Annexure - 3

Master of Commerce, M. Com (Regular)

Course Matrix (2020-21)

Course Code	Semester and Course	Teaching hours	Credits	Maximum Marks			Examination Duration
				Continuous Assessment	Semester-end Examination	Total	
SEMESTER – I							
HC101	Organisational Theory and Behaviour	4	4	25	75	100	3
HC102	Managerial Economics for Business Decisions	4	4	25	75	100	3
HC103	Accounting Theory and Analysis	4	4	25	75	100	3
HC104	Advanced Financial Management	4	4	25	75	100	3
Soft Core Stream - Students can opt any two course among the following Courses							
SC101	Advanced Management Accounting	3	3 + 3 = 6	25	75	100	3
SC102	Financial Markets and Services	3		25	75	100	3
SC103	Credit Management in Banks	3		25	75	100	3
SC104	Principles and Practices of Insurance	3		25	75	100	3
	Semester – I, Total	**22**	**22**	**150**	**450**	**600**	
SEMESTER – II							
HC201	Business Environment and Government Policy	4	4	25	75	100	3
HC202	Advanced Marketing Management	4	4	25	75	100	3
HC203	Business and Corporate Taxation	4	4	25	75	100	3
HC204	Advanced Cost Management	4	4	25	75	100	3
Soft Core Stream - Students can opt any two course among the following Courses							
SC201	Investment Management	3	3 + 3 = 6	25	75	100	3
SC202	Advanced Auditing	3		25	75	100	3
SC203	Supply Chain Management	3		25	75	100	3
SC204	Managerial Communication	3		25	75	100	3
Interdisciplinary Courses offered to Other Departments							
EL201	E-Banking	2	2	10	40	50	1½
EL202	Personal Financial Planning	2		10	40	50	1½
	Semester – II, Total	**24**	**24**	**160**	**490**	**650**	

SEMESTER – III							
HC301	E-Commerce	4	4	25	75	100	3
HC302	Operations Research	4	4	25	75	100	3
HC303	Business Research Methodology	4	4	25	75	100	3
Soft Core Stream - Students can opt any One Course between the following Courses							
SC301	Human Resource Management	3	3	25	75	100	3
SC302	Business Ethics and Corporate Governance	3		25	75	100	3
Elective Specialization - Students can opt any Two Specialization Courses among the following Groups							
SC301E	Group A - Accounting: Indian Accounting Standards (Ind AS) - I	4	4 + 4 = 8	25	75	100	3
SC302E	Group B - Taxation: Indirect Taxation – I (GST)	4		25	75	100	3
SC303E	Group C - Finance: Risk Management and Financial Derivatives	4		25	75	100	3
SC304E	Group D - Banking: Indian Banking System	4		25	75	100	3
SC305E	Group E - Insurance: Management of Life Insurance	4		25	75	100	3
SC306E	Group F - Marketing Management: Consumer Behaviour and Marketing Research	4		25	75	100	3
Interdisciplinary Courses offered to Other Departments							
EL301	Stock Markets	2	2	10	40	50	1½
EL302	Micro Finance	2		10	40	50	1½
	Semester – III, Total	**25**	**25**	**160**	**490**	**650**	
SEMESTER – IV							
HC401	International Business	4	4	25	75	100	3
HC402	Entrepreneurship Development	4	4	25	75	100	3
HC403	Project Report	*	4	25	75	100	-
*Project Report: Classes 1 hour per batch of 6 students per week for each teacher.							
Soft Core Stream - Students can opt any One Course between the following Courses							
SC401	Security Analysis and Portfolio Management	3	3	25	75	100	3
SC402	Strategic Management	3		25	75	100	3

Elective Specialization - Students have to study same Specialization Groups which they opted in 3rd Semester							
SC401E	Group A - Accounting: Indian Accounting Standards (Ind AS) - II	4	4 + 4 = 8	25	75	100	3
SC402E	Group B - Taxation : Indirect Taxation – II (GST and Customs)	4		25	75	100	3
SC403E	Group C - Finance: Global Business Finance	4		25	75	100	3
SC404E	Group D - Banking: International Banking	4		25	75	100	3
SC405E	Group E - Insurance: Management of Non - Life Insurance	4		25	75	100	3
SC406E	Group F - Marketing Management: Services Marketing	4		25	75	100	3
	Semester – IV, Total	**19 + PR**	**23**	**160**	**490**	**600**	
Note: Semester – IV : 19 Hours Class Room Teaching + *Project Report Classes 1 hour per batch of 6 students per week for each Teacher.							
Besides, the students have to study three soft skill courses in the first year and these courses are (1) Communication Skills, (2) Computer Skills and (3) Life Skills. These courses carry one credit each.							

- **Any one group from the available elective specialisation stream shall be selected by a student at the time of commencement of Third Semester. Once an elective specialisation stream has been selected, no change in the option will be allowed later in the Fourth Semester. The students must take the same elective specialisation stream in the Fourth Semester. The Department/Affiliated colleges will announce at the end of the Second Semester. The soft core elective specialisation stream which will be offered during Third and Fourth Semesters depends on the availability of faculty members, infrastructure and the demand for the elective specialisation streams.**

Semester – I

Course – HC101: Organizational Theory and Behaviour

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To familiarize the Students with Individual, Interpersonal and Group-Related perspectives in Organizational Behaviour along with the Recent Developments..

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Organizational Theories**: Introduction to Organization, Organizational Theories: Classical, Neo-Classical and Contemporary; Organization Structure: Formal and Informal Organizations, Span of Control; Responsibility and Authority; Delegation of Authority and Decentralization.

Unit – 2: **Organizational Behaviour (OB):** Meaning and Definitions, Nature, Fundamental Concepts, Scope of OB, Challenges and Opportunities for Organization Behaviour, Contributing Disciplines to the field of OB, and Organization Behaviour Models.

Unit – 3: **Individual Behaviour:** Foundations of Individual Behaviour, Personality: Meaning and Definitions, Determination of Personality, Personality Traits; Perception: Meaning and Definitions, Perceptual Process, Factors influencing Perception, Perceptual Biases/Errors; Learning: Meaning, Theories of Learning; Attitude: Functions and Sources of Attitude; Values: Types of Values.

Unit – 4: **Group Behaviour:** Determinants of Group Behaviour, Nature and Concept of Group Formation, Stages of Group Formation, Types of Groups: Formal and Informal, Group Norms, Group Cohesiveness; Leadership: Styles of Leadership, Theories of Leadership; Motivation: Concept and Early Theories of Motivation, Applications of Motivation; Decision-Making: Importance, Types, Steps and Approaches, Decision Making in Various Conditions, Decision Tree.

Unit – 5: **Organizational Culture, Development and Stress Management:** Concept and Determinants of Organizational Culture; Organizational Development: Concept and Intervention Techniques; Stress Management: Individual and Organizational Factors to Stress, Consequences of Stress on Individual and Organization, Management of Stress.

Books Recommended for Reference (Recent Editions)

1. Stephen P. Robbins, Organization Behaviour, Pearson Education.
2. John M Ivancevich, Robert Konopaske and Michael T Matteson, Organizational Behavior and Management.
3. Keith Davis, Human Behaviour at Work, PHI
4. Subba Rao, Management and Organizational Behaviour, HPH
5. Luthans Fred, Organization Behaviour, McGraw Hill International
6. Ashwathappa K, Organization Behaviour: Text, Cases and Games, HPH
7. Don Hell Siegal *et al*, Organization Behaviour, South Western Thomson Learning.

8. David A Buchanan, Organizational Behaviour Pearson.
9. Dr. S. S Khanka, Organizational Behaviour, S. Chand
10. Stephen P. Robbins, Organizational Behaviour, Pearson, 15th Edition

Semester – I

Course – HC102: Managerial Economics for Business Decisions

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To improve managerial decision making in the framework of a firm or organization by enabling the students to expose and analyze their acquired knowledge in Managerial Economics and aid to take up managerial responsibilities.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Definitions, Nature and Scope of Managerial Economics, Managerial Economics Relation with other Disciplines, Basic Concepts of Managerial Economics; Demand Analysis and Forecasting: Concept of Demand, Determinants and Types of Elasticities of Demand, Demand Function, Demand and Supply Interaction, Techniques of Demand Forecasting.

Unit – 2: **Production Analysis:** Production Factors, Production Functions; Short-Run and Long-Run Production Function, Graphical and Mathematical Approaches in finding Firm Equilibrium; ISOQUANT, ISOCOST, Least Cost Combination of Inputs, Law of Returns, Economies of Scale and Scope, Cob-Douglas Production Function .

Unit – 3: **Cost and Revenue Analysis:** Concepts of Cost, Determinants of Cost, Cost-Output Relationship in Short Run and Long-Run; Economies of Scale V/s Diseconomies of Scale; Cost Control and Cost Reduction; Revenue Concepts; Functional Relationship Between Marginal Revenue, Total Revenue, Marginal Cost and Total Cost.

Unit – 4: **Pricing Methods and Strategies:** Introduction to Pricing, Factors Influencing Pricing, Pricing Practices, Process of Price Determination, Pricing in Public Interest ,Government Intervention and Pricing; Price Discrimination-Degrees of Price Discrimination, International Price Discrimination and Dumping.

Unit – 5: **National Income and Business Cycle:** The Idea of National Income, GDP, NDP, GNP, NNP, Measurement and Difficulties in Measuring National Income; Business Cycle, Phase, Characteristics and ill effects, Curative Measures; Inflation: Types of Inflation, Causes of Inflation and Recent changes.

Books Recommended for Reference (Recent Editions)

1. Yogesh Maheshwari, Managerial Economics, Sultan Chand Publication.
2. Gupta G S, Managerial Economics, Tata McGraw-Hill Publishing Company Ltd
3. John Sloman and Mark Sutcliffe, Economics for Business, Pearson Publications

4. William J. Baumol and Alan S. Blinder, Microeconomics Principles and Policy, Thomson Publication
5. Dwivedi D.N, Managerial Economics, Vikas Publishing House
6. T.N. Hajela, Public Finance, Ane Books Pvt ltd
7. Richard A. Musgrave and Peggy B. Musgrave, Public Finance in Theory and Practice, McGraw Hill Book Co
8. Richard J. Aronson, Public Finance, McGraw Hill Book Co
9. H. L. Bhatia, International Economics, Vikas Publication
10. Joel Dean, Managerial Economics, PHI

Semester – I

Course - HC103: Accounting Theory and Analysis

Weekly Teaching Hours: 4 | Examination Duration: 3 hours
Credits: 4 | Maximum Marks: 100

Objective: To enable the students to acquaint with a coherent set of logical principles and a general frame of reference for evaluation and development of sound accounting practices and also to enable them to understand the important contemporary issues in Accounting and provide awareness regarding latest developments in the field of accounting.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Generally Accepted Accounting Principles (GAAPs)**: Introduction, Definition of Accounting – Financial, Cost and Management; Accounting as the Language of Business, Accounting as the Information System, and Users and Uses of Accounting Information.

GAAPs: Introduction; Need for Accounting Principles; Meaning of Accounting Principles; Structure of GAAPs – (a) Accounting Assumptions - Business Entity Concept, Going Concern Concept and Money Measurement Concept; (b) Accounting Concepts - Accounting Period Concept, Objectivity, and Dual-Aspect Concept; (c) Accounting Principles - Cost Principle, Matching Principle - Recognition of Revenue, Realization Principle and Systems of Accounting; (d) Accounting Conventions – Conservatism, Consistency, Materiality and Disclosure; and (e) Accounting Rules and Policies.

Unit – 2: **Accounting Theory**: Introduction; Meaning and Definitions; Importance of Accounting Theories; Classification of Accounting Theories - Structural (Syntactical) Theories, Interpretational (Semantical) Theories and Behavioral (Pragmatic) Theories; Approaches to Formulation of Accounting Theory - Descriptive Approach, Normative Approach and Ethical Approach; Few Basic Equity Theories - Proprietary Theory, Entity Theory and Fund Theory.

Unit – 3: **Accounting for Price Level Changes**: Introduction; Effects of Inflation; Approaches to Inflation Accounting - Entry and Exit Value Approaches –

Partial and Complete Revaluation Methods – (a) Current Purchasing Power Method - Forward and Backward Approaches, Conversion Factor, Monetary and Non-monetary Items and Restatement of Items of Financial Statements and Preparation of Inflation-adjusted Financial Statements under CPP Method; (b) Current Cost Accounting Method - Current Cost Profit and Loss Account - Cost of Sales Adjustment, Depreciation Adjustment, Monetary Working Capital Adjustment and Gearing Adjustment and Current Cost Balance Sheet.

Unit – 4: **Human Resource Accounting**: Introduction; Human Resource Accounting – Definitions and Features, Premises of Human Resource Accounting, Classification of Human Resource Costs, Approaches of Human Resource Accounting – (a) Cost Approaches - Acquisition Cost Method and Replacement Cost Method; and (b) Value Approaches - Present Value of Future Earnings Method, Adjusted Discounted Future Wages Method, Hermanson's Unpurchased Goodwill Method, Economic Value Method, Competitive Bidding or Opportunity Cost Model, Morse's Net Benefits Method and Ogan's Discounted Certainty Equivalent Net Benefits Model; Comprehensive Model – Quantification and Recognition of Qualities of HR into HRA Model; Advantages; and Indian Scenario.

Unit – 5: **Financial Reporting**: Financial Reporting – Concept, Objectives and Benefits, Trueblood Report and Stamp Report, Qualities of Financial Information, Corporate Social Responsibility Reporting and Recent Trends in Financial Reporting. The Companies Act, 2013 and Financial Statements; Ind AS – 1: Presentation of Financial Statements and Ind AS - 7: Statement of Cash Flows.

Books Recommended for Reference (Recent Editions)

1. Robert N Antony and James S Reece, Accounting – Text and Cases
2. Sidney Davidson and Roman L. Weil, Handbook of Modern Accounting
3. Porwal, Accounting Theory, PHI
4. Jawaharlal, Accounting Theory, HPH
5. S.K. Bhattacharya and John Dearden, Accounting For Management – Text and Cases
6. Pyle, White and Larson, Fundamentals of Accounting Principles
7. MWE Glautier and B. Underdown, Accounting Theory and Practice, Prentice Hall Publications
8. J. Madegowda, Accounting Theory and Analysis, Himalaya Publishing House
9. S. N. Mahashwari, Advanced Accounting, Vikas Publishing House
10. Hendrikson, Accounting Theory.

Semester – I

Course – HC104: Advanced Financial Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To facilitate understanding of the conceptual and practical applicability of various techniques of Financial Management in different segments of business.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Meaning and Objectives of Financial Management, Profit Vs Wealth Maximization, Interrelation among Financial Decisions, Interface of Financial Management with other Disciplines, and Measuring Shareholders' Value Creation; Time Value of Money: Concept, Importance, Factors contributing to the Time Value of Money, Techniques of Time Value of Money and Loan Amortisation Schedule.

Unit – 2: **Financing Decisions**: Capital Structure: Introduction, Determinants, Patterns, Point of Indifference and Theories of Capital Structure; Leverages: Meaning, Uses and Types; Cost of Capital: Concept, Definitions, Computation of Specific Cost of Capital and WACC.

Unit – 3: **Long-Term Investment Decisions**: Capital Budgeting: Importance, Process, Non-discounted and Discounted Techniques of Capital Budgeting; Analysis of Risk in Capital Budgeting: Concept and Risk Evaluation Approaches.

Unit – 4: **Dividend Decisions**: Introduction, Types of Dividend Policy, Factors influencing Dividend Policy, Stock Split, Bonus Share and SEBI Guidelines for Issuing Bonus Shares, Legal Provisions relating to Dividend in India; Dividend and Market Valuation: Walter's Model, Gorden's Model and MM Approach.

Unit – 5: **Inventory Management**: Concept, Objectives, Motives, Costs of Holding Inventories, Risk and Benefits of Holding Inventory, Determining of Stock Levels, EOQ and ABC Analysis.

Books Recommended for Reference (Recent Editions)

1. Brigham, Financial Management: Theory and Practice, Cengage Publication
2. Sudhindra Bhat, Financial Management: Principles and Practice, Excel books Publication
3. G. Sudarshana Reddy, Financial Management: Principles and Practice, Himalaya Publishing House
4. Ravi M. Kishore, Financial Management: Problems and Solutions, Taxman
5. M Y Khan and P K Jain, Financial Management, TMH Publication
6. Shashi K. Gupta and R. K Sharma, Financial Management: Theory and Practice, Kalyani Publisher
7. Prasanna Chandra, Financial Management: Theory and Practice, TMH Publication
8. I M Pandey, Financial Management, Vikas Publishing
9. Kohok M. A, Advanced Financial Management, Everest Publication
10. J. Van Horne, Fundamentals of Financial Management, Prentice Hall of India

Semester – I

Course - SC101: Advanced Management Accounting

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To enable the students to acquire adequate knowledge about different aspects of Management Accounting and to equip them with the requisite competence to use them in managerial decisions.

Pedagogy: A Combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Meaning and Definitions, Nature, Objectives, Significance, Scope, Functions, Uses and Limitations, Tools and Techniques of Management Accounting, Installation of Management Accounting System; Management Accounting as a separate branch of Accounting; and Management Accountant: Functions, Duties and Essential Qualities.

Unit – 2: **Budgetary Control:** Meaning and Objectives of Budget, Budgeting and Budgetary Control; Nature and Importance of Budgetary Control; Classification and Preparation of Functional and Master Budgets, Fixed and Flexible Budget; Zero Based Budget; and Advantages and Limitations of Budgetary Control.

Unit – 3: **Standard Costing and Variance Analysis:** Introduction, Meaning, Objectives, and Significance of Standard Costing, Budgetary Control *V/s* Standard Costing, Prerequisites of Standard Costing, Types of Standards; Variance Analysis: Materials, Labour, Overhead Variances, Sales and Profit Variances, Accounting treatment of Variances; and Managerial Uses of Variance Analysis.

Unit – 4: **Responsibility Accounting:** Responsibility Accounting: Definition, Meaning, Basic Principles, Process in Implementation, Controllable and Non-Controllable Costs, Responsibility Reporting, Determinants of Responsibility Centers, Difficulties in Implementation, Responsibility Centre Performance Measurement and Reporting to different levels of Management.

Transfer Pricing: Need, Methods of Transfer Pricing: Full Cost Method, Standard Cost Method, Marginal Cost Method, Market-based Transfer Price, Dual Transfer Prices, Negotiated Price Method, Arbitrary Transfer Price and Cost Plus Method; General Rules of Transfer Pricing.

Unit – 5: **Inter Firm Comparison and Managerial Reporting:** Introduction, Meaning, Definitions, Procedure and Requirements: Establishment of Central Organization, Adoption of Uniform Costing Principles and Practices **Management Reporting:** Meaning and Definitions, Fundamental Principles of Managerial Reports, Modes and Types of Reporting.

Books Recommended for Reference (Recent Editions)

1. Pandey I. M, Management Accounting, Vani Publications
2. Vij, Madhu, Management Accounting, McMillan
3. Atkinson Anthony A, Rajiv D. Banker, Robert Kaplan and S. Mark Young, Management Accounting, Prentice Hall

4. Horngreen, Charles T, and Gary L. Sundem and William O. Stratton, Introduction to Management Accounting, Prentice Hall of India.
5. Drury Colin, Management and Cost Accounting, Thomson Learning
6. Garison R. H and E. W. Noreeb, Managerial Accounting, McGraw Hill.
7. Ronald W. Hilton, Managerial Accounting, McGraw Hill Education.
8. Khan and Jain, Management Accounting, Tata McGraw Hill
9. Jawahar Lal, Advanced Management Accounting – Text, Problems and Cases, S Chand & Co
10. J. Madegowda, Advanced Management Accounting, Himalaya Publishing House

Semester - I

Course – SC102: Financial Markets and Services

Weekly Teaching Hours: 3 | Examination Duration: 3 hours

Credits: 3 | Maximum Marks: 100

Objective: To equip the students with conceptual framework of functioning of financial markets, their structure and functioning of different players of financial markets.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **An Overview of Indian Financial System**: Structure of Indian Financial system; Objectives and Functions of Financial System, Financial System and Economic Development; Flow of Funds in Economic Development; Financial Sector Reforms, Financial Inclusion and Recent Developments.

Unit – 2: **Financial Markets:** Nature, Functions and Efficiency; Types of Financial Markets: **Money Market:** Meaning, Constituents, Functions of Money Market; Money Market Instruments; Recent Trends in Indian Money Market. **Capital Market:** Types of Capital Market: Primary Market: Its Role and Functions, Issue of Capital: Methods of Issuing Securities in Primary Market, Intermediaries in New Issue Market, Procedure for New Issues, and SEBI Guidelines for Issue in Primary Market. Secondary Market: Importance and Functions, Listing of Securities in Stock Exchanges, Players and Trading Mechanism in Stock Exchange, Settlement Process; Stock Exchanges: BSE, NSE, and OTC Exchange of India.

Unit – 3: **Financial Services:** Leasing, Factoring, Credit Rating, Hire Purchase, Consumer Durables Financing, Merchant Banking Agencies, Underwriting, Funds Transfer, Acceptance, Stock Holding, Loan Syndication, Custodial Service, Depository Services, and Venture Capital Finance.

Unit – 4: **Financial Institutions:** Banking and Non-Banking Financial Companies (NBFCs); Development Finance Institutions (DFIs); Insurance Organizations; Mutual Funds: Types of Mutual Fund Scheme, ETFs, Hedge Funds, Private Equity Funds and other Recent Developments

Unit – 5: **Global Capital Markets**: International Markets: FIIs, Euro Issues, ECB, Latest Guidelines of ECB, ADRs, GDRs, IDRs, FCCB, FDI; International Bonds: Bulldog, Yankee, and Bunny Bonds, Case Analysis and Recent Developments.

Books Recommended for Reference (Recent Editions)

1. Cornett M. M and Sauders A, Fundamentals of Financial Institutions Management, McGraw Hill
2. Mandura Jeff, Financial Markets and Institutions, West Publishing Company
3. Thygerson Keneth J, Financial Markets and Institutions, Harper Collins
4. Rose and Marquis, Money and Capital Market: Financial Institutions and Instruments in a Global Market Place, McGraw Hill
5. Clifford Gmoez, Financial Markets, Institutions, and Financial Services, PHI
6. Mark Grinblatt, and Sheridan Titman, Financial Market and Corporate Strategy, Tata McGraw Hill
7. Meir Khon, Financial Institutions and Markets , Oxford University Press
8. M.Y Khan, Financial Services, Tata McGraw Hill
9. L.M Bhole, Financial Institution and Markets, Tata McGraw Hill
10. Sasidharam K and Mathew A, Financial Services and System, Tata McGraw Hill

Semester - I

Course – SC103: Credit Management in Banks

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To expose the students to the foundations of credit management, its processes and performance evaluation.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **An Overview of Credit Policy and Loan Characteristics:** Credit Process, Characteristics of Different Types of Loan, Evaluation of Commercial Loan Request, Financial Statement Analysis, Cash Flow Analysis, Projection, Project Appraisal and Finance, Term Loan Sanction Working Capital Finance, Hypothecation, Pledge, Mortgage, Loan Documentation and Recent Developments.

Unit – 2: **Evaluation of Consumer Loans:** Types of Consumer Loans, Credit Analysis, Risk Return Analysis of Consumer Loans, Customer Profitability Analysis, Loan Pricing-Fix and Floating Rates.

Unit – 3: **Credit Management in Banks:** Screening of Application, Appraisal of Credit, Sanction Limit, Post Sanction Compliance, Credit Monitoring Supervision, Review, Government Policies for Credit Extension. Credit Institution, Loan Syndication and its Process, Role and Functions, Credit Information Bureau, Fair Practice Code for Bankers, Functions of BCSBI, Prime Lending Rate; Fraud Management and Recent Developments.

Unit – 4: **Agriculture Finance and Retail Lending:** Categories and Target of Priority Sector Advances, Common RBI Guidelines, Crop Loans, Crop Insurance Schemes, Diary, Sericulture, Poultry, Animal Husbandry, Horticulture, Gobar Gas, Kisan Credit Cards, Micro Credit, Self-Help Groups and Micro Finance, NABARD initiatives. Lead Bank Scheme, Retail Banking Products and

Advances, Consumer Credit Financing, Women Empowerment through SHGs and Recent Developments.

Unit – 5: **Loans and Advances against Pledge:** Hypothecation, Mortgage, Lien, Advances against Goods, Document to title of Goods, Life Insurance Policies, Stock Exchange Securities, Fixed Deposit Receipt, Book Debts, Supply Bill, Real Estate, Advances against Collateral Securities, Management of NPAs Guidelines, Willful Defaults, Latest SARFAESI Act, 2002 with Amendments, Establishment of Tribunal, Powers and Functions of Asset Reconstruction Companies.

Books Recommended for Reference (Recent Editions)

1. J. F Sinkey, Commercial Bank Financial Management, Macmillan Publishing Co
2. Timothy W Kochi, Scott, Bank Management, Thomson
3. Justin Paul and Padmalatha Suresh, Management of Banking and Financial Services, Pearson
4. Kumar, Banking Law and Practice, Tamil Nadu Book House
5. S Natarajan and R. Parameswaran, Indian Banking, S. Chand
6. B S Khubchandani, Practice and Law of Banking, Macmillan India Limited
7. Pai Panandikar and N C Mehra, Rural Banking, NIBM
8. Mongia J N, Banking Around the World, Allied Publishers
9. Vasant Desai, Indian Banking – Nature and Problems, HPH
10. Charless L Prather, Money and Banking, Richard D Irwin Inc

Semester – I

Course – SC104: : Principles and Practices of Insurance

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To provide working knowledge of insurance to the students to enable them to translate the principles into practice.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Meaning and Definitions of Insurance, Nature and Functions of Insurance; Principles of Insurance: Utmost Good Faith, Insurable Interest, Indemnity, Contribution, Subrogation, Proximate Cause; Essentials of Law of Insurance Contract, Classification of Insurance, Nomination and Assignment, Comparison between Life and General Insurance, and Human Life Value.

Unit – 2: **Principles of Organization**: Structure of Insurance Companies: Stock Insurance Companies, Lloyd's Association, Mutual Insurance Companies; Reciprocal Exchange, Office Procedure, Handling of Grievances; Insurance Ombudsman: Powers, Duties and Functions; Records, Forms and Control. Technology for Insurance: IT Applications in Fundamental Areas, E- Insurance and Online Insurance.

Unit – 3: **Regulatory Environment**: History of Insurance Legislation in India, The Insurance Act, 1938 and its Provisions; The Insurance Regulatory and Development Authority: Powers, Functions and Duties; Motor Vehicles Act – 1988 and 2019, and Information Technology Act, 2000; Registration of Insurance Companies: Renewal, Suspension and Revival of Registration, and Cancellation of Certificate of Registration.

Unit – 4: **Insurance Intermediaries:** Need for Intermediaries**,** IRDA Regulations towards appointments of Agents: Duties, Code of Conduct, Commission, Termination of Agency; Role of Surveyors and Loss Assessor in General Insurance, Brokers and Third Party Administrator in Health Insurance.

Unit – 5: **Insurance Market:** Globalization and Privatization of Insurance Services, Liberalization of Insurance Sector, Malhotra Committee Recommendations, and Opportunities for Insurance Industry.

Books Recommended for Reference (Recent Editions)

1. M. N Mishra and S B Mishra, Principle and Practice of Insurance, S. Chand and Co
2. T. S Mann, Law and Practice of Life Insurance in India, Deep and Deep
3. G. Krishna Swamy, Principles and Practice of Life Insurance, Excel Books
4. Swaroop C Sahoo and Suresh C Das, Insurance Management, HPH
5. Dr. S. V Joga Rao, Principles of Insurance Law, Wadhwa and Co
6. Badla B. S, Insurance Fundamentals, Deep and Deep Publication
7. Jawahar Lal U, Insurance Industry, ICFAI Press
8. K. C Mishra and G. E Thomas, General Insurance, Cengage Learning
9. K. C Mishra, Principles and Practice of General Insurance, Cengage Learning
10. Neelam C Gulati, Principles of Insurance Management, Excel Books

Semester – II

Course – HC201: Business Environment and Government Policy

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To familiarize the students with the business environment prevailing in India and other parts of the world, and their implications for the business.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Conceptual Framework of Business Environment:** Concept, Significance, and Nature of Business Environment: Internal and External, Changing Dimensions of Business Environment, Techniques of Environmental Scanning and Monitoring, Business Policy, Case Study and Recent Changes.

Unit – 2: **Public Policies:** The Role of Public Policies in Governing Business, Government and Public Policy, Classification of Public Policy, Areas of Public

Policy, Need for Public Policy in Business, Levels of Public Policy, Elements of Public Policy, The Corporate and Public Policy, Framing of Public Policy; Government Regulations in Business, Justification of Regulation, Types of Regulation, Problems of Regulation; Case Analysis and Recent Developments.

Unit – 3: **Industrial Policies and Reforms:** Industrial Policies: A critical appraisal of New Industrial Policy 1991, With the Recent Amendments in Industrial Policy, National Manufacturing Policy; **Sickness in India** – An overview of sickness in SME's and Public Sector Enterprises, Causes for Sickness, Magnitude and Remedial Measures, Important Provisions of Sick Industrial Companies, (Special Provisions) Act, 1985 and Applicability; BIFR: Functions, and Functions of Operating Agencies, Case Study and Recent Changes.

Unit – 4: **Privatization and Disinvestment:** Expansion of Public Sector and its Defects, Privatization Reaction, Ways of Privatization, Obstacles, Conditions for Success of Privatization, Benefits of Privatization, Arguments against Privatization, Sins and Pitfalls of Privatization, Rangarajan Committee and Privatization in India; Case Analysis and Recent Developments.

Unit – 5: **Competition Act, 2002 and Consumer Protection Act, 1986:** Introduction, Definitions, Consumer Enterprise, Goods, etc., Prohibition of Certain Agreements, Abuse of Dominant Position and Regulation of Combinations, Competition Commission of India; Duties, Powers and Functions of Commission; Duties of Director General; Competition Appellate Tribunal and Recent Changes.

Consumer Protection Act, 1986: Introduction, Objectives, Applicability, Consumer and Rights of Consumers, Nature and Scope of Remedies available to Consumer; Case Study and Recent Amendments.

Books Recommended for Reference (Recent Editions)

1. K. Ashwathappa, Business Environment, Himalaya Publishing House.
2. Bertozzi-Burgunder, Business, Government, and Public Policy: Concepts and Practices - Prentice Hall
3. Buchholz., Business Environment and Public Policy, Implication for Management and Strategy formulation - Prentice Hall
4. F. Cherunilam -Business & Govt. - Himalaya Publishing House
5. Victor Strategic Management in the Regulating Environment: Cases and Industry Notes - Prentice Hall
6. Subba Rao - Strategic Management.
7. Tokyo, McGram hill –Business Policy and strategic Management
8. K. Ashwathappa, Essential of Business Environment, Himalaya Publishing House.
9. Ghosh and Kapoor, Business Policy and Environment, Himalaya Publishing House.
10. HIgar Ansoff, Corporate Strategy, Tata McGraw Hill.

Semester – II

Course – HC202: Advanced Marketing Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To facilitate understanding of the conceptual framework of Marketing and its connection with various strategies of Marketing in achieving Organizational Goals.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit - 1 **Introduction**: Nature and Scope of Marketing; Core Marketing Concepts; Modern Marketing Concepts; Marketing Mix; Marketing Management Process: A Strategic Perspective; Customer Quality, Value and Satisfaction; Planning and Control. **Marketing Environment:** Significance of Scanning Marketing Environment; Analyzing Macro Environment of Marketing: Economic, Demographic, Socio-Cultural, Technological, Political and Legal Segments; Impact of Micro and Macro Environment on Marketing Decisions, Recent Trends in Marketing Environment.

Unit – 2 **Buyer Behavior and Market Segmentation:** Need for Studying Buyer Behavior; Consumer Buying Process; Factors Influencing Consumer Buying Decisions, Models of Consumer Behavior; Market Segmentation: Bases for Segmenting a Consumer Market; Levels of Market Segmentation; Factors Influencing Selection of Market Segments; Criteria for Effective Market Segmentation; Targeting and Positioning: Target Market Selection and Strategies; Positioning: Concept, Bases and Process.

Unit – 3 **Product and Pricing Decisions:** Product: Concept and Classification; Major Product Decisions; New Product Development; Packaging and Labelling; Product Support Services; Branding Decisions; Product Life Cycle: Concept and Appropriate Strategies Adopted at Different Stages.

Pricing Decisions: Objectives, Factors Affecting Price of a Product, Pricing Policies and Strategies. Ethical Issues in Product and Pricing Decisions.

Unit – 4 **Promotion and Distribution Decisions:** Role of Promotion in Marketing; Promotion Methods: Advertising, Personal Selling, Publicity, Sales Promotion Tools and Techniques; Promotion Mix; Ethical Issues in Promotion Decisions. **Channels of Distribution:** Concept and Importance, Different Types of Distribution; Middlemen's and their Functions; Channel Management, Selection, Motivation and Performance Appraisal of Distribution Middlemen.

Unit - 5 **Trends in Marketing:** CRM Service Marketing, Social Media Marketing, Green Marketing, Customer Relationship Management, Rural Marketing, Other Emerging Trends and Recent Developments in Marketing.

Books Recommended for Reference (Recent Editions)

1. V. S. Ramaswamy and S Namakumari, Marketing Management, Macmillan Publishers

2. S K Baral and S C Bihari, Advanced Approach to Marketing Management, A.I.T.B.S Publishers
3. David Jobber, John Fahy, Foundations of Marketing, TMH
4. William D Perreault, E Jerome Mc Carthy, Basic Marketing - A Global Managerial Approach, McGraw-Hill Publishers
5. Michael J. Etzel, Bruce J Walker, William J Stanton, Ajay Pandit, Marketing - Concepts and Cases, McGraw-Hill Publishers
6. Philip Kotler, Kevin Lane and Keller, Marketing Management, Pearson Education Publication
7. Philip Kotler, Armstrong, Principles of Marketing, Pearson Education Publication
8. Alexander Chernev, Strategic Marketing Management, Cerebellum Press Publication
9. Geoffery K Francis, Modern Marketing Management, TMH Publication
10. Ralph Westfall, Stanley, F Starch, Marketing Research - Text and Cases, TMH Publication

Semester – II

Course – HC203: Business and Corporate Taxation

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: The course aims at making students conversant with the concept of Corporate Tax Laws and also their implications on Tax Planning and Management and to familiarize with latest provisions of Indian Corporate Tax Laws and related Judicial Verdicts.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Basic Concepts:** Income Tax, Corporate Tax; Assessee; Assessment Year; Previous Year; Company; Different kinds of Companies: Indian Company, Foreign Company, Widely Held Company, Closely Held Company, Domestic Company; and Incidence of Tax.

Unit – 2: **Tax Planning and Company Promotion**: Meaning of Tax Planning, Tax Avoidance, Tax Evasion and Tax Management; Features and Scope for Tax Planning; Business Location and Tax Planning; Nature of Business and Tax Planning: FTZ, Units in SEZ, 100% EOU and Infrastructure Development.

Unit – 3: **Computation of Corporate Tax**: Carry Forward and Set Off of Losses in the case of Companies, Computation of Taxable Income of Companies; Computation of Corporate Tax Liability; Minimum Alternate Tax; Alternate Minimum Tax; and Tax on Distributed Profits of Domestic Companies. Double Taxation Avoidance Agreement; Provisions for Relief in respect of Double Taxation, GAAR; Transfer Pricing.

Unit – 4: **Tax Planning with reference to Managerial Decisions:** Financial Decisions: Capital Structure Decisions; Dividend Policy; Bonus Shares and Capital Gains; Bond Washing Transactions; Own or Lease of an Asset, Installment or Hire Purchase, Make or Buy Decisions, Buying an Asset with Own Fund or Borrowed Fund and Repair, Replace, Renewal or Renovation; Shutdown or Continue: Tax Planning in respect of Amalgamation or De-Merger of Companies, Slump Sale, Conversion of a Firm into a Company; Conversion of Sole Proprietorship into Company, Conversion of Company into Limited Liability Partnership.

Unit – 5: **Tax Management, Administrative Procedures and ICDS:** E-commerce Transaction and Liability in Special Cases; Tonnage Taxation, TDS; Advance Payment of Tax with reference to Corporate Assessee; TCS; Administrative Procedure; Assessment- Procedures and Types of Assessment; Return on Income; Statement of Financial Transaction (SFT). E-Filing: Appeal and Revision; Penalties and ICDS.

Books Recommended for Reference (Recent Editions)

1. Vinod K Singhania and Kapil Singhania, Direct Tax Planning and Management, Taxman.
2. Vinod, K. Singhania, Direct Taxes - Law and Practices, Taxman.
3. Mehrotra, H. C, Income Tax Law and Accounts including Tax Planning, Sahitya Bhawan Publications.
4. Narang and Gaur, Income Tax, Himalaya Publishing House.
5. Prasad. B, Direct Tax- Law and Practices, Wishwa Prakashana.
6. T.N.Manoharan, Students Handbook on Income Tax Law, Snow White Publication.
7. Harshad C Chowdhary, Central Excise and Customs, Ashodha Publications.
8. E. A. Srinivas, Corporate Tax Planning, Tata McGraw Hill.
9. V.S.Sundaram, Commentaries on the Law of Income- Tax in India, Law Publisher, Allahabad.
10. Meherotra and Goyanka, Direct Taxes- Tax Planning and Management, Sahitya Bhawan

Semester – II

Course – HC204: Advanced Cost Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to apply principles and techniques of cost in decision making situations.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Activity Based Costing (ABC)**: Cost: Ascertainment, Control, Reduction, Avoidance and Management; Cost Management System.
Activity Based Costing: Inadequacies of Traditional Methods of Overhead Absorption, Concept of ABC, Kaplan and Cooper's Approach to ABC, Cost Drivers and Cost Pools, Main Activities and their Cost Drivers, Allocation of Overheads under ABC: Characteristics, Steps, Implementation; Benefits and Limitations of ABC System.

Unit – 2: **Learning Curve Model:** Concept and Phases of Learning Curve, Graphical Representation, Learning Curve Applications and Factors Affecting Learning Curve and Experience Curve.

Just-in-Time Approach: Concept, Philosophy of JIT, Sources of Waste, Objectives of JIT, Features and Methodology of Implementation of JIT, Planning for Adoption and Limitations of JIT Costing.

Unit – 3: **Life Cycle:** Life Cycle Costing: Concept and Characteristics Activities and Phases in Product Life Cycle, Short Product and Extension of Product Life Cycle, Turning Point Indices in Product Life Cycle; and Project Life Cycle Costing.

Unit – 4: **Target Costing:** Meaning and Definitions, Basic Concepts, Unique Features and Cost Determination Procedure Under Target Costing.

Unit – 5: **Cost Analysis for Managerial Decisions**: Introduction; Managerial Decisions: Influencing Factors and Relevant Information; Application of Marginal Costing for Managerial Decisions: Product Diversification, Make or Buy Decisions, Pricing Decisions, Joint and By-product Costing: Methods of Apportioning Joint Costs and Sell or Further Process Decisions, Profitability and Scarce Resource Allocation, Temporary Shut-down.

Books Recommended for Reference (Recent Editions)

1. J. Madegowda, Cost Management, Himalaya Publishing House, Mumbai.
2. Horngren et al., Introduction to Management Accounting, PHI, New Delhi.
3. Kaplan and Atkinson, Advanced Management Accounting, PHI Publications, New Delhi.
4. Ravi. M. Kishore, Cost Management, Taxman Publications, New Delhi.
5. Horngren, Foster and Datar, Cost Accounting, A Managerial Emphasis, PHI, New Delhi.

6. Edward Blocher, Cost Management, A strategic Emphasis, TMH, New Delhi.
7. Hilton, Cost Management, TMH, New Delhi.
8. J. Madegowda, Marginal Costing for Managerial Decisions, Prateeksha Publishers.
9. Charles. T. Horngren and George Foster, Cost Accounting – A Managerial Emphasis, Prentice-Hall of India Pvt., Ltd.
10. C. Bursk and John. F. Chapman, New Decisions-Making Tools for Managers, The New American Library Inc.

Semester – II

Course – SC201: Investment Management

Weekly Teaching Hours: 3 | Examination Duration: 3 hours

Credits: 3 | Maximum Marks: 100

Objective: To enable the students to understand various investment avenues and a general frame for valuation of investable securities.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Meaning of Investment; Nature and Scope of Investment Analysis; Elements of Investment – Return, Risk and Time Elements; Objectives of Investment; Approaches to Investment Analysis; Security, Return and Risk Analysis; Measurement of Return and Risk.

Unit – 2: **Types of Investments:** Financial Investments – Securities and Derivatives, Deposits and Tax-sheltered Investment; Non-Financial Investment – Real Estate, Gold and other Types and their Characteristics; Sources of Financial Information.

Unit – 3: **Fundamental and Technical Analysis:** Fundamental Analysis-Economic Analysis, Industry Analysis and Company Analysis; Technical Analysis-Various Prices and Volume Indicators, Indices and Moving Averages; Interpretation of Various Types of Trends and Indices.

Unit – 4: **Valuation of Investable Securities:** Bonds, Debentures, Preference Shares, Convertible Securities and Equity Shares; Valuation of Options and Futures.

Unit – 5: **Efficient Market Hypothesis and Portfolio Selections:** Weak, Semi-strong and Strong Market; Testing of Different Forms of Market Efficiency and their Significance; Portfolio Selection–Traditional and Modern Approaches; Portfolio Revision and Appraisal.

Books Recommended for Reference (Recent Editions)

1. Cheney J and E Muses, Fundamental of Investments, Paul, New York
2. Fabozzi, Frank J, Investment Management, Prentice Hall
3. Bodie Zvi, kane Alex, Marcus J Alan and Mohanty Pitabas, Investment, The TMH
4. Avadhani V A, Security Analysis and Portfolio Management, Himalaya Publishing House

5. Pandian Punithavathy, Security Analysis and Portfolio Management, Vikas Publishing House
6. Domodaran, Investment Valuation, Jhon Wiley, New York.
7. Prasanna Chandra, Investment Analysis and Portfolio Management, TMH
8. Kevin S, Portfolio Management, PHI, New Delhi
9. Fuller Russew J and Farrel James L, Modern Investment and Security Analysis, TMH
10. Sharpe F William, Alexander J Gordon and Bailey V Jeffery, Investment Practice, PHI

Semester – II

Course – SC202: Advanced Auditing

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To gain expert knowledge of current auditing practices and procedures and apply them in auditing engagements.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** Definition, Scope and Objectives of Auditing; Basic Principles Governing an Audit; Audit Evidence; Audit Planning and Programming; Audit Sampling; Analytical Procedure; Introduction to Statements on Standard Auditing Practices.

Unit – 2: **Company Audit and Independent Financial Audit:** Provisions of the Companies Act, 2013 as regards Maintenance of Books of Accounts and Registrars; Audit of Share Capital; Audit of Reserves and Surplus; Audit of Debentures; Audit of Public Deposits; Audit of Investments.

Independent Financial Audit: Vouching, Verification and Valuation of Assets and Liabilities.

Unit – 3: **Cost Audit:** Definition and Objectives, Cost Audit Vs Financial Audit, Advantages and Criticism against Cost Audit; Cost Auditor: Qualifications and Appointment; Cost Audit Procedure: Material, Labor, Overhead, Depreciation, Work-in-Progress and Stores and Spare Parts; Cost Audit Report.

Unit – 4: **Management Audit:** Definitions, Objectives, Need and Importance of Management Audit; Management Auditor: Qualifications and Appointment; Techniques of Management Audit; Management Audit Vs Financial Audit; Audit of Management Functions: Production, Personal, Finance and Accounts, Selling and Distribution, General Management and Management Information System; Management Audit Report.

Unit – 5: **Trends in Auditing:** Audit of Members of Stock Exchange; Non- Banking Financial Company and Audit of Banks; Mutual Funds; Depositories; Environmental Audit; Quality Audit; Energy Audit; System Audit and Safety Audit.

Books Recommended for Reference (Recent Editions)

1. C. A. Pankaj Garg Advanced Auditing & Professional Ethics Taxmann's
2. CA Aarthi Lahoti & CA Vinod Kumar Agarwal Advanced Auditing & Professiona Ethics
3. Aruna Jha, Auditing, Taxmann's
4. CA AKS Krishanan, Advanced Auditing & profession Ethics.
5. CA Sarthak join, Advanced Audit
6. CA Aseem Trivedi, Advanced auditing & Professional Ethics.
7. Arpita Ghose, Gourab Ghose, Advanced Auditing & Professional Ethics, Green Edition
8. J. K . Shah, Advanced Auditing
9. Sanjay Gupta, Advanced Auditing , Sahitya Bhavana Publishers & Distributors pvt.ltd.
10. CA G. Sekar, CA B Saravana Prasath, Advacned Auditing, Wolters Kluwer.

Semester – II

Course – SC203: Supply Chain Management

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To facilitate understanding of the conceptual framework of Supply Chain Management and its application in management.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Supply Chain Management and Recent issues:** Concept, Importance and Objectives- CRM Vs SCM, Benchmarking concept, features and implementation, outsourcing in SCM– basic concepts and value addition in SCM – concept of demand chain management. Role of IT in supply chain management.

Unit – 2: **Designing the supply chain network:** Designing the distribution network, role of distribution, factors influencing distribution, design options, distribution networks in practice, network design in the supply chain, factors affecting the network design decisions. Designing and Planning Transportation Networks.

Unit – 3: **Transportation:** Transportation in SCM, Transportation formats, Modes of Transportation, Factors Affecting Transportation Performance, Factors influencing the Selection of Transporter, Modes of Transport, Fleet Management, Multi Model Transport, Containerization, Vehicle Scheduling and Routing, Milk Run and Cross Docking.

Unit – 4: **Warehousing:** Warehousing – Types of warehouses, warehousing operations, Warehouse automation, Warehouse Management Systems. Third party and value added warehousing, Role and importance of Handling Systems, Pricing, Revenue Management, Selection of Handling Systems for SC integration.

Unit – 5: **Logistics Management:** Logistics of part of SCM, logistics costs, different models, logistics sub-systems, inbound and out bound logistics bullwhip effects in logistics, distribution and warehousing management. Demand Management and Customer Service: Demand Management, traditional forecasting, CPFRP, customer service, expected cost of stock outs.

Books Recommended for Reference (Recent Editions)

1. Martin Christopher "Logistics and Supply Chain Management" 2016 Edinburgh gate UK
2. Alan Harrison" Logistics Management and Strategy: Competing through the Supply Chain"2019 Pearson Education Limited
3. Sunil Chopra" Supply Chain Management: Strategy, Planning, and Operation" 2019 Pearson Education Limited.
4. Edward Frazelle "Supply Chain Strategy"2017, McGraw-Hill Education
5. Leenders, Michiel R and others, "Purchasing and Supply Chain Management", 2010, TMH
6. Coyle, J.J. Bardi E.J. Etc., "A Logistics Approach to Supply Chain Management", 2009, Cengage, 1st Edition.
7. Power Mark J & Others, "The Outsourcing Hand Book How to Implement a Successful Outsourcing Process", 2007, Kogan Page, 1st Edition.
8. Mohanty, R.P and Deshmukh, S.G, "Essentials of Supply Chain Management", 2009, 1st Edition. Jaico,
9. Chandrasekaran. N, "Supply Chain Management process, system and practice", 2010, Oxford, 1st Edition.

Semester – II

Course – SC204: Managerial Communication

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To make the students to understand the different aspects of Communication Skills.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** Meaning, Importance of Communication, Purpose of Communication, Process of Communication, Communication Structure in Organizations, Barriers in Communication, Pre-requisites for Effective Communication and Communication Network.

Unit – 2: **Verbal and Non-Verbal Communication:** Meaning, Principles of successful Oral Communication, Barriers in Oral Communication; Conversation Control: Reflection and Empathy, Effective Principles of Oral Communication; Non-verbal Communication: Meaning, Characteristics, Classification, and Guidelines for Developing Non-verbal Communication.

Unit – 3: **Written Communication:** Meaning, Importance of skills in Written Communication, Purpose of Writing, Elements of Writing and Principles of Effective Writing; Business Letters and Reports: Introduction, Meaning, Importance, Types of Business Letters and Report Writing, Writing of Business Letters and Reports and Writing of Memos; Reading Comprehension: Discussion of Passages with questions to be answered.

Unit – 4: **Listening:** Meaning, Significance, Types, Myths about Listening, Barriers and Overcoming Measures, Stages of Listening, and Body Language of an Active Listener.

Unit – 5: **Presentation Skills and Employment Communication:** Meaning, Elements of Presentation, Designing a Presentation, Six great Helpers in Presentation, and Steps to a Successful Presentation; Group Communication: Meetings, Seminars, Conferences, Workshops and Business Etiquettes.

Employment Communication: Introduction, Writing CVs, Group Discussion, Interview Skills and Impact of Technological Advancement on Business Communication. (Recent Developments)

Books Recommended for Reference (Recent Editions)

1. M. K Seghal and V Khetrapals, Business Communication, Excel Books.
2. P. D Chaturvedi and Mukesh Chaturvedi, Business Communication: Concepts, Cases and Applications, Person Publications.
3. Asha Kaul, Business Communication, Himalaya Publishing House.
4. Rajesh Viswanathan, Business Communication, Himalaya Publishing House.
5. R. K Chopra, Communication Management, Himalaya Publishing House.
6. Dennis Tourish and Owen Hargie, Key Issues in Organizational Communication, Routledge.
7. Michael Kramer, Managing Uncertainty in Organizational Communication, Lawrence Erlbaum Associates.
8. Sandra M Oliver, Handbook of Corporation Communication and Public Relations: Pure and Applied, Routledge.
9. Renal Fox and John Fox, Organizational Discourse – A Language-Ideology, Power Perspective, Prager.
10. Robert R Ulmar, Communication and Organizational Crisis, Power Perspective, Prager.

Semester – III

Course – HC301: E-Commerce

Weekly Teaching Hours: 4 Examination Duration: 3 Hours

Credits: 4 Maximum Marks: 100

Objective: To make the students familiar with E-Commerce, E-Commerce Strategies, Technology and Application of Information Technology in Business.

Pedagogy: A Combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Conceptual Framework of E-Commerce**: Introduction, Meaning, Definitions, Unique Features, Need and Scope, Online Extension of BAM Model, Impact of E-Commerce on Business and Opportunities in E-Commerce, Advantages and Disadvantages of E-Commerce, IT Act - 2000 with Amendments, and its Positive aspects for Corporate Sector.

Unit – 2: **Business Models for E-Commerce and Software**: E-Business Models Based on Relationship of Transaction Parties and E-Business Models based on Relationship of Transaction Types, Accounting Software, Types- Tally, SAP.

Unit – 3: **Digital Marketing and Social Media Strategy**: Traditional and Digital Marketing, Internet Marketing Mix, Digital Marketing Trends, E-Marketing and E-Marketing Strategies; E-Advertising and M-Commerce. Social Media Strategy-Concept, Risk and Challenges, Social Media to Solve Business Challenges, Step by Step Guide to Creating a Social Media Strategy.

Unit – 4: **E-Customer Relationship Management:** Meaning and Definitions, Features, Framework and Architecture of E-CRM, Components of E-CRM, Building E-CRM, Tools to Maintain E-CRM, Strategies for E-CRM Solutions; Data Mining: Elements, Types, Process and Applications, Advantages and Disadvantages; Typical Business Touchpoints.

Unit – 5: **E-Payments System and Cyber Crime:** Introduction, Special Features, Types - Digital Token Based EPS, Smart Cards, Credit Cards, Digital Signature, E-Cheque, E-Cash, E-Purse, Debit Card and Mobile Payment, Components of an Effective EPS, Risk in EPS; EDI and EFT. Cybercrime: Meaning, Tools and Methods used in Cyber Crime- Proxy Servers and Anonymizers, Phishing, Password Cracking, Key Loggers and Spy Wares, SQL Injection, Buffer Overflow, Attacks on Wireless Network.

Books Recommended for Reference (Recent Editions)

1. Joseph P T, E-Commerce: An Indian Perspective, PHI
2. Krishnamurthy Sandeep, E-Commerce Management, Vidya Vikas Publication
3. Paramashivaiah P and Madhu S, E-commerce, Himalaya Publishing House, Mumbai
4. Murthy C. S. V, E-Commerce – Concepts, Model, And Strategies, Himalaya Publishing House
5. Whitely D, E-Commerce Strategy, Technology and Applications, Mcgraw Hill

6. Wetherbe Turban, Information Technology for Management, John Willey Publishers
7. Eliason Alan L, Business Computer Systems and Applications, Science Research Associates, Chicago
8. Justice Yatindre Singh, Cyber Laws, Universal Law Publishing Company
9. Prajagopalan S. P, Computer Application in Business, Vikas Publishing House
10. Nina Godbole & Sunit Belapure Cyber Security, Wiley India Pvt Ltd, 2012

Semester – III

Course – HC302: Operations Research

Weekly Teaching Hours: 4 Examination Duration: 3 hours
Credits: 4 Maximum Marks: 100

Objective: This course aims at developing an understanding of the application of Operations Research Techniques for optimal managerial decisions.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction and Linear Programming:** Introduction, Meaning, Definition of Operations Research, Importance and Scope, Quantitative Techniques in Business Applications, Optimization Concept, Operations Research Models, Linear Programming: Introduction to Linear Programming, Problem Formulation, Product Mix and various Managerial Applications, Graphical Method of Problem Solving, Alternate Techniques of Linear Programming Problems, Simplex Method, Duality in Linear Programming, Formulation of Dual Problems, Advantages and its Economic Interpretation.

Unit – 2: **Transportation Models:** Nature and Scope of Transportation and Allocation Models, Methods of Allocation, Different Methods for Finding Initial Solution: VAM, N-W Corner Rule, and Other Methods, Degeneracy, Finding Optimal Solution, Test for Optimality, Imbalance in Total Availability and Total Requirement, Impossible Shipments, Alternate Methods of Solutions, and Maximization as Objective Applications.

Unit – 3: **Assignment Problems:** Row Minimum, Column Minimum, Iteration, Balanced, Unbalanced, Infeasible, Maximization, Objectives, Applications, Travelling Salesman Problem.

Unit – 4: **Replacement Models:** Machines Replacement Models, Replacement of Items Deteriorating with Time, Replacement of Items that fail completely; and Description of Application Areas like Recruitment and Promotion Problems, Equipment Renewal Problems.

Unit – 5: **Network Models:** Introduction to PERT and CPM Techniques, Determination of Critical Path- PERT, Estimating Activity Times, Network Components, Precedence, Events, Activities, Errors and Dummies, Critical Path Analysis, Float, Probabilities in PERT Analysis, Project Time calculation, Project Crashing, Time, and Cost Considerations.

Books Recommended for Reference (Recent Editions)

1. J K Sharma., Quantitative Techniques, Macmillan India
2. N D Vohra., Quantitative Techniques in Management, TMH
3. J K Sharma., Operations Research, Macmillan
4. K. Shridhar Bhat, Operation Research and Quantitative Techniques, Himalaya publishing house
5. Anderson, Sweeney, Williams., Quantitaive Methods for Business. Thomson
6. Srivastava and Others., Quantitative Techniques, New Age International
7. Barry Render, Ralph Stair and Michael Hanna., Quantitative Analysis, Pearson
8. Freederick Hillier and Gerald Lieberman., Operations Research, TMH
9. N.P. Agarwal, Sonia Agarwal, and Himanshu Saxena, Quantitative Techniques,
10. S.D. Sharma., Operations Research, Kedar Nath Ram Nath and co. publishers

Semester - III

Course – HC303: Business Research Methodology

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: The course is envisaged to provide the students with the knowledge and skill related to conduct of research related to business and familiarize the students with the technicalities of executing a research assignment.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction to Research:** Meaning and Objectives of Research; Significance of Research; Process of Research; Types of Research; Research Approaches; Criteria for Good Research; Ethics in Business Research; Selection and Formulation of a Research Problem; Criteria of a Good Research Problem; Review of Literature: Role of Literature in Research Process; and Structure of Literature Review**.**

Unit – 2: **Hypothesis and Research Design:** Concept, Sources and Types of Hypothesis; Formulation of Hypotheses; Qualities of a Workable Hypothesis; Usefulness of Hypothesis in Business Research; **Research Design:** Uses of Research Design; Steps in Preparing a Research Design; Classification of Research Design, and Research Design for Business Studies.

Unit – 3: **Collection of Data and Sampling:** Types of Data Collection; Process of Data Collection through Observation and Schedule; Pilot study; Construction of Questionnaire; Interview Techniques in Business Research. **Sampling:** Meaning and Definitions of Sampling, Characteristics of Good Sample; Principles of Sampling; Sampling Process; Types of Sampling Techniques; Sampling and Non-Sampling Errors.

Unit – 4: **Measurement Scales and Statistical Analysis:** Concept and Levels of Measurement; Tests of Sound Measurement: Test of Validity and Reliability;

Concept of Scaling; Types of Measurement Scales; Data Preparation: Editing, Coding, Classification, Tabulation. **Statistical Analysis:** Measures of Central Tendency; Measures of Variation; Measures of Skewness; Statistical Testing Procedure; Types of Tests: T-Test, Chi-Square Test, ANOVA, Pearson's Correlation; and Role of SPSS in Research.

Unit – 5: **Interpretation and Report Writing:** Meaning and Importance of Interpretation; Pre-requisites of Interpretation; Errors in Interpretation; **Report Writing:** Essentials of a Good Research Report; Types of Reports; Layout of a Research Report; Guidelines for effective Report Writing; Writing up of the Report; Evaluating a Research Report.

Books Recommended for Reference (Recent Editions)

1. Aggarwal. S and Bharadwaj S, Research Methodology, Kalyani Publications.
2. Krishnaswamy. O. R, Research Methodology, Himalaya Publishing House.
3. C. M. Chikkodi and Satyaprasad B, Business Statistics, Himalaya Publishing House.
4. Bhandarkar W. T, Methodology and Techniques of Social Research, Himalaya Publishing House.
5. Pannerselvam R, Research Methodology, Prentice Hall of India.
6. Gupta. S. C and Gupta I, Business Statistics, Himalaya Publishing House.
7. Donald R Cooper and Pamela S Schindler, Business Research Methods, Tata McGraw Hill
8. Aczl-Sounderpandian, Business Statistics, Tata McGraw Hill
9. Wilson. M, Business Statistics, Himalaya Publishing House.
10. Levin. R. I and Rubin D. S, Statistics for Management, Pearson

Semester - III

Course – SC301: Human Resource Management

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To facilitate understanding of the conceptual framework of Human Resource Management and its application in decision making.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction HRM and HRIMS** - Concept, Significance, Objectives and Scope, HR Planning, Job Analysis and Design; Job Description and Job Specification; Strategic HRM. Human Resource Information Management System (HRIMS) and Developing HRIMS.

Unit – 2: **HRM Functions and HR Audit:** Recruitment, Selection, Induction and Placement, Recruitment Sources: Internal and External, Selection: Steps in Selection Process; Human Resource Audit, Audit of Corporate Strategy, Audit of Human Resource Function, Audit of Managerial Compliance, Audit of

Employee Satisfaction.

Unit – 3: **Training, Development and Outsourcing**: Training: Need, Importance and Objectives, Methods of Training; Executive Development Programs: Need and Techniques. Outsourcing: Concept and Evolutions, Reasons and Criteria for Outsourcing, Types of Outsourcing, Problems and Remedial Measures of Outsourcing, Future Outsourcing in India.

Unit – 4: **Industrial Relations, Compensation and Appraisal:** Industrial Relations; Industrial Disputes and Settlements, Disciplinary Procedure, Suspension, Dismissal, Layoff, Retrenchment, Closure, VRS, Health and Safety. Compensation and Rewards, Factors influencing Compensation: Monetary and Non-Monetary Benefits; Performance Appraisal: Process of Performance Appraisal: Methods of Performance Appraisal.

Unit – 5: **HRM in the Era of Knowledge and Diversity at Work:** Knowledge Management: Concept, Knowledge Conversion, Process of KM, Virtual Organizations: Feature, Types and Issues of HR, Learning Organizations. Diversity at Work: Managing Diversity, Causes of Diversity, The Paradox of Diversity, Diversity with Special Reference to Handicapped, Women and Aging. Empowerment and Gender Issues.

Books Recommended for Reference (Recent Editions)

1. Desslor Gary, Human Resource Management, Pearson Education
2. Mathis and Jackson, Human Resource Management, Thomson
3. Flippo, Edwin B, Personnel Management, McGraw-Hill
4. Memoria and Gankar, Personnel Management: Text and Cases, Himalaya Publishing House
5. Monappa and Mirza, Personnel Management, TMH
6. Charles R Green, Strategic Human Resource Management, PHI
7. P. Subba Rao, Human Resource Management, Himalaya Publishing House
8. Deepak Kumar S D, Human Resource Management, Excel Books
9. Gupta C B, Human Resource Management, Sultan Chand & Sons
10. Decenzo, Robbins, Personnel/Human Resource Management, John Wiley & Sons Pvt Ltd.

Semester – III

Course – SC302: Business Ethics and Corporate Governance

Weekly Teaching Hours: 3 — Examination Duration: 3 hours

Credits: 3 — Maximum Marks: 100

Objective: This paper aims at providing the students an understanding of ethical issues related to business and good governance necessary for long term survival of business.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Business Ethics:** The Concept of Ethics; Ethics and related Connotations, Business Values and Ethics, Concept of Business Ethics, Various Approaches to Business Ethics; Ethical Theories; Ethical Governance; Social Responsibility– An Extension of Business Ethics; The Concept of Corporate Ethics; Benefits of Adopting Ethics in Business; Code of Ethics, Ethics Committee.

Unit – 2: **Business Ethics in Different Streams:**

Ethics in Finance: Introduction, Accountability and Acquisitions. Fair Value, Finance and Ethics, Insider Trading and Financial Statements.

Ethics in HRM: Introduction, Ethical Implications of Variation in HRM Practices; Individualism v/s Collectivism in HRM Practices; Psychological Expectancy Model; Restricting and Layoffs.

Ethics in Marketing: Introduction, Marketing Ethics and Consumer Rights; Criticism of Ethics in Marketing; Ethics in International Marketing.

Unit – 3: **Corporate Governance:** Concepts of Corporate Governance, Origin and Need for Registered Companies; Models of Corporate Governance; Committees and Authorities on Corporate Governance: Recommendations of Cadbury Committee, Confederation of Indian Industries, Code of Corporate Governance, Kumaramangalam Birla Committee Recommendations; Board Committees: Audit Committee, Compensation Committee, Nomination Committee- Constitution, Need, Rights, Duties and Responsibilities.

Unit – 4: **Corporate Management:** Management v/s Governance; Internal Constituents of the Corporate Governance; Key Managerial Personnel (KMP); Chairman- Qualities of a Chairman, Powers, Responsibilities and Duties of a Chairman; Chief Executive Officer (CEO), Role and Responsibilities of the CEO; Separation of Roles of Chairman and CEO, CFO, Manager, Company Secretary, Auditor.

Unit – 5: **Corporate Social Responsibility (CSR) –**Meaning, Corporate Philanthropy, CSR- An Overlapping Concept, Corporate Sustainability Reporting; CSR through Triple Bottom Line; CSR and Business Ethics; CSR and Corporate Governance; Environmental Aspects of CSR; CSR Models; Drivers of CSR; Global Reporting Initiatives; Major Codes on CSR; Initiatives in India. (Recent Developments)

Books Recommended for Reference (Recent Editions)

1. S.K. Bhatia - Business Ethics and Managerial Values (Deep & Deep Publications Pvt.Ltd, 2000)
2. Velasquez – Business Ethics – Concepts and Cases.
3. Reed Darryl – Corporate Governance, Economic Reforms & Development (Oxford).
4. Mathur UC – Corporate Governance & Business Ethics (Mc Millan).
5. A.N. Tripathi, Human Values, New Age International
6. Prof. S.K. Chakraborthy, Wisdom Leadership, Wheeler Publication.
7. Corporate Governance, MacMallin, OUP

8. Chakraborty, The Management and Ethics Omnibus-, OUP
9. S.S. Iyer - Managing for Value (New Age International Publishers, 2002)
10. Laura P Hartman Abha Chatterjee - Business Ethics

Semester - III

Course – SC301E: Indian Accounting Standards (Ind AS) – I

Weekly Teaching Hours: 4 | Examination Duration: 3 hours
Credits: 4 | Maximum Marks: 100

Objective: To familiarize the students with the Corporate Financial Reporting Standards as notified by the Ministry of Corporate Affairs, GoI. and Imparting Advanced Accounting Knowledge and Skills.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: An Overview of IND AS: Introduction, Convergence, Need, Challenges, Implementation Road Map. Regulatory Framework in India: Standards Setting Bodies and Process, India and IFRS.

Unit – 2: **Conceptual Framework**: Ind AS - 8: Accounting Policies, Changes in Accounting Estimates and Errors; Ind AS - 10: Events after Reporting Period; and Ind AS-24 Related Party Disclosure. Other Ind AS: Ind AS – 29: Financial Reporting in Hyper-inflationary Economies; and Ind AS – 34: Interim Financial Reporting.

Unit – 3 **Valuation and Measurement of Assets**: Ind AS - 16: Property, Plant and Equipment; Ind AS - 38: Intangible Assets; Ind AS - 40: Investment Property; Ind AS - 2: Inventories; Ind AS - 20: Accounting for Government Grants; Ind AS - 23: Borrowing Costs and Ind AS – 36: Impairment of Assets.

Unit – 4: **Valuation and Measurement of Liabilities**: Ind AS - 19: Employee Benefits and Ind AS - 37: Provisions, Contingent Liabilities and Contingent Assets.

Unit – 5: **Revenue and Expenses**: Ind AS - 18: Revenue; Ind AS - 11: Construction Contracts and Ind AS - 21: The Effects of Changes in Foreign Exchange Rates; Ind AS - 33: Earnings per Share.

Books Recommended for Reference (Recent Editions)

1. Greuning Van Hennie, International Financial Reporting Standards - A Practical Guide.
2. International Financial Reporting Standards (IFRSs), Taxman.
3. Haskins E Mark and Ferris R Kenneth and Selling J Thomas, International Financial Reporting and Analysis: A Contextual Emphasis.
4. Nobes Christopher and Parker Robert, Comparative International Accounting.
5. Mohapatra A.K. Das, International Accounting.
6. The Companies Act, 2013, Publications Division, Government of India.

7. Mukesh Saraf, Practical Implementation and Application Guide of Indian Accounting Standards (Ind AS) IFRS- Converged Ind AS, Bharat Law House.
8. B.D. Chatterjee, Illustrated Guide to Indian Accounting Standards (Ind AS), Taxman
9. T.P Ghosh, Illustrated Guide to Indian Accounting Standards (Ind AS), Taxman
10. Companies (Indian Accounting Standards) Rules, 2015 (Ind AS), with Referencer, Bharat Law House Pvt.Ltd

Semester - III

Course – SC 302E: Indirect Taxation– I (GST)

Weekly Teaching Hours: 4 Examination Duration: 3 Hours
Credits: 4 Maximum Marks: 100

Objective: To expose the students to the basic concepts of GST, develop the knowledge about the provisions under the Act, impart idea about levy, collection of tax, tax credit and explain the application of GST in business practices.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc.*

Course Inputs

Unit – 1: **Introduction:** Tax-Direct and Indirect Tax, GST-Stages and Evolution of GST in India, GST Bill, GST Council, Need for GST in India, Challenges for the Introduction of GST in India, Salient Features, Benefits of GST; Subsuming of Taxes, Framework of GST in India: CGST, SGST, UTGST, IGST; Computation, Goods outside the scope of GST; Dual GST Model.

Unit – 2: **Basic Concepts:** Agent; Aggregate Turnover; Agriculturist; Assessment; Business; Business Vertical; Capital Goods; Casual Taxable Person; Central Tax; Common portal; Composite Supply-Continuous Supply of Goods; Continuous Supply of Services; Electronic Commerce-Electronic Commerce Operator; Concept of GSTN.

Unit – 3: **Levy and Collection of Tax:** GST Rate Structure, Supply, Scope of Supply, Composite and Mixed Supplies; Levy and Collection; Composition Levy; Exemptions; Person Liable to pay GST; Supply of Goods or Services or both to or by Special Economic Zone. Reverse Charge; Electronic Commerce Operators.

Unit – 4: **Time Value and Place of Supply under GST:** Time of Supply; Value of Supply and Place of Supply; Change in Rate of Tax in respect of Supply; Exempt Supply**;** Problems on Time and Place of Supply, Value of Supply, Value of Taxable Supply, Invoice Value, GST Payable.

Registration under GST: Introduction, Persons not liable for Registration; Compulsory Registration in Certain Cases; Procedure; Concept of Distinct Person under GST; Deemed Registration; Cancellation of Registration; Revocation of Registration.

Unit – 5: **Input Tax Credit (ITC):** Introduction, Eligibility for taking Input Tax Credit (ITC); Blocked Credits; Method of Reversal of Credits; Input Tax Credit in Special Circumstances; Input Tax Credit in respect of Goods sent for Job-work; Distribution of Credit by Input Service Distributor (ISD), Recovery of Excess Credit by ISD-Availing and Utilization of ITC; Computation of GST; Problems on ITC.

Books Recommended for Reference (Recent Editions)

1. V P Agarwal, H C Meherotra, Goods and Services Tax, Sahithya Bahavan Publication.
2. V S Datey, GST Ready Reckoner, Taxmann's Publication.
3. Vinod K Singhania, Student guide to GST and Custom Law, Taxmann
4. V P Agarwal, H C Meherotra, Goods and Services Tax and Customs Act, Sahithya Bahavan Publication.
5. V S Datey, All about GST, Taxmann's Publication
6. Dr Vandana Bangar and Dr Yogendra Bangar, Beginner's Guide to GST.
7. C A Rajat Mohan, Illustrated Guide to Goods and Service Tax, Bharat Publication.

Additional References

- CGST Act
- SGST Act
- IGST Act
- Study Material of ICAI

Semester – III

Course – SC303E: Risk Management and Financial Derivatives

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to understand the concepts and use of Derivatives in Risk Management.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Risk Management:** Introduction to Risk Management, Meaning, Definition, Nature; Types of Risks; Evolution of Risk; Steps in Risk Management; RBI Guidelines; Classification of Risks; Sources of Risk: Internal and External.

Unit – 2: **Introduction to Derivatives Market:** Concept of Derivatives; Evolution of Derivatives; Emergence of Derivatives Market: Participants, Functions and Development of Exchange Traded Derivatives; Exchange Traded Vs OTC Derivatives; Types of Derivatives; Overview of Indian Derivatives Market and The Regulatory Framework of Derivatives Trading in India.

Unit – 3: **Forwards and Futures Market:** Pricing; Trading and Settlement Mechanism; Concept of Forward and Futures Contracts; Features; Forward and Futures Trading Mechanisms; Forward Markets as Forerunners of Future Markets; Types of Futures Contracts; Major Distinctions between Forwards and Futures Contracts; Theories of Forward and Futures Pricing; Pricing of Forwards and Futures.

Unit – 4: **Options Market and Pricing:** Concept of Option Contracts; Development of Options Markets; Types of Options: Call Option and Put Option; Terminologies used for Options Pricing; Styles of Options: European, American and Bermudian Options and Difference between Futures and Options.

Option Pricing: Factors affecting Option Pricing; Put-Call Parity Relationship; Option Greeks; Option Pricing Models: Black-Scholes Option Pricing Model; Binomial Option Pricing Model.

Unit – 5: **Concept of Swaps:** Mechanics of Interest Rate Swaps, Valuation of Interest Rate Swaps; Currency Swaps, Valuation of Currency Swaps. Uses of Swaps; Warrants, Exotics, Weather, Energy and Insurance Derivatives; Critiques of Derivatives.

Books Recommended for Reference (Recent Editions)

1. Hull C John, Options, Futures and Other Derivatives, Pearson Education Publishers.
2. N. D, Vohra and B R Baghi, Futures and Options, Tata McGraw-Hill Publishing Company Ltd.
3. David A Dubofsky and Thomas W Miller, Derivatives: Valuation and Risk Management, Oxford University Press, Newyork.
4. S. L. Gupta, Financial Derivatives: Theory, Concepts and Problems, Prentice Hall of India.
5. Red Head, Financial Derivatives: An Introduction to Futures, Forwards, Options, Prentice Hall of India.
6. S. S. S. Kumar, Financial Derivatives, Prentice Hall of India.
7. T.V. Somanathan, Derivatives, Tata McGraw-Hill Publishing Company Ltd.
8. www.sebi.com, NSE Manual of Indian Futures and Options
9. Kolb Robert W, Options: An Introduction, Kolb Publishing.
10. G. Kotreshwar, Risk Management – Insurance and Derivatives, Himalaya Publishing House.

Semester - III

Course – SC304E: Indian Banking System

Weekly Teaching Hours: 4 | Examination Duration: 3 hours

Credits: 4 | Maximum Marks: 100

Objective: To expose the students to the fundamental concepts of Banking, its operation and innovations in Banking Sector.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Commercial Banking**: Banking System in India; Phases of Indian Banking; Classification of Banks; Impact of Nationalization and Liberalization on Indian Banking; Challenges after Nationalization and Liberalization; Nature and Structure of Commercial Banking in India and Recent Development in Commercial Banking.

Unit – 2: **Central Banking**: Central Banking Policy in Developed and Developing Economies; Functions: Note Issue, Bankers to the Government; Bankers to Commercial Banks; Credit Control Techniques; Structure and Organization of RBI - Role of RBI as Central Bank, Banking Regulation Act, 1949; The Reserve Bank of India Act, 1934 and Monetary Policy, Instruments; and Role of Monetary Policy Committee.

Unit – 3: **Rural Banking**: Functions of Co-Operative Banks, Co-Operative Credit, RRBs and their Functions, Structural Changes, Reforms in Co-Operative Credit; NABARD: Its Functions, Objectives and Working, Role of NABARD in Agriculture Finance and Rural Infrastructure Development Funds.

Unit – 4: **Information Technology in Banks**: Impact of Technology in Banking, Core Banking, Indian Trust Act 1882, Information Assurance Security (IAS), Block Chain, Cryptocurrency, CASA (Current Account and Savings Account), Ethical Hacking, Dormant Account, ATM Management, Cybercrimes, D-MAT, Challenges and Opportunities of E-banking, Committee Recommendations, Cashless Banking, Implementation Computerization and Security.

Capital Adequacy Requirements: Capital Adequacy in Banks, Capital Adequacy Norms, Maintenance of CRAR, Basel Accord Framework, Basel Accords – I, II and III; Impact of Basel Accords on Indian Banking System; Statutory Requirements: Need for Reserve Requirements and Computation of CRR and SLR.

Unit – 5: **Financial Services and Reforms**: Consumer Finance, Housing Finance, Depository Services and Insurance Services; Banking Ombudsman Scheme and Narasimhan Committee Recommendations.

Financial Sector Reforms in India - Need for Reforms, Major Reforms after 1991, Issues and Impact of Financial Reforms, KYC Norms and Money Laundering Regulations Act, 2002.

Books Recommended for Reference (Recent Editions)

1. J. F Sinkey, Commercial Bank Financial Management, Macmillan Publishing Co

2. Hawtrey, The Art of Central Banking, Augustus Publishers
3. Charless L Prather, Money and Banking, Richard. D. Irwin Inc
4. Benton E. Gup, Commercial Banking - The Management of Risk, Wiley
5. Jain Rathi Sharma, Banking Service Operations, RBD Publication
6. Indian Institute of Banking and Finance, Principle and Practice of Banking, Macmillan
7. B S Khubchandani, Practice and Law of Banking, Macmillan India Limited
8. K. P. M Sundharam and P. N Varshney, Banking Theory - Law and Practice, Pearson
9. Pai Panandikar and N C Mehra, Rural Banking, National Institute of Bank Management
10. S Natarajan and R. Parameswaran, Indian Banking, S. Chand

Semester - III

Course – SC305E: Management of Life Insurance

Weekly Teaching Hours: 4 | Examination Duration: 3 hours

Credits: 4 | Maximum Marks: 100

Objective: To enable the students to understand various dimensions of life insurance and the IRDA regulations regarding management of life insurance.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Principles of Life Insurance**: Life Insurance in Ancient India, Regulation of Life Insurance, Concept, Growth of Actuarial Science, Life Insurance Needs at various Stages, Benefits of Life Insurance; Essential Elements of Insurance Contract: Utmost Good Faith, Insurable Interest, Representation, Warranty, Indemnity and Contribution.

Unit – 2: **Product Development and Life Insurance Products:** Concept of Product, Origin of New Product, New Product Development Process; Bancassurance: Models of Bancassurance, E- Insurance; and Emerging Trends in Insurance Sector.

Life Insurance Products: The basic elements of Life Insurance Products, Features of Term Insurance and Endowment Insurance, Role of Term Insurance and Endowment Insurance in Product Designing, Whole Life Assurance, Children's Life Insurance, Group Insurance, Different Types of Life Insurance Products in Indian Market, Life Insurance Products available in the Overseas Market, Products of the Several Private Insurer's and Recent Trends in the Insurance Industry.

Unit – 3: **Annuities and Pensions:** Meaning of Annuities and Pensions, Need for an Annuity; Different Types; Obligation of the Insurer regarding the payment of Annuity; Different Schemes available in India; Present Status and Future Prospects of Pension Funds in India.

Unit – 4: **Risk Assessment and Underwriting**: Concept of Underwriting; Different Classes of Lives and the Standard for Classification of Risks; Need for Selection, Purpose of Selection; Important factors to assess the Insurability of Individual; Sources of Information for Underwriting, Classification of Underwriting Process and Measures to be considered for the Sub-Standard Lives.

Unit – 5: **Claims Management**: Features of Insurance Claims; Operative Clause of Policy, Maturity Claims and Death Claims, Early Claims, Claims Investigation Management of early Claims, Claim Concession Clause, Married Women's Property Act, and Accident and Disability Benefits.

Books Recommended for Reference (Recent Editions)

1. M. N Mishra and S B Mishra, Principle and Practice of Insurance, S. Chand and Co
2. Mishra K. C, Practice of Life Insurance, Cengage learning
3. Mishra K. C, Life Insurance Underwriting, Cengage Learning
4. T. S Mann, Law and Practice of Life Insurance in India, Deep and Deep
5. G. Krishna Swamy, Principle and Practice of Life Insurance, Excel Books
6. Swaroop C. Sahoo and Suresh C Das, Insurance Management, Himalaya Publishing House
7. Chris Paine, Reinsurance, Ane Books Pvt. Ltd
8. S. V Joga Rao, Principle of Insurance Law, Wadhwa and Co
9. Badla B. S, Insurance Fundamentals, Deep and Deep Publication
10. Jawahar Lal U, Insurance Industry, ICFAI Press

Semester - III

Course – SC306E: Consumer Behaviour and Marketing Research

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to understand consumer behaviour and different aspects of marketing research.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Unit -1: **Consumer Behaviour:** Introduction, Definition, Consumer Behaviour and Marketing, Application of Consumer Behaviour Science, Significance, Stages in Consumer Decision Making, Characteristics of Indian Consumers, Types of Consumer Decision Making, Diversity of Consumer Behaviour, Consumer Needs and Motivation - Positive and Negative Motivation, Rational *Vs* Emotional Motives, Nature and Characteristics of Indian Consumers, Consumer Movement in India, Rights and Responsibilities of Consumers in India.

Unit – 2: **Determinants of Consumer Behavior:** Individual Determinants of Consumer Behaviour, Personality and Self Concept, Consumer Perception, Consumer Learning, Consumer Attitude Formation and Change; Consumer Relevant Reference Groups - Opinion Leaders - Family Decision Making and Consumption Related Roles - Family Life Cycle - Social Class and Consumer Behavior - Influence of Culture on Consumer Behavior - Cross Cultural Context, Diffusion of Innovations - The Diffusion and Adoption Process - Consumer Innovativeness and Personality Traits, External Influences on Consumer Behaviour Social Class**.**

Unit – 3: **Consumer Decision Making:** Models of Consumer Decision Making - Engle-Kollatt Blackwell Model, Howard-Sheth Model, Bettman's Model and HCB Model; Concept of Involvement, Extensive/Limited Problem Solving – Reutilized Responsive Behaviour. Post-Purchase Behavior - Consumer Satisfaction Concept and Models - Expectancy Disconfirmation, Desires Congruency Model, Equity Theory, Attribution Theory, Cognitive Dissonance, Consumer Delight and Consumer Complaint Behaviour. Family Decision Making and Consumption Related Roles, Key Family Consumption Roles, Dynamics of Husband-Wife Decision Making

Unit – 4: **Consumerism:** Evolution of Consumer Society; Definition of Consumerism, Buyers and Sellers Rights, Effects of Consumerism; Organizational Buying - Concept and Comparison with Consumer Buying – Influence of Economic, Political, Legal, Suppliers, Technology, Customers, Government and Labour Factors; Analyzing Buyers' Strengths and Negotiation Capabilities, Traditional Family Life Cycle & Marketing Implications, Reference Groups: Understanding the Power & Benefits of Reference Groups.

Unit – 5: **Conceptual Framework of Marketing Research:** Marketing Research, Role of Marketing Research in Marketing, Research Process, Implications of Marketing Research on Marketing Mix, Limitations of Marketing Research, Ethics in Marketing Research and Prominent Market Research Agencies in India. Cluster Analysis for Identifying Market Segments, Conjoint Analysis for Product Research, Multi-Dimensional Scaling, Discriminate Analysis and Perceptual Mapping for Brand Positioning; Advertising Research - Copy Testing, Media Selection, Media Scheduling, Market and Sales Analysis.

Books Recommended for Reference (Recent Editions)

1. Debraj Datta and Mahua Datta, Consumer Behaviour and Advertising Management, Vrinda Publication Pvt Ltd
2. S. Sumathi and P. Saravanavel, Marketing Research and Consumer Behavior, Vikas Publishing House Pvt Ltd
3. Leon Schiffman and Lazar Kanuk, Consumer Behaviour, PHI
4. Paco Underhill, Why We Buy: The Science of Shopping, Simon and Schuster
5. Rama Bijapurkar, We Are like that Only, Penguin India
6. Damodar Mall, Super Marketwala: Secrets to Winning Consumer India, Random House
7. Green Paul, Tull Donald, and Albaurn Gerald, Research for Marketing Decisions
8. Akar, Kumar and Day, Marketing Research

9. Tull S Donald and Hawkins I Del, Marketing Research - Measurement and Methods

10. Mittal Sheth, Customer Behavior – A Managerial Perspective, Thomson

Semester - IV

Course – HC401: International Business

Weekly Teaching Hours: 4 | Examination Duration: 3 hours

Credits: 4 | Maximum Marks: 100

Objective: To make the students understand and demonstrate issues of international business in world economy.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction to International Business**: Meaning, Scope, International Orientations, Motives for Internationalization of Firms, Environmental Factors influencing International Business and Strategic Decisions in International Business.

Unit – 2: **International Trade Theories:** Theory of Mercantilism, Absolute Advantage Theory, Comparative Cost Advantage Theory, Hecksher-Ohlin Theory, New Product Life Cycle Theory**,** New Trade Theory, Porter's Diamond Model and Implications for International Business.

Unit – 3: **Strategies for International Business:** Profiting from Global Expansion, Global Expansion and Business Level Strategy, Pressures for Cost Reduction and Local Responsiveness; International Strategies: International, Multi- Domestic, Global, and Transnational Strategies; Strategic Alliances: Types of Competitive Strategic Alliances, Advantages and Disadvantages of Strategic Alliances.

Foreign Direct Investment: Theories of FDI, Benefits and Costs of FDI, Determinants of FDI, Laws and Regulations governing FDI in India, FDI in Indian Retail Sector and Impact of FDI on Indian Economy.

Unit – 4: **International Institutions**: WTO: Objectives of WTO, Structure of WTO, Fundamental Principles of WTO, Functions of WTO, India and WTO; IMF – Role of IMF in Balance of Payments and SDR, India and IMF; UNCTAD – Role of UNCTAD in Developing Countries, and India and UNCTAD.

Unit – 5: **Regional Trade Blocs and Other Issues:** Concept of Regional Trade Bloc, Purpose of Regional Trade Blocs, European Union, BRICS, SAARC, ASEAN, NAFTA, APEC, OAU and GCC.

Intellectual Property Rights: Nature of Intellectual Property, TRIPs, Problems and Fears of Developing Nations regarding TRIPs and International Characteristics of Intellectual Property.

Books Recommended for Reference (Recent Editions)

1. Alan M. Rugman and Richard M. Hodgetts, International Business, Pearson Publication

2. Donald Ball, International Business, TMH Publication
3. Justin Paul, International Business, PHI Publication
4. Vyuptakesh Sharan, International Business , Concept, Environment and Strategy, Pearson Education Publication.
5. Francis Cherunilam, International Business ,Text and Cases, PHI Publication
6. Charles W. L. Hill, Global Business Today, TMH Publication
7. Therese Flaherty, Global Operations Management, TMH Publication
8. Subba Rao, International Business, Himalaya Publishing House
9. Sundaram and Black, International Business Management, PHI Publication
10. Srivastava R.M., International Strategic Management, Himalaya Publishing House.

Semester – IV

Course – HC402: Entrepreneurship Development

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To expose the students to the foundations and different dimensions of Entrepreneurial Development.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** Meaning, Definitions and Concept of Enterprise, Entrepreneurship and Entrepreneurship Development, Evolution of Entrepreneurship, Theories of Entrepreneurship, Characteristics and Skills of Entrepreneurship, Concepts of Intrapreneurship, Entrepreneur Vs Intrapreneur, Entrepreneur Vs Entrepreneurship, Entrepreneur Vs Manager, Role of Entrepreneurship in Economic Development, Factors Affecting Entrepreneurship, Problems of Entrepreneurship.

Unit – 2: **Entrepreneurial Competency and Development:** Meaning and Concept of Entrepreneurial Competency, Developing Entrepreneurial Competencies, Entrepreneurial Culture, Entrepreneurial Mobility, Factors Affecting Entrepreneurial Mobility, Types of Entrepreneurial Mobility. Entrepreneurial Motivation: Meaning and Concept of Motivation, Motivation Theories, Entrepreneurship Development Program: Needs and Objectives of EDPs, Phases of EDPs, Evaluation of EDPs

Unit – 3: **Institutional Development of Entrepreneurship:** Role of Government in Promoting Entrepreneurship, MSMEs Policy in India, Agencies for Policy Formulation and Implementation: District Industries Centres (DIC), Small Industries Service Institute (SISI), Entrepreneurship Development Institute of India (EDII), SIDBI, RUDSETI, MFI, SHG_S, National Institute of Entrepreneurship & Small Business Development (NIESBUD), National Entrepreneurship Development Board (NEDB), Financial Support System: Forms of Financial Support, Long Term and Short Term Financial Support, Sources of Financial Support, MUDRA, Development of Financial Institutions, Investment Institutions.

Unit – 4: **Women and Social Entrepreneurship:** Meaning, Characteristic Features, Problems of Women Entrepreneurship in India, Developing Women Entrepreneurship in India, Concept of Social Enterprise and Social Entrepreneurship, Social Entrepreneurs, Sustainability Issues in Social Entrepreneurship, Rural Entrepreneurship, Family Business Entrepreneurship, Concepts of Entrepreneurship Failure, Issues of Entrepreneurial Failure, Entrepreneurial Resurgence, Reasons for Entrepreneurial Failure, Essentials to Avoid Unsuccessful Entrepreneurship.

Unit – 5: **Business Ideas, Project Identification and Formulation:** Forms of Business Ownership, Issues in Selecting Forms of Ownership, Environmental Analysis, Identifying Problems and Opportunities, Defining Business Idea, Planning Business Process; Project Management: Concept, Features, Classification of Projects, Issues in Project Management; Project Identification; Project Formulation; Project Design and Network Analysis; Project Evaluation; Project Appraisal; Project Report Preparation; Specimen of a Project Report. (Recent Developments)

Books Recommended for Reference (Recent Editions)

1. Singh Narendra, Project Management and Control, Himalaya Publishing House.
2. Prasanna Chandra, Projects: Planning, Analysis, Selection, Implementation and Review, Tata McGraw Hill.
3. P. Gopala Krishnan and V. E Rama Moorthy, Project Management, MacMillan India.
4. Chandra Prasanna, Project Preparation, Appraisal and Implementation, Tata McGraw Hill.
5. A. N Desai, Entrepreneurship Management, Ashish Publishing House.
6. Vasanth Desai, The Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House.
7. Nicholas, Project Management for Business and Technology: Principles and Practice, Prentice Hall of India.
8. Hall B. L, Pickle and Yance, Small Business Management, John Wiley & Sons, USA.
9. Kenneth R. Van Vloorthis, Entrepreneurship and Small Business Management, Allyn and Bacon.
10. C. M. Bammback and J. R. Manscusu, Entrepreneurship and Venture Management, Prentice Hall of India.

Semester – IV

Course – HC403: Project Report

Objective: The primary objective of making the students to involve in the project work is to expose them to the practical field. The study is a plethora of Principles, Canons, Rules and Regulations, Theories and Tenets in the class-room set-up. In order to understand the versatility of the same in application, they are enthused to take up project work. The industry-related, farm-related, field-related and business-related problems may be chosen for the study. Thus the findings of the study would help the problem encounters to solve them.

Procedure: After the examination of M. Com – II Semester, the students have to finalize the topics for their Project Reports, select the study area and required to complete the preliminary work. During the III – Semester, the students have to collect the data from different sources including the books, journals, reports, websites, *etc*. Based on this, the students shall prepare the Project Report under the guidance of a teacher (allotted by the Department) and submit two copies, one to the University and another to the concerned Departments at least one week prior to the close of M. Com – IV Semester classes.

Project Report: The size of the report shall be between 80 to 120 pages – 1½ line space, Times New Roman, 12 font size, both sides aligned, and 1.10" margins all sides. The student shall submit one copy to the Department at least one week prior to the close of M. Com Semester – IV classes.

Credits: 4

Semester – IV

Course SC401 – Security Analysis and Portfolio Management

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To equip the students with advanced analytical tools, models and financial theory necessary for making sound investment decisions and optimum portfolio choice as well as understanding the paradigms by which financial securities are valued.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction :** Fundamental Analysis: Meaning, Economy Analysis, Economic Forecasting, Forecasting Techniques; Industry Analysis: Concept of Industry, Industry Life Cycle, Industry Characteristics, Company Analysis: Financial Statements, Analysis of Financial Statements (Theory Only). Technical Analysis: Meaning, Dow Theory, Basic Principles of Technical Analysis, Trends and Trend Reversal, Eliot Wave Theory, Mathematical Indicators, Market Indicators (Theory).

Unit – 2: **Analysis of Fixed Income Securities:** Bond Fundamentals; Types of Bonds, Valuation of Bonds, Bond Yields, Bond Price, Yield Relationship; Analysis of Risks in Bonds: Duration and Convexity. Bond Portfolio Management: Passive Bond Management and Active Bond Management Including Bond Immunization Strategies.

Security Market Indexes: Meaning, Different Averages and Indexes Exist, The Construction of Indexes, Maintenance Problems with Security Market Indexes , Stock Market Index Revision (Including Problems).

Unit – 3: **Portfolio Selection:** Feasible Set of Portfolios, Efficient Set of Portfolios Selection of Optimal Portfolios (Including Problems). Sharpe Single Index Model: Measuring Security Return and Risk, Measuring Portfolio Return and Risk, Multi Index Model (Including Problems).

Unit – 4: **Portfolio Analysis :** Security Risk and Return Vs. Portfolio Risk and Return; Various Components of Risks-Market Risk, Inflation Risk, Management Risk, Liquidity Risk, Business Risk, Financing Risk etc.; Systematic Vs. Unsystematic Risks.

Unit – 5: **Portfolio Management :** Selection and Management of Optimum Portfolio Under Markowitz Model; Sharpe Model, Capital Asset Pricing Model (CAPM) and Arbitrage Pricing Model; Portfolio Selection Under Risk-free Lending and Borrowing Assumptions; Portfolio Appraisal and Revision

Books Recommended for Reference (Recent Editions)

1. Avadhani,V.A: International finance, Himalaya
2. Avadhani,V.A: Investment & Security Management in India, Himalaya.
3. Bhall,V.K.: Investment Management, S. Chand & Co.,
4. Fisher Donald E & Ronald J Jordan: Securities Analysis & Portfolio Management, PHI;
5. Francaia Jack Clark & Richard W Taylor: Theory & Problems of Investment, Mcgraw
6. Gangadhar V: Investment Management, Anmole
7. Kevin S: Security Analysis and Portfolio Management, Prentice Hall.,
8. Mayo: Investments, Thomson.
9. Punithavathi Pundyan: Securities Analysis & Portfolio Management, Vikas.
10. Reilly: Investment Analysis and Portfolio Management, Thomson.,

Semester - IV

Course – SC402: Strategic Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To familiarize the students with various tools of strategic planning and evaluation, to enable them to understand theoretical foundations of Strategic Management and Develop an idea about strategy formulation process

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **An Overview of Strategic Management:** Strategy: Concept, Mintzberg Models of Strategy, Strategic Management: Models, Levels, Process, Benefits, Guidelines for Effective Strategic Management. Strategic Management V/s Operational Management, and Strategic Role of Board of Directors and Top Management.

Unit – 2: **Environmental Analysis: Internal Analysis**: Competitive Advantage, Competencies, SWOT Analysis, Resources, Capabilities and Core Competence, Resource Base View of a Firm, Key Success Factors, Value Chain Analysis, Bench Marking.

External Analysis: Components of External Analysis, Segments of General Environment, Industry 's Dominant Factors, Porter 's Five Forces Model, PEST Analysis, Industry Driving Forces, Strategic Group Mapping.

Unit – 3: **Strategic Intent:** Vision and Mission, Significance, Characteristics, Objectives, Types, Setting of Objectives, Factors affecting Strategy, Generic Strategies, Other Strategy Choices, Strategic Alliances, Mergers and Acquisitions, Vertical Integration, Outsourcing, Offensive Strategies, First Mover Advantages and Disadvantages, Diversification, Modernization, Turnaround.

Unit – 4: **Crafting Strategy:** Strategy Framework for Analyzing Competition, Porters Value Chain Analysis, Competitive Advantage of a Firm, Formulation of Strategy at Corporate, Business and Functional Levels, Strategic Analysis and Choice, Strategy Implementation, Inter-Relationship between Formulation and Implementation.

Unit – 5: **Evaluation of Strategy:** Strategic Evaluation, Significance, Criteria, Barriers and Overcoming Barriers. Strategic Control and Operational Control: Types of Strategic Controls, Process of Operational Control, Evaluation Techniques for Strategic and Operational Control.

Books Recommended for Reference (recent editions)

1. Hill and Jones, Strategic Management – Text and Cases, All India Publishers, Chennai.
2. Peers and Robinson, Strategic Management, AITBS, New Delhi.
3. P. Ghemawat, Commitment: The Dynamics of Strategy, Harvard Business School Press, Boston.
4. Michal. E. Porter, The Competitive Advantage of Nations, Macmillan, New Delhi
5. Lawrence R Jaunch, Business Policy and Strategic Management, McGraw Hill
6. Fred R. David, Strategic Management Concepts and Cases, PHI
7. Sharma R. A, Strategic Management in Indian Companies, Deep and Deep Publications

8. Subba Rao, P, Business Strategic Management, Himalaya Publications

9 Ravi M. Kishore, Strategic Management – Text and Cases, Taxman's Publishers Ltd.

10 R. M. Srivatsava, Corporate Strategy and Planning, TMH

Semester – IV

Course – SC401E: Indian Accounting Standards (Ind AS) - II

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to understand the IFRS converged Indian Accounting Standards as notified by the Ministry of Corporate Affairs, GoI and to equip the learner to understand the applications of accounting in Corporate Sector and recent developments.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Group Accounting**: Ind AS-27: Separate Financial Statements; Ind AS-28: Investments in Associates and Joint Ventures; Ind AS-110: Consolidated Financial Statements; Ind AS-103: Business Combinations; Ind AS-111: Joint Arrangements; and Ind AS-112: Disclosure of Interest in other Entities.

Unit – 2: **Technical and Specialized Standards**: Ind AS-17: Lease Accounting; Ind AS-12: Income Taxes; Ind AS-102: Share Based Payments; Ind AS-108: Operating Segments and Ind AS-41: Agriculture.

Unit – 3: **Financial Instruments**: Ind AS-109, Ind AS – 107, Ind AS – 32 and Ind AS – 39: Financial Instruments. **Fair Value**: Ind AS-113: Fair Value Measurement.

Unit - 4 **Other Ind AS**: Ind AS-101: First Time Adoption; and Challenges and Issues; Ind AS-105: Non-Current Assets held for Sale and Discontinued Operations; Ind AS – 104: Insurance Contracts; Ind AS-106: Exploration for and Evaluation of Mineral Resources; Ind AS – 114: Regulatory Deferral Accounts.

Unit -5 **Developments in IFRS**: Developments in IFRS Space including New Lease Standard, New Conceptual Framework, and New Revenue Standard.

Books Recommended for Reference (Recent Editions)

1. Greuning Van Hennie., International Financial Reporting Standards , A Practical Guide.
2. International Financial Reporting Standards (IFRSs), Taxman.
3. Haskins E Mark and Ferris R Kenneth and Selling J Thomas, International Financial Reporting and Analysis: A Contextual Emphasis.
4. Nobes Christopher and Parker Robert, Comparative International Accounting.
5. Mohapatra A.K. Das, International Accounting.
6. The Companies Act, 2013, Publications Division, Government of Indian
7. Mukesh Saraf, Practical Implementation and Application Guide of Indian Accounting Standards (Ind AS) IFRS Converged Ind AS (English), Bharat Law House.
8. B. D. Chatterjee, Illustrated Guide to Indian Accounting Standards (Ind AS), Taxman.

9. T. P. Ghosh, Illustrated Guide to Indian Accounting Standards (Ind AS), Taxman.
10. Companies (Indian Accounting Standards) Rules, 2015 (Ind AS) with Referencer, Bharat Law House Pvt. Ltd.

Semester – IV

Course – SC402E: Indirect Taxation – II (GST and Customs)

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to understand the principles underlying the Indirect Taxation Statutes (with reference to Goods and Services Tax Act, Customs Act) and their impact on business decision making.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** Tax Invoice; Credit and Debit Notes; E-Way Bill, Procedure for Generation of E-Way Bill; Accounts and Records; Electronic Cash Ledger-Manner of Utilization of Amount in Electronic Cash Ledger, Electronic Credit Ledger-Manner of Utilization of ITC, Electronic Liability Ledger-Order of Discharge of Tax and Other Dues.

Unit – 2: **Payment of Tax, TDS and TCS under GST:** Computation of Tax Liability and Payment of Tax; Interest on Delayed Payment of Tax; Refund of Tax; Tax Deduction at Source (TDS); Collection of Tax at Source (TCS); Computation of Interest on Delayed Payment of Tax.

Unit – 3: **Matching Concept and Audit:** Matching, Reversal and Reclaim of Input Tax Credit; Matching, Reversal and Reclaim of Reduction in Output Tax Liability; Audit, Meaning, Types of Audit; Returns under GST; Assessment, Types; Furnishing of Returns, First Return, Revision of Return, Final Return, Default in Furnishing Return Information; Penalty/Late Fee; Appeal to Appellate Authority.

Unit – 4: **Customs Law**: Introduction, Definitions, Circumstances of Levy; Types of Duties, Basic Customs Duty, IGST (Replacement of CVD and Spl .CVD), Protective Duties, Safeguard Duty, Countervailing Duty on Subsidized Articles, Anti-Dumping Duty; Exemption from Customs Duty.

Unit – 5: **Valuation under Customs**: Introduction, Valuation of Imported Goods; Valuation of Export Goods; Import Export Procedure: Import Procedure, Export Procedure; Deemed Exports; Duty Drawback, Negative List of Duty Drawbacks; Import by 100% Export Oriented Units; Import by SEZs; Project Import.

Books Recommended for Reference (Recent Editions)

1. V P Agarwal, H C Meherotra, Goods and Services Tax, Sahithya Bahavan Publication.

2. V S Datey, GST Ready Reckoner, Taxmann's Publication.
3. Vinod K Singhania, Student guide to GST and Custom Law, Taxmann
4. V P Agarwal, H C Meherotra, Goods and Services Tax and Customs Act, Sahithya Bahavan Publication.
5. V S Datey, All about GST, Taxmann's Publication
6. Dr Vandana Bangar and Dr Yogendra Bangar, Beginner's Guide to GST.
7. V S Datey, E-Way Bill, Taxmann's Publication.
8. C A Rajat Mohan, Illustrated Guide to Goods and Service Tax, Bharat Publication.

Additional References

1. CGST Act
2. SGST Act
3. IGST Act
4. Study Material of ICAI

Semester-IV

Course – SC403E: Global Business Finance

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: The Objective of this course is to make the students to acquaint with the International Financial Management in order to assist the MNCs in respect of International Financial matters.

Pedagogy: A Combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** An Overview of Global Business Finance, Distinguishing Features, Objectives, Significance, Factors Responsible for Increased Role of Global Business Finance, Challenges, Finance Function in the Global Context, Global Finance Manager, Role of Global Finance Manager in MNCs, and Differences Between Global Financial Management and Domestic Financial Management.

International Financial Institutions and Markets: Origin, Objectives, Structure and Operation of – Bank for International Settlement (BIS), International Monetary Fund (IMF), World Bank Group , International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC); International Development Agency (IDA), Multilateral Investment Guarantee Agency (MIGA) and International Conference for Settlement of Investment Disputes (ICSID), Development Banks, Euro Currency Markets, Euro Banking, Market for International Securities – International Bonds, Euro Notes and Euro Commercial Papers, and Medium Term Euro Notes.

Unit – 2: **Foreign Exchange Market and Exchange Rate Determination:** Concept of Forex Market, Features and Structure of Forex Market, Functions and Role of Forex Market, Participants of Forex Market, Mechanics of Currency Trading, Foreign Exchange Market in India, Types of Transactions and Settlement Dates, Exchange Rate and Theories of Exchange Rate Determination, Factors Influencing Exchange Rate, Determination of Exchange Rate in the Spot Market and Forward Market, Calculation of Outright Rate, Bid Price, Ask Price, Quotation, Types of Quotation, Currency Futures , Forward Contracts *V/S* Future Contracts, Arbitrage, Covered Interest Arbitrage, Hedging and Speculation.

Unit – 3: **Foreign Exchange Exposure and Risk:** Introduction, Nature of Exposure and Risk, Types of Foreign Exchange Exposures: Translation, Transaction and Economic Exposure, Management of Foreign Exchange Exposure Risk through Hedging: Internal and External Techniques and Balance of Payment.

Unit – 4: **Cost of Capital and Financial Structure of MNCs:** Introduction, Determination of Cost of Capital , Cost of Debt, Cost of Preference Shares, Cost of Equity Capital, Cost of Retained Earnings, Weighted Average Cost of Capital; Financial Structure of Multinational Groups, and Capital Structure for Foreign Subsidies.

Unit – 5: **International Capital Budgeting Decisions:** Introduction, Basic Concepts of International Capital Budgeting, Issues in Foreign Investment Analysis, Estimation of Cash Flows, Cost of Capital, and Portfolio Consideration of MNCs.

Books Recommended for Reference (Recent Editions)

1. Alan C Shapiro, Multinational Financial Management, John Wiley Publication.
2. Eun and Resnik, International Financial Management, TMH Publication.
3. Reid W. Click, Joshua D. Coval, The Theory and Practice of International Financial Management, Prentice Hall of India Pvt. Ltd
4. Maurice D. Levi, International Finance, McGraw Hill International Editions
5. Jeff Madhura, International Finance Management, South Western Thomson Learning.
6. IAN Giddy, Global Financial Market, AITBS, New Delhi.
7. Jeevanadan C, Foreign Exchange and Risk Management, Sultan Chand and Sons
8. V. K Bhalla, International Finance Management, Galgotia Publishing Company
9. P G Apte, International Financial Management, THM Publication.
10. P K Jain, Josette Peyrard, Surendra S Yadav, International Financial Management, Macmillan India Ltd.

Semester – IV

Course SC404E –: International Banking

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To acquaint the students with different aspects of International Banking.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction to International Banking:** Meaning, Functions, Characteristics, Dimension, Size of International Banking Market, Financing of Exports, Financing of Imports, International Payment System.

Unit – 2: **International Capital Market:** Introduction, Historical Background, Meaning and Definitions, Types, Financial Market Flow Beyond National Boundaries, Debt and Non-Debt Flow, Volatile and Stable Flows, Interest Rate Differentials, Demand for and Supply of Funds Across Borders.

Unit – 3: **Offshore Banking Centres:** Introduction, Meaning and Definitions, Role of International Financing, Global Balance Sheet of Banks, Asset and Liability Management of Foreign Banks.

Unit – 4: **Foreign Exchange and Market:** Introduction, Meaning, Elements, Importance, Evolution of Exchange Rate System; International Monetary System – Gold Standard, Types of Exchange Rates, Fluctuations in Foreign Exchange Rate, Cause and Effect, Need for Stable Foreign Exchange Rates, Determination of Exchange Rates, Theories of Determination of Foreign Exchange Rates.

Unit – 5: **Forex Market in India:** Introduction, Meaning, Types, Operations, Convertibility, Objectives of Foreign Exchange Control, Problems of Foreign Exchange Markets of India, Mechanism to Settle the Problem, Role of RBI in Settlement of Foreign Exchange Problems in India, EXIM Bank, Exchange Control Regulations Related to Merchant Transactions and Export Credit Guarantee Corporation of India.

Books Recommended for Reference (Recent Editions)

1. Bose Rupanarayan, Fundamentals of International Banking, McMillan
2. Indian Institute of Banking and Finance, International Banking Operations.
3. International Banking, ICFAI Publications
4. International Banking , Legal and Regulatory Aspects, McMillan
5. Francis Cherunilam, International Business Environment, HPH
6. Walmsky Julian, The Foreign Exchange and Money Markets
7. Rajwade A V, Foreign Exchange, International Finance and Risk Management
8. Don Dixon and Bishop Paul, The Foreign Exchange Handbook
9. Madhukar R. K, Dynamics of Bank Marketing, UBS Publishers

Semester- IV

Course – SC405E: Management of Non-Life Insurance

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To provide a working knowledge of Non-life Insurance Products and Companies and Reinsurance as a risk management tool.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Principles of General Insurance**: Introduction, Essential Elements and Principles of General Insurance: Indemnity, Utmost Good Faith, Subrogation, Insurable Interest, and Contribution; Nationalization of GIC, GIC and its Subsidiaries, Organization Management of GIC; and Role of Tariff Advisory Committee.

Unit – 2: **Fire Insurance and Motor Insurance**: Definition of Fire Insurance, Risk Covered under Fire Insurance Policy, Kinds of Fire Insurance Policies, Standard Policy Coverage and Special Coverage; Add-on-Covers, Consequential Loss Insurance; Motor Insurance, Types of Motor Insurance, Motor Vehicle (Amendment) Act, 2019, Third Party Motor Insurance Policy, Surveyor and Loss Assessor in Fire Insurance.

Unit – 3: **Marine Insurance:** History, Meaning and Definition, Contents of Marine Policy, Maritime Perils, Clauses Incorporated in a Marine Policy, Kinds of Marine Insurance Policies, Marine Losses, Payment of Claims, General Average and Particular Average, Constructive Total Loss, Partial Loss and Marine Claim Documents.

Unit – 4: **Rural Insurance in India:** Development of Rural Insurance, Opportunities and Challenges, Types of Rural Insurance, Distribution Channels, Strategies Adopted by Insurance Companies and Insurance Schemes for Rural and Social Sectors.

Unit – 5: **Health and other Insurance:** Reason for the Growth, Health Insurance Schemes in India, Problems of Health Insurance, Health Insurance Portability, Doctor Packages Policy and Cancer Insurance Policy; Burglary Insurance in India, Micro Insurance, Agriculture Insurance, Terrorism Risk Insurance, Crop Insurance; Current Scenario; Reinsurance: Evolution of Reinsurance, Need for Reinsurance and Classification of Reinsurance.

Books Recommended for Reference (Recent Editions)

1. K. C Mishra and G. E Thomas, General Insurance, Cengage Learning
2. K.C Mishra, Fire and Marine Underwriting, Cengage Learning
3. Insurance Operations, ICFAI Press
4. K. C Mishra, Principle and Practice of General Insurance, Cengage Learning
5. M. N Mishra and S B Mishra, Principle and Practice of Insurance, S. Chand and Co
6. T. S Mann, Law and Practice of Life Insurance in India, Deep and Deep
7. Badla B. S, Insurance Fundamentals, Deep and Deep Publication

8. Kothari and Bathi, Principles and Practice of Insurance, Sahitya Bhavan
9. Redja, Principles of Risk Management and Insurance, TMH
10. Denis Riley, Consequential Loss Insurance and Claims, Sweet Maxwell

Semester-IV

Course – SC406E: Services Marketing

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To expose students to different perspectives and concepts of Services Marketing and to help them in achieving conceptual clarity to develop skills for applying to the business problems.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Service and Service Environment:** Introduction, Nature and Definition of Services, Classification of Services, Evolution of Services as Value Contribution, Goods and Services Continuum, Contribution of Services Sector to the Economy, Evolving Environment of Services, Extended Services, Services in the Modern Economy, and Global and Indian Scenario.

Unit – 2: **Foundations of Services Marketing:** Introduction to Services Marketing, Service Marketing Philosophy, Marketing Concept and Orientation, Defining Services Marketing, Differences Between Services and Goods, Marketing Challenges, Marketing Planning, Market Research and Services, Consumer Behaviour, Handling of Consumer Misbehavior, Evaluation of Service Alterations, Customer Satisfaction and Delight, and Post Purchase Evaluation by Customers.

Unit – 3: **Services and Pricing of Services:** Introduction to 8 Ps of Marketing Mix, Product, Price, Place, Promotion, Process, People, Productivity and Quality, Physical Evidence of Services, Segmenting, Targeting and Positioning and Creating of Services, Identifying and Classifying Supplementary Services, Product Life Cycle of Services, Branding of Services, New Service Development; Pricing of Services: Objectives, Approaches, Methods and Problems in Pricing.

Unit – 4: **Management of Service Delivery Process:** Blueprinting Services, Service Process Redesign, Service Marketing Triangle, Managing Internal and External Customers, Customer Expectations of Services, Customer Perceptions of Service and Measurement of Quality in Services, SERVQUAL Model and Other Measurement Methods; Creating a Culture of Service, Customer as Co-Producer, Balancing Demand and Capacity, Managing People for Service Advantages, Improving Service Quality and Productivity, The Gap Model, Customers Role in Service Delivery, Services Market Segmentation, Positioning and Differentiation of Services, and Strategies for Managing/Closing the Five Gaps.

Unit – 5: **Information Technology (IT) and Services Marketing Applications:** Role of IT Services, E-services, Online Consumer Behaviour, Self Service Technologies, Services Marketing Applications: Financial Services, Hospitality Services, Education Services, IT Services, Hotel Services, Event Management Services, Consultancy Services, Retailing Services, Telecommunication Services, Not or Profit Services and Social Services, Government Services, NGO Services, etc.

Books Recommended for Reference (Recent Editions)

1. Hoffman, Services Marketing, Thomson.
2. Lovelock Chatterjee, Services Marketing: People, Technology and Strategy, Pearson Education.
3. Christopher Love Lock, Jochen Wirtz and Jayantha Chatterjee, Services Marketing, Pearson Education
4. C. Bhattacharjee, Services Marketing
5. Govind Apte, Service Marketing, Excel Books
6. Kenneth E. Clow and David L. Kurtz, Service Marketing, Biztantra, New Delhi
7. Adrain Payne, Essence of Services Marketing, PHI, New Delhi.
8. Jha, S. M, Services Marketing, Himalaya Publishing House
9. Barrie Hopson and Mike Scally, 12 Steps to Success through Service, Mercury Publication Canada
10. Bateson. J, Managing Services Marketing, Text and Readings, Dryden, Chicago

M.Com (Regular)
Question Paper Pattern for Semester-end Examinations

Each Question Paper shall be divided into four Sections *viz.*, Section – A (Basic Skills), Section – B (Conceptual), Section – C (Analytical), and Section – D (Application).

Section – A: Maximum Marks: 10

Five questions shall be answered out of seven questions. Each question carries two marks.

Section – B: Maximum Marks: 15

Three questions shall be answered out of four questions. Out of four questions, two shall be problems in the case of Quantitative Courses. Each question carries five marks.

Section – C: Maximum Marks: 20

Two questions shall be answered out of three questions. Out of three questions, two shall be problems in the case of Quantitative Courses. Each Question carries ten marks.

Section - D: Maximum Marks: 30

Two questions shall be answered out of three questions. Out of three questions, two shall be problems in the case of Quantitative Courses. Each Question carries fifteen marks.

Note: (1) In the case of theory courses, one case shall be compulsory in Section - D.
(2) Calculator, Mathematical Table and Present Value Table are allowed.

Elective (Inter-disciplinary) Courses offered for the Students of other Disciplines/Departments

Semester - II

Course – EL201: E-Banking

Weekly Teaching Hours: 2 Examination Duration: 1½ hours

Credits: 2 Maximum Marks: 50

Objective: This course is designed to equip students with current developments in the banking industry with respect to the application of electronics in banking to promote self-service retail banking.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Function of Banks:** Functions of Reserve Bank of India, Commercial Banks, Private Sector Banks, Grameena Banks, RRBs and Co-Operative Banks.

Unit – 2: **Banker and Customer Relationship:** Know your Customer [KYC], CRM in Banks, Factors Influencing to Maintain Relation Between Banker and Customer, Guidelines for Opening of different bank accounts and procedures for their operations.

Unit – 3: **Bank Deposits and Loans:** Different types of Deposits and Loan Products of Banks, Preparation of Project Proposal for Loan Purpose, Rate of Interest – Fixed and Floating, Documentation Procedures.

Unit – 4: **Banking Technology:** Electronic Banking, Core Banking Technology, Debit and Credit Cards, ATMs, New Technologies in Banks.

Books Recommended for Reference (recent editions)

1. Machiraju, H.R., Indian Financial System, Vikas, New Delhi.
2. Verma, J.C. Merchant Banking, TMH, New Delhi.
3. Mithani and Gordeon, Banking Theory and Practice, Himalaya, Bombay.
4. Bhole, L.B., Financial Institutions and Markets, TMH, New Delhi
5. C S Rayudu, E- Business, Himalaya Publishing House.

Semester – II

Course – EL202: Personal Financial Planning

Weekly Teaching Hours: 2 Examination Duration: 1½ hours

Credits: 2 Maximum Marks: 50

Objective: To provide an overview to the students of other Disciplines about different personal financial plans for investment, tax, retirement, *etc*.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Financial Planning:** Introduction, Importance, Process, Professionalism in Financial Planning, Concepts of Money Value, Net Worth, Simple and Compound Interest.

Unit – 2: **Saving and Investment Plans:** Introduction, Savings Instruments – Setting Up a Savings Plan – Tax Saving Schemes; Need for Investment, Financial Markets and Instruments, Investment Planning Strategies and Case Studies

Unit – 3: **Insurance Plans:** Introduction, Features of Insurance, Role of Insurance in Personal Financial Planning, Product Profile of Life and Non-Life Insurance Policies, Tax Benefits and Case Studies.

Unit – 4: **Retirement Planning:** Introduction, Importance, Process of Retirement Planning, Types of Pension and Annuity Plans and Case Studies.

Books Recommended for Reference (recent editions)

1. Khan M. Y, Financial Services, Tata McGraw Hill
2. Kotreshwar G, Risk management, Insurance and Derivatives, HPH
3. Jeff Madura, Personal Financial Planning, Pearson Edition
4. ICFAI, Personal Financial Planning
5. Mishra K. C and Steward Doss, Personal Financial Planning, Cengage Learning India

Semester – III

Course – EL301: Stock Markets

Weekly Teaching Hours: 2 Examination Duration: 1½ hours

Credits: 2 Maximum Marks: 50

Objective: The course is designed to meet the expectations of non-commercial graduates and intended to help students to understand the, stock market, different types of stock market instruments and fundamentals of indices, such as SENSEX and NIFTY.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Stock Markets:** Meaning, History, Functions of a Stock Exchange; Role of SEBI; Leading Stock Exchange in India- NSE and BSE.

Unit – 2: **Stock Market Instruments:** Shares: Types of Shares; Stocks Vs Debentures; Debentures: Types of Debentures; Bonds: Types of Bonds; Benefits of investment in Stock v/s Debentures.

Unit – 3: **Trading in Stock Market:** Trading Mechanism; Speculation: Types of Speculation Membership, Procedure, Advantages; Demat Account; Depository Services; NSDL, CSDL; Brokers, Brokerage; Settlement Procedure.

Unit – 4: **Stock Market Indices:** NIFTY, SENSEX, S&P, CNX, MIDCAP, Small CAP, Large CAP, Factors Impacting Indices.

Books Recommended for Reference (Recent Editions)

1. Dr S. Guruswamy, Capital Markets, , Mcgraw Hill Pulications.

2. Dr M S Khan, S M Farisal, Capital Market and Investment Management, Laxmi Publications, First Edition.
3. Dr. G Kotreshwar, Capital Market Instruments, Chandana Publications, Mysore.
4. Sunil, Parameswaran, Equity Shares , Preferred Shares and Stock Market Indices, Mcgraw Hill Publications.

Semester – III

Course – EL302: Micro Finance

Weekly Teaching Hours: 2 Examination Duration: 1½ hours

Credits: 2 Maximum Marks: 50

Objective: To make the students understand the Indian Micro Finance Sector and its contribution for women empowerment and financial inclusion.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** Meaning, Definition, History of Micro Finance, Micro Finance Products and Services, Micro Finance and Rural Financial Services, Micro Finance as a tool for Development, Problems of Micro Finance in India; Micro Finance Vs Micro Credit.

Unit – 2: **Micro Finance Models:** Credit Lending Models of Micro Finance- Co-operative Model, Grameen Joint Liability Group Model, SHG Model, Federated SHG Model and Status of Micro Finance in India; SHG – Bank Linkage Programmes in India – Introduction, History, and Progress under SHG – Bank Linkage Programmes in India.

Unit – 3: **Micro Finance and Women Empowerment:** Concept of Women Empowerment, Women Empowerment through SHGs, Role of Micro Finance in Women Empowerment, Socio- Economic Empowerment of Women, and Challenges to Women Empowerment and Micro Finance.

Unit – 4: **Financial Inclusion and Micro Finance:** Concept of Financial Inclusion, Definition, Importance of Financial Inclusion, Causes of Financial Inclusion, Need for Financial Inclusion, Role of Micro Finance in Financial Inclusion, Tools of Financial Inclusion and Methods, and Achievements of Financial Inclusion of India.

Books Recommended for Reference (recent editions)

1. Debadutta K. Panda, Understanding Micro Finance, Wiley
2. P. Gupta, Introduction to Managing Micro Finance, Cyber Tech publication
3. Prabhu Ghate, Micro Finance in India, Sage Publication
4. Rohit N. Desai, Micro Finance (Evolution, Achievements and Challenges), Galaxy Book Company
5. NABARD's Annual Report, Report of Rangarajan Committee on Financial Inclusion, Government of India

Question Paper Pattern for Elective Courses

(offered by the DoS in Commerce, Kuvempu University for the students of other Disciplines at the Post-Graduate Level)

Duration: 1½ hours,

Maximum Marks: 40,

Students shall answer five questions out of eight questions, and

Each question carries 8 marks.

M.Com Course Curricula

(Revised)

Approved by:		
	BoS in Commerce (PG):	12 December 2016
	Faculty of Commerce:	3 March 2017
	Academic Council:	30 March 2017
Communication from University: KU:Acad:AC-4(170):1165:2017-18 dated 6 May 2017		
Effective from 2017-18 academic year		

Master of Commerce, M. Com (Regular)

Course Matrix (proposed, 2017-18)

Course Code	Semester and Course	Teaching hours	Credits	Maximum Marks			Examination Duration
				Continuous Assessment	Semester-end Examination	Total	
	Semester – I						
HC101	Organizational Behaviour and Theory	3	3	25	75	100	3
HC102	Managerial Economics	4	4	25	75	100	3
HC103	Advanced Financial Management	4	4	25	75	100	3
HC104	Accounting Theory and Analysis	5	5	25	75	100	3
SC101	Soft Core Stream, Course – I	4	4	25	75	100	3
SC102	Soft Core Stream, Course – II	3	3	25	75	100	3
	Semester – I, Total	23	23	150	450	600	
	Semester – II						
HC201	Business Environment and Government Policy	4	4	25	75	100	3
HC202	Advanced Marketing Management	4	4	25	75	100	3
HC203	Managerial Communication	3	3	25	75	100	3
HC204	Business Mathematics and Statistics	4	4	25	75	100	3
SC201	Soft Core Stream, Course - III	4	4	25	75	100	3
SC202	Soft Core Stream, Course - IV	3	3	25	75	100	3
EL - 1	Elective/Inter-disciplinary Course - I	2	2	10	40	50	1½
	Semester – II, Total	24	24	160	490	650	
	Semester – III						
HC301	Human Resource Management	4	4	25	75	100	3
HC302	E-commerce	3	3	25	75	100	3
HC303	Quantitative Techniques for Managerial Decisions	4	4	25	75	100	3
HC304	Business Research Methodology	4	4	25	75	100	3
SC301	Soft Core Stream, Course - V	4	4	25	75	100	3
SC302	Soft Core Stream, Course - VI	4	4	25	75	100	3
EL - 2	Elective/Inter-disciplinary Course - II	2	2	10	40	50	1½
	Semester – III, Total	25	25	160	490	650	
	M.Com, Semester – IV						

HC401	Strategic Management and Corporate Governance	3	3	25	75	100	3
HC402	Global Business Management	4	4	25	75	100	3
HC403	Production and Operations Management	4	4	25	75	100	3
HC404	Entrepreneurial Development and Project Management	3	3	25	75	100	3
HC405	Inplant Training and Project Report	3	3	25	75	100	
SC401	Soft Core Stream, Course – VII	4	4	25	75	100	3
SC402	Soft Core Stream, Course – VIII	4	4	25	75	100	3
	Semester – IV, Total	25	25	175	525	700	
	Semesters – I to IV, Grand Total	97	97	645	1955	2600	

Besides, the students have to study three soft skill courses in the first year and these courses are (1) Communication Skills, (2) Computer Skills and (3) Life Skills. These courses carry one credit each.

Soft Core Stream – A: Accounting and Taxation		**Soft Core Stream – B: Accounting and Finance**	
SC101A	Advanced Management Accounting	SC101B	Advanced Management Accounting
SC102A	Corporate Tax Planning and Management	SC102B	Indian Financial System
SC201A	Strategic Cost Management	SC201B	Strategic Cost Management
SC202A	Goods and Services Tax	SC202B	Investment Management
SC301A	Marginal Costing for Managerial Decisions	SC301B	Marginal Costing for Managerial Decisions
SC302A	Indian Accounting Standards - I	SC302B	Derivatives Market
SC401A	Indian Accounting Standards - II	SC401B	Indian Accounting Standards
SC402A	Cost Accounting Standards and Other Issues	SC402B	Global Business Finance
Soft Core Stream – C: Banking and Insurance		**Soft Core Stream – D: Banking and Finance**	
SC101C	Indian Banking System	SC101D	Indian Banking System
SC102C	Principles and Practice of Insurance	SC102D	Indian Financial System
SC201C	Credit Management in Banks	SC201D	Credit Management in Banks
SC202C	Management of Life Insurance	SC202D	Investment Management
SC301C	Indian Accounting Standards	SC301D	Indian Accounting Standards
SC302C	Management of Non-life Insurance	SC302D	Derivatives Market
SC401C	International Banking	SC401D	International Banking

SC402C	Actuarial Science	SC402D	Global Business Finance
Soft Core Stream – E: Marketing Management and Human Resource Management			
SC101E	Consumer Behaviour and Marketing Research		
SC102E	Human Resource Development		
SC201E	Services Marketing		
SC202E	Competency Mapping and Succession Planning		
SC301E	Retailing and Brand Management		
SC302E	Industrial Relations and Employee Welfare		
SC401E	International Marketing Management		
SC402E	International Human Resource Management		

Elective Courses (for the students of other Disciplines):

Semester – II (Even Semester):

EL201: Personal Financial Planning

EL202: Principles of Marketing

Semester – III (Odd Semester):

EL301: Micro Finance

EL302: Income Tax Law and Practice

Semester – I

Course – HC101: Organizational Behaviour and Theory

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To develop a theoretical understanding among students about the structure and behaviour of organizations and to make them capable of realizing the competitiveness of firms.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Organization Theory**: Introduction to Organization, Organization Theory - Classical, Neo-Classical and Contemporary, Authority, Power, Status, Formal and Informal Structure.

Unit – 2: **Organizational Structure and Design:** Introduction, Meaning, Determinants and Types – Line, Staff, Line and Staff, Functional and Divisional; and Project Matrix.

Unit – 3: **Organizational Behaviour (OB):** Meaning and Definition, Nature, Fundamental Concepts, Scope of OB, Challenges and Opportunities for Organization Behaviour, Contributing Disciplines to the field of OB, and Organization Behaviour Models.

Unit – 4: **Individual Behaviour:** Causes of Human Behaviour.

Personality: Meaning and Definition, Determination of Personality, Personality Traits.

Perception: Meaning and Definition, Perceptual Process, Factors influencing Perception, The Link between Perception and Individual Decision Making, Perceptual Biases/Errors, Honing Perceptual Skills.

Learning: Meaning, Theories.

Attitude: Sources of Attitude.

Values: Types of Values.

Job Satisfaction.

Unit – 5: **Group Behaviour:** Determinants of Group Behaviour, Group Process, Group Tasks, Types of Groups – Formal and Informal, Group Norms, Group Cohesiveness; Leadership – Styles of Leadership, and Decision Making in Group.

Unit – 6: **Organizational Change and Development:** Concept and Determinants of Organizational Culture; Organization Development – Concept and Intervention Techniques, Individual and Organizational Factors to Stress, Consequences of Stress of Individual and Organization, and Management of Stress.

Books Recommended for Reference (recent editions)

1. Stephen P. Robbins, Organization Behaviour, Pearson Education.
2. John M Ivancevich, Robert Konopaske and Michael T Matteson, Organizational Behavior and Management.
3. Keith Davis, Human Behaviour at Work, PHI

4. Subba Rao, Management and Organizational Behaviour, HPH
5. Luthans Fred, Organization Behaviour, McGraw Hill International
6. Ashwathappa K, Organization Behaviour: Text, Cases and Games, HPH
7. Don Hell Siegal *et al*, Organization Behaviour, South Western Thomson Learning.

Semester – I

Course – HC102: Managerial Economics

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To improve managerial decision making in the framework of a firm or organization by enabling the students to expose and analyze their acquired knowledge in Managerial Economics and aid to take up managerial responsibilities.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction to Managerial Economics**: Economy and Economies, Essential Process and Problems of Economy, Nature and Scope of Managerial Economics, Managerial Economics and other Disciplines, Basic Concepts of Managerial Economics.

Unit – 2: **Demand Analysis and Forecasting:** Concept of Demand, Determinants and Types of Demand, Elasticity of Demand, Demand Function, Demand and Supply Interaction, Market Equilibrium; Demand Forecasting - Techniques of Demand Forecasting.

Unit – 3: **Production Analysis:** Production Factors; Production Function; Short-run and Long-run Production Functions; Graphical and Mathematical Approaches in finding Firm Equilibrium; ISOQUANT, ISOCOST, Least Cost Combination of Inputs, Law of Returns, Economies of Scale and Scope, Cob-Douglas Production Function, and Managerial implications of Production Function.

Unit – 4: **Cost and Revenue Analysis:** Concepts of Cost, Determinants of Cost, Cost-Output Relationship in Short- and Long-Run, Economies of Scale *Vs* Diseconomies of Scale, Cost Control and Cost Reduction, Revenue Concepts, Functional Relationship between Marginal Revenue, Total Revenue, Marginal Cost and Total Cost.

Unit – 5: **Market Structure and Pricing Practices:** Market Structure – Classification, Price and Output determination under Monopoly, Oligopoly, Monopolistic and Perfect Competitive Market Conditions; Price Discrimination - Degrees of Price Discrimination, International Price Discrimination and Dumping.

Unit – 6: **Pricing Methods and Strategies:** Introduction to Pricing; Factors influencing Pricing; Pricing Practices; Process of Price Determination; Pricing Strategies; Pricing in Public Interest, and Government Intervention and Pricing.

Books Recommended for Reference (recent editions)

1. Yogesh Maheshwari, Managerial Economics, Sultan Chand Publication.
2. Gupta G S, Managerial Economics, Tata McGraw-Hill Publishing Company Ltd
3. John Sloman and Mark Sutcliffe, Economics for Business, Pearson Publications

4. William J. Baumol and Alan S. Blinder, Microeconomics Principles and Policy, Thomson Publication
5. Dwivedi D.N, Managerial Economics, Vikas Publishing House
6. T.N. Hajela, Public Finance, Ane Books Pvt ltd
7. Richard A. Musgrave and Peggy B. Musgrave, Public Finance in Theory and Practice, McGraw Hill Book Co
8. Richard J. Aronson, Public Finance, McGraw Hill Book Co
9. John F. Due and Ann F. Friedlaender, Government Finance, A.I.T.B.S. Publishers and Distributors
10. H. L. Bhatia, International Economics, Vikas Publication
11. Joel Dean, Managerial Economics, PHI
12. Rangarajan, Principles of Macro Economics, TMH

Semester - I

Course – HC103: Advanced Financial Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To facilitate understanding of the conceptual and practical applicability of various techniques of Financial Management in different segments of business.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Meaning and Objectives of Financial Management, Profit *Vs* Wealth Maximization, Interrelation among Financial Decisions, Interface of Financial Management with other Disciplines, and Measuring Shareholders' Value Creation; Time Value of Money - Concept, Importance, Factors contributing to the Time Value of Money, Techniques of Time Value of Money, and Loan Amortisation Schedule.

Unit – 2: **Financing Decisions**: Capital Structure - Introduction, Determinants, Patterns, Point of Indifference and Theories of Capital Structure; Leverages – Meaning, Uses, and Types; Cost of Capital – Concept, Definition, Computation of Specific Cost of Capital and WACC.

Unit – 3: **Long-Term Investment Decisions**: Capital Budgeting – Importance, Process, Non-discounted and Discounted Techniques of Capital Budgeting; Analysis of Risk in Capital Budgeting – Concept, and Risk Evaluation Approaches.

Unit – 4: **Dividend Decisions**: Introduction, Types of Dividend Policy, Factors influencing Dividend Policy, Stock Split, Bonus Share and SEBI guidelines for issuing Bonus Shares, Legal Provisions relating to Dividend in India, Dividend and Market Valuation – Walter's Model, Gorden's Model and MM Approach.

Unit – 5: **Inventory Management**: Concept, Objectives, Motives, Costs of Holding Inventories, Risk and Benefits of Holding Inventory, Determining of Stock Levels, EOQ and ABC.

Unit – 6: **Cash and Receivables Management**: Objectives of Cash Management, Cash Conversion Cycle, Baumol Model of Cash Management; Receivables Management - Concept, Objectives, Costs of Accounts Receivable

Management, Factors influencing the size of Investment in Receivables, Credit Policy and Determination of appropriate Credit Policies.

Books Recommended for Reference

1. Vyuptakesh Sharan, Fundamental of Financial Management, Pearson Education Publication
2. Sudhindra Bhat, Financial Management: Principles and Practice, Excel books Publication
3. G. Sudarshana Reddy, Financial Management: Principles and Practice, Himalaya Publishing House
4. Ravi M. Kishore, Financial Management: Problems and Solutions, Taxman
5. M Y Khan and P K Jain, Financial Management, TMH Publication
6. Shashi K. Gupta and R. K Sharma, Financial Management: Theory and Practice, Kalyani Publisher
7. Prasanna Chandra, Financial Management: Theory and Practice, TMH Publication
8. I M Pandey, Financial Management, Vikas Publishing
9. Kohok M. A, Advanced Financial Management, Everest Publication
10. J. Van Horne, Fundamentals of Financial Management, Prentice Hall of India
11. Horne J C V, Financial Management and Policy, Pearson Education Publication
12. Brigham, Financial Management: Theory and Practice, Cengage Publication

Semester - I

Course - HC104: Accounting Theory and Analysis

Weekly Teaching Hours: 5 | Examination Duration: 3 hours
Credits: 5 | Maximum Marks: 100

Objective: To enable to the students to acquaint with a coherent set of logical principles and a general frame of reference for evaluation and development of sound accounting practices and also to enable them to understand the important contemporary issues in Accounting, and the Tools for analysis and interpretation of Financial Statements.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **I Generally Accepted Accounting Principles (GAAPs)**: Introduction, Definition of Accounting – Financial, Cost and Management; Accounting as the Language of Business, Accounting as the Information System, and Users and Uses of Accounting Information.

GAAPs: Introduction; Need for Accounting Principles; Meaning of Accounting Principles; Structure of GAAPs – (a) Accounting Assumptions - Business Entity Concept, Going Concern Concept and Money Measurement Concept; (b) Accounting Concepts - Accounting Period Concept, Objectivity, and Dual-Aspect Concept; (c) Accounting Principles - Cost Principle, Matching Principle - Recognition of Revenue, Realization Principle, and Systems of Accounting; (d) Accounting Conventions – Conservatism, Consistency, Materiality, and Disclosure; and (e) Accounting Rules and Policies.

Unit – 2: **Accounting Theory**: Introduction; Importance of Accounting Theories;

Accounting Theory – Meaning and Definitions; Classification of Accounting Theories - Structural (Syntactical) Theories, Interpretational (Semantical) Theories, and Behavioural (Pragmatic) Theories; Approaches to Formulation of Accounting Theory - Descriptive Approach, Normative Approach, and Ethical Approach; Few Basic Equity Theories - Proprietary Theory, Entity Theory, and Fund Theory.

Unit – 3: **Accounting for Price Level Changes**: Introduction; Effects of Inflation; Approaches to Inflation Accounting - Entry and Exit Value Approaches – Partial and Complete Revaluation Methods – (a) Current Purchasing Power Method - Forward and Backward Approaches, Conversion Factor, Monetary and Non-monetary Items, and Restatement of Items of Financial Statements and Preparation of Inflation-adjusted Financial Statements under CPP Method; (b) Current Cost Accounting Method - Current Cost Profit and Loss Account - Cost of Sales Adjustment, Depreciation Adjustment, Monetary Working Capital Adjustment, and Gearing Adjustment, and Current Cost Balance Sheet.

Unit – 4: **Human Resource Accounting**: Introduction; Human Resource Accounting – Definitions and Features; Premises of Human Resource Accounting; Classification of Human Resource Costs; Approaches of Human Resource Accounting – (a) Cost Approaches - Acquisition Cost Method, and Replacement Cost Method; and (b) Value Approaches - Present Value of Future Earnings Method, Adjusted Discounted Future Wages Method, Hermanson's Unpurchased Goodwill Method, Economic Value Method, Competitive Bidding or Opportunity Cost Model, Morse's Net Benefits Method, and Ogan's Discounted Certainty Equivalent Net Benefits Model; Comprehensive Model – Quantification and Recognition of Qualities of HR into HRA Model; Advantages; and Indian Scenario.

Unit – 5: **Financial Reporting**: Financial Reporting – Concept, Objectives and Benefits, Trueblood Report and Stamp Report, Qualities of Financial Information, The Companies Act, 2013 and Financial Statements; Ind AS – 1: Presentation of Financial Statements and Ind AS - 7: Statement of Cash Flows.

Unit – 6: **Analysis and Interpretation of Financial Statements**: An Overview of Tools of Analysis and Interpretation – (a) Comparative Financial Statements, (b) Common-size Financial Statements, (c) Trend Analysis, (d) Ratio Analysis, and (e) Funds Flow Statement (Note: The students have studied this Unit at the B.Com level and therefore, the Course Teacher is expected to provide only an overview of this Unit and to focus on solving advanced problems involving analysis and interpretation of Financial Statements).

Books Recommended for Reference

1. J. Madegowda, Accounting Theory and Analysis, Himalaya Publishing House
2. J. Madegowda, Advanced Management Accounting, Himalaya Publishing House
3. Robert N Antony and James S Reece, Accounting – Text and Cases
4. Sidney Davidson and Roman L. Weil, Handbook of Modern Accounting
5. Porwal, Accounting Theory, PHI
6. Jawaharlal, Accounting Theory, HPH
7. S.K. Bhattacharya and John Dearden, Accounting For Management – Text and Cases
8. Pyle, White and Larson, Fundamentals of Accounting Principles

9. Hendriksen, Accounting Theory
10. William W. Pyle and Kermit D Larson, Financial Accounting
11. Jain and Narang, Accounting Theory, Kalyani Publishers
12. S. N. Maheshwari, Advanced Accounting, Vikas Publishing House

Semester I

Course –SC101A/B: Advanced Management Accounting

Weekly Teaching Hours: 4 Examination Duration: 3hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to acquire adequate knowledge about different aspects of Management Accounting and to equip them with requisite competence to use them in managerial decisions.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Meaning, Definitions, Significance, Nature and Scope, Objectives, Functions, Uses and Limitations, Tools and Techniques of Management Accounting, Installation of Management Accounting System; Management Accounting as a separate branch of Accounting; and Management Accountant – Functions, Duties, and Essential Qualities.

Unit – 2: **Budgetary Control:** Meaning and Objectives of Budget, Budgeting and Budgetary Control; Nature and Importance of Budgetary Control; Classification and Preparation of Functional and Master Budgets, and Fixed and Flexible Budget; and Zero Based Budget; and Advantages and Limitations of Budgetary Control.

Unit – 3: **Standard Costing and Variance Analysis:** Introduction, Meaning, Objectives, and Significance of Standard Costing, Budgetary Control *Vs* Standard Costing, Prerequisites of Standard Costing, Types of Standards; Variance Analysis - Materials, Labour, Overhead Variances, Sales and Profit Variances, Accounting treatment of Variances; and Managerial Uses of Variance Analysis.

Unit – 4: **Responsibility Accounting:** Responsibility Accounting - Definition, Meaning, Basic Principles, Process in Implementation, Controllable and Non-controllable Costs, Responsibility Reporting, Determinants of Responsibility Centers, Difficulties in Implementation, Responsibility Centre Performance Measurement Reporting to different levels of Management.

Transfer Pricing: Need, Methods of Transfer Pricing – Full Cost Method, Standard Cost Method, Marginal Cost Method, Market-based Transfer Price, Dual Transfer Prices, Negotiated Price Method, Arbitrary Transfer Price and Cost Plus Method; General Rules of Transfer Pricing.

Unit – 5: **Inter Firm Comparison:** Introduction, Meaning and Definitions, Procedure and Requirements – Establishment of Central Organization, Adoption of Uniform Costing Principles and Practices.

Unit - 6: **Managerial Reporting and Management Audit:** Introduction, Management Reporting – Meaning and Definitions, Fundamental Principles of Managerial Reports, Modes and Types of Reporting; Management Audit – Meaning,

Responsibility Accounting as an aid to Management Audit, and Management Auditor.

Books Recommended for Reference(recent editions)

1. J. Madegowda, Advanced Management Accounting, Himalaya Publishing House
2. Vij, Madhu, Management Accounting, McMillan
3. Atkinson Anthony A, Rajiv D. Banker, Robert Kaplan and S. Mark Young, Management Accounting, Prentice Hall
4. Horngreen, Charles T, and Gary L. Sundem and William O. Stratton, Introduction to Management Accounting, Prentice Hall of India.
5. Drury Colin, Management and Cost Accounting, Thomson Learning
6. Garison R. H and E. W. Noreeb, Managerial Accounting, McGraw Hill.
7. Ronald W. Hilton, Managerial Accounting, McGraw Hill Education.
8. Khan and Jain, Management Accounting, Tata McGraw Hill
9. Jawahar Lal, Advanced Management Accounting – Text, Problems and Cases, S Chand & Co
10. Jain and Narang, Advanced Cost Accounting, Kalyani Publications
11. Ronald W. Hilton, Managerial Accounting, McGraw Hill.
12. Pandey I. M, Management Accounting, Vani Publications

Semester - I

Course – SC101C/D: Indian Banking System

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To expose the students to the fundamental concepts of Banking, its operation and innovations in Banking Sector.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Commercial Banking**. Banking System in India, Phases of Indian Banking, Classification of Banks, Impact of Nationalization and Liberalization on Indian Banking, Challenges after Nationalization and Liberalization, Nature and Structure of Commercial Banking in India; and Recent Development in Commercial Banking.

Unit – 2: **Central Banking**: Central Banking Policy in Developed and Developing Economies, Functions - Note Issue, Bankers to the Government; Bankers to Commercial Banks; Credit Control Techniques; Structure and Organization of RBI - Role of RBI as Central Bank, Banking Regulation Act, 1949; The Reserve Bank of India Act, 1934 and Monetary Policy, Instruments; and Role of Monetary Policy Committee.

Unit – 3: **Rural Banking**: Functions of Co-Operative Banks, Co-Operative Credit, RRBs and their Functions, Structural Changes, Reforms in Co-Operative Credit; NABARD - Its Functions, Objectives and Working, Role of NABARD in Agriculture Finance, and Rural Infrastructure Development Funds.

Unit – 4: **Information Technology in Banks**: Impact of Technology in Banking, Core Banking, Plastic Money, ATMs, Mobile Banking, Internet Banking, Electronic Payment System, RTGS, NEFT, ECS, CTS, Facets of E-banking, Challenges and Opportunities of E-banking, Committee Recommendations, Cashless Banking; Implementation Computerization and Security.

Unit – 5: **Capital Adequacy Requirements**: Capital Adequacy in Banks, Capital Adequacy Norms, Maintenance of CRAR, Basel Accord Framework, Basel Accords – I, II and III; Impact of Basel Accords on Indian Banking System; Statutory Requirements - Need for Reserve Requirements, and Computation of CRR and SLR.

Unit – 6: **Financial Services and Reforms**: Consumer Finance, Housing Finance, Depository Services, and Insurance Services; Banking Ombudsman Scheme, and Narasimhan Committee Recommendations.

Financial Sector Reforms in India - Need for Reforms, Major Reforms after 1991, Issues and Impact of Financial Reforms, KYC Norms, and Money Laundering Regulations Act, 2002.

Books Recommended for Reference (recent editions)

1. J. F Sinkey, Commercial Bank Financial Management, Macmillan Publishing Co
2. Hawtrey, The Art of Central Banking, Augustus Publishers
3. Charless L Prather, Money and Banking, Richard. D. Irwin Inc
4. Benton E. Gup, Commercial Banking - The Management of Risk, Wiley
5. Jain Rathi Sharma, Banking Service Operations, RBD Publication
6. Indian Institute of Banking and Finance, Principle and Practice of Banking, Macmillan
7. B S Khubchandani, Practice and Law of Banking, Macmillan India Limited
8. K. P. M Sundharam and P. N Varshney, Banking Theory - Law and Practice, Pearson
9. Pai Panandikar and N C Mehra, Rural Banking, National Institute of Bank Management
10. S Natarajan and R. Parameswaran, Indian Banking, S. Chand
11. Mongia J. N, Banking Around the World, Allied Publishers Pvt Ltd
12. Padmalatha, Suresh and Justin Paul, Management of Banking and Financial Services, Dorling Kindersley

Semester - I

Course – SC101E: Consumer Behaviour and Marketing Research

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to understand consumer behaviour and different aspects of marketing research.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Consumer Behaviour:** Introduction, Definition, Consumer Behaviour and Marketing, Application of Consumer Behaviour Science, Significance, Stages

in Consumer Decision Making, Characteristics of Indian Consumers, Types of Consumer Decision Making, Diversity of Consumer Behaviour, Consumer Needs and Motivation - Positive and Negative Motivation, Rational *Vs* Emotional Motives, Consumer Models - The Economic Model, Learning Model, Psycho-analytical Model, and Sociological Model.

Unit – 2: **Determinants of Consumer Behavior:** Individual Determinants of Consumer Behaviour, Personality and Self Concept, Consumer Perception, Consumer Learning, Consumer Attitude Formation and Change; Consumer Relevant Reference Groups - Opinion Leaders - Family Decision Making and Consumption Related Roles - Family Life Cycle - Social Class and Consumer Behavior - Influence of Culture on Consumer Behavior - Cross Cultural Context; Diffusion of Innovations - The Diffusion and Adoption Process - Consumer Innovativeness and Personality Traits.

Unit – 3: **Consumer Decision Making:** Models of Consumer Decision Making - Engle-Kollatt Blackwell Model, Howard-Sheth Model, Bettman's Model, and HCB Model; Concept of Involvement, Extensive/Limited Problem Solving – Reutilized Responsive Behaviour. Post-Purchase Behavior - Consumer Satisfaction Concept and Models - Expectancy Disconfirmation, Desires Congruency Model, Equity Theory, Attribution Theory, Cognitive Dissonance, Consumer Delight, and Consumer Complaint Behaviour.

Unit – 4: **Consumerism:** Evolution of Consumer Society; Definition of Consumerism, Buyers and Sellers Rights, Effects of Consumerism; Organizational Buying - Concept and Comparison with Consumer Buying – Influence of Economic, Political, Legal, Suppliers, Technology, Customers, Government, and Labour Factors; Analyzing Buyers' Strengths and Negotiation Capabilities.

Unit – 5: **Conceptual Framework of Marketing Research:** Marketing Research, Role of Marketing Research in Marketing, Research Process; Implications of Marketing Research on Marketing Mix, Limitations of Marketing Research, Ethics in Marketing Research, and Prominent Market Research Agencies in India.

Unit – 6: **Application of Marketing Research:** Cluster Analysis for Identifying Market Segments, Conjoint Analysis for Product Research, Multi-Dimensional Scaling, Discriminate Analysis and Perceptual Mapping for Brand Positioning; Advertising Research - Copy Testing, Media Selection, Media Scheduling, Market and Sales Analysis; Sales Forecasting - Objective and Subjective Methods, Test Marketing, and Industrial *Vs* Consumer Marketing Research.

Books Recommended for Reference (recent editions)

1. Debraj Datta and Mahua Datta, Consumer Behaviour and Advertising Management, Vrinda Publication Pvt Ltd
2. S. Sumathi and P. Saravanavel, Marketing Research and Consumer Behavior, Vikas Publishing House Pvt Ltd
3. Leon Schiffman and Lazar Kanuk, Consumer Behaviour, PHI
4. Paco Underhill, Why We Buy: The Science of Shopping, Simon and Schuster
5. Rama Bijapurkar, We Are like that Only, Penguin India
6. Damodar Mall, Super Marketwala: Secrets to Winning Consumer India, Random House

7. Green Paul, Tull Donald, and Albaurn Gerald, Research for Marketing Decisions
8. Akar, Kumar and Day, Marketing Research
9. Tull S Donald and Hawkins I Del, Marketing Research - Measurement and Methods
10. Mittal Sheth, Customer Behavior – A Managerial Perspective, Thomson
11. Hawkins, Best and Coney, Consumer Behavior, TMH
12. Schiffman Leon, Kanuk Lazar Leslie, Consumer Behavior, Pearson

Semester - I

Course – SC102A: Corporate Tax planning and Management

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: The course aims at making students conversant with the concept of Corporate Tax Laws and also their implications on Tax Planning and Management.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Basic Concepts**: Income Tax; Corporate Tax; Assessee; Assessment Year; Previous Year; Company, Different kinds of Companies - Indian Company, Foreign Company, Widely Held Company, Closely Held Company, Domestic Company; and Incidence of Tax.

Unit – 2: **Tax Planning and Company Promotion**: Meaning of Tax Planning, Tax Avoidance, Tax Evasion and Tax Management; Features; Scope for Tax Planning; Business Location and Tax Planning; Nature of Business and Tax Planning.

Unit – 3: **Computation of Corporate Tax**: Carry Forward and Set Off of Losses in the case of Companies, Computation of Taxable Income of Companies; Computation of Corporate Tax Liability; Minimum Alternate Tax; and Tax on Distributed Profits of Domestic Companies.

Unit – 4: **Tax Planning with reference to Financial and Managerial Decisions**: Capital Structure Decisions; Dividend Policy; Bonus Shares and Capital Gains.

Tax Planning with reference to Managerial Decisions - Own or Lease of an Asset, Installment or Hire Purchase, Make or Buy Decisions, Buying an Asset with own Fund or Borrowed Fund and Tax Planning with reference to Amalgamation and Demerger of Companies.

Unit – 5: **Exemptions for Undertakings**: FTZ, Units in SEZ, 100% EOU, and Infrastructure Development.

Unit – 6: **TDS,** Advance Payment of Tax with reference to Corporate Assessee; and Assessment Procedure - Types of Assessment; Return on Income and E-filing.

Books Recommended for Reference (recent editions)

1. Vinod K Singhania and Kapil Singhania, Direct Tax Planning and Management, Taxman.
2. Vinod, K. Singhania, Direct Taxes - Law and Practices, Taxman.
3. Mehrotra, H. C, Income Tax Law and Accounts including Tax Planning, Sahitya Bhawan Publications.

4. Narang and Gaur, Income Tax, Himalaya Publishing House.
5. Prasad, B, Direct Taxes -Law and Practices, Wishwa Prakashana
6. T. N. Manoharan, Students Handbook on Income Tax Law, Snow White Publications
7. Harshad. C. Chowdhry, Central Excise and Customs, Ashoda Publications
8. E. A. Srinivas, Corporate Tax Planning, Tata McGraw Hill
9. V. S. Sundaram, Commentaries on the Law of Income-Tax in India, Law Publisher, Allahabad
10. A. C. Sampath Iyengar, Law of Income Tax, Bharat Publishing house
11. Bhagvati Prasad, Direct Taxes - Laws and Practice, Wishwa Prakashana
12. Mehrotra and Goyanka, Direct Taxes - Tax Planning and Management, Sahitya Bhavan

Semester - I

Course – SC102B/D: Indian Financial System

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To equip the students with conceptual framework of functioning of financial markets, their structure and functioning of different players of financial markets.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Overview of Indian Financial System**: Structure of Indian Financial system; Objectives and Functions of Financial System, Financial System and Economic Development; Niti Aayog; Financial Markets, Financial Instruments, Financial Institution and Financial Services.

Unit – 2: **Security Markets - Legal Environment:** SEBI - Introduction, Objectives, Powers and Functions, Role of SEBI in Capital Market and Investor Protection, Security Contract Regulations Act, 1956; and Salient Features of SEBI Act, 1992.

Unit – 3: **Primary Market:** Primary Market - Its Role and Functions; Issue of Capital - Methods of issuing Securities in Primary Market, Intermediaries in New Issue Market - Merchant Bankers, Underwriters, Brokers, Registrars and Managers, Bankers, Pricing of Issue - Book Building, Green Shoes Option, Procedure for New Issues, and SEBI Guidelines for Issue in Primary Market.

Unit – 4: **Secondary Market Operations**: Stock Exchanges in India - Importance and Functions, Listing of Securities in Stock Exchanges; Players in Stock Exchange - Investors, Speculators Market Makers, Stock Brokers; Eligibility Criteria; Trading in Stock Exchange, Stock Exchanges - Bombay Stock Exchange, National Stock Exchange, Over-the-Counter Exchange of India, and The SEBI (Central Listing Authority Regulations, 2003).

Trading Mechanism - BOLT, NEAT System, Screen Based System; Clearing and Settlement - Introduction, Terminologies, Transaction Cycle; Settlement Process - Demat and Trading Account; Trading Documents; Contract Note, Delivery Notes; Depositories - Role and Need; The Depositories Act, 1996; SEBI (Depositories and Participants Regulations) 1996; Depositories and

Participants Regulations 2012; and Types of Depositories - NSDL, CDSL, and Depository Participant.

Unit – 5: **Money Market Operation:** Meaning, Scope, Functions, Players, Call Money Market Operation, Treasury Bills, Mechanism of Commercial Papers, Certificate of Deposits, Trade Bills, New Instruments in Money Markets, Regulatory Role of RBI in Money Markets, and Tools for managing Liquidity in the Money Markets.

Unit – 6: **Recent Developments in Indian and Global Capital Markets**: International Markets - FIIs, Euro Issues, ECB, Latest Guidelines of ECB, ADRs, GDRs, IDRs, FCCB, FDI; International Bonds - Bulldog, Yankee, and Bunny Bonds.

Books Recommended for Reference (recent editions)

1. Cornett M. M and Sauders A, Fundamentals of Financial Institutions Management, McGraw Hill
2. Mandura Jeff, Financial Markets and Institutions, West Publishing Company
3. Thygerson Keneth J, Financial Markets and Institutions, Harper Collins
4. Rose and Marquis, Money and Capital Market: Financial Institutions and Instruments in a Global Market Place, McGraw Hill
5. Clifford Gmoez, Financial Markets, Institutions, and Financial Services, PHI
6. Mark Grinblatt, and Sheridan Titman, Financial Market and Corporate Strategy, Tata McGraw Hill
7. Meir Khon, Financial Institutions and Markets , Oxford University Press
8. M.Y Khan, Financial Services, Tata McGraw Hill
9. L.M Bhole, Financial Institution and Markets, Tata McGraw Hill
10. Sasidharam K and Mathew A, Financial Services and System, Tata McGraw Hill
11. Pathak B V, Indian Financial System, Pearson
12. Mishkin, Fredrick S and Stanley G Fakins, Financial Markets and Institutions, Pearson

Semester - I

Course – SC102C: Principles and Practice of Insurance

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To provide working knowledge of insurance to the students to enable them to translate the principles into practice.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Meaning and Definition of Insurance, Nature and Functions of Insurance, Principles of Insurance - Utmost Good Faith, Insurable Interest, Indemnity, Contribution, Subrogation, Proximate Cause; Essentials of Law of Insurance Contract, Classification of Insurance, Nomination and Assignment, Comparison between Life and General Insurance, and Human Life Value.

Unit – 2: **Principles of Organization**: Structure of Insurance Companies - Stock Insurance Companies, Lloyd's Association, Mutual Insurance Companies;

Reciprocal Exchange, Office Procedure, Handling Grievances; Insurance Ombudsman - Powers, Duties, and Functions; Records, Forms, and Control.

Technology for Insurance - IT Applications in fundamental Areas, E-Insurance, and Online Insurance.

Unit – 3: **Regulatory Environment**: History of Insurance Legislation in India, The Insurance Act, 1938 and its Provisions; The Insurance Regulatory and Development Authority - Powers, Functions and Duties; Motor Vehicles Act, 1988, and Information Technology Act, 2000; Registration of Insurance Companies – Renewal, Suspension and Revival of Registration, and Cancellation of Certificate of Registration.

Unit – 4: **Insurance Intermediaries:** Need for Intermediaries**,** IRDA Regulations towards appointments of Agents - Duties, Code of Conduct, Commission, Termination of Agency; Role of Surveyors and Loss Assessor in General Insurance, Brokers, and Third Party Administrator in Health Insurance.

Unit – 5: **Insurance Market:** Globalization and Privatization of Insurance Services, Liberalization of Insurance Sector, Malhotra Committee Recommendations, and Opportunities for Insurance Industry.

Unit - 6: **Management of Risk**: Definition of Risk, Peril and Risk, Nature of Risk, Classification of Risk, Risk Management Process, Techniques of Risk Management, and Risk Management Policy in Insurance.

Books Recommended for Reference (recent editions)

1. M. N Mishra and S B Mishra, Principle and Practice Of Insurance, S. Chand and Co
2. T. S Mann, Law and Practice of Life Insurance in India, Deep and Deep
3. G. Krishna Swamy, Principle and Practice of Life Insurance, Excel Books
4. Swaroop C Sahoo and Suresh C Das, Insurance Management, HPH
5. Dr. S. V Joga Rao, Principles of Insurance Law, Wadhwa and Co
6. Badla B. S, Insurance Fundamentals, Deep and Deep Publication
7. Jawahar Lal U, Insurance Industry, ICFAI Press
8. K. C Mishra and G. E Thomas, General Insurance, Cengage Learning
9. K. C Mishra, Principles and Practice of General Insurance, Cengage Learning
10. Neelam C Gulati, Principles of Insurance Management, Excel Books
11. K. C Mishra and R. C Guria, Financial Management and Insurance Accounting, Cengage Learning
12. Mark S Dorfman, Risk Management and Insurance, PHI

Semester - I

Course – SC102E: Human Resource Development

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: The objective of the course is to make students aware of the concepts, techniques and practices of human resource development. This course is intended to make students capable of applying the principles and techniques as professionals in organizations they work for.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars,

Assignments, *etc*.

Course Inputs

Unit – 1: **Human Resource Development** (HRD): Concept and Evolution, Human Resource Mobilization, HRD Conceptual Base, HRD at Micro and Macro Levels, Sub-systems of HRD, HRD Philosophy, Strategic Interventions in HRD Sector and Target Groups, HRD Mechanism, Processes and Outcomes, HRD Instruments.

Unit – 2: **HRD and Management**: Attitude of Top Management towards HRD, Motivational aspects of HRD, Trends and Practices, and Line Managers and HRD.

Management Development - Introduction, Needs and Priorities, Requirements, Nature and Elements of Management Development, Approaches to Management Development, Emotional Intelligence and Leadership Qualities, and Responsibility for Management Development.

Unit – 3: **HRD Activities**: HRD Culture and Climate, Elements of HRD Climate, Measurement of HRD Climate, Factors of HRD Climate, Determinant Needs, Developmental Supervisor, HRD for Workers - HRD Mechanisms for Workers, and Role of Trade Unions.

Unit – 4: **Organizational Learning**: The Learning Organizations, Process of Learning and Development, Learning Theory, Implications of Learning Theory and Concepts, Learning Styles, Learning Curve, and Technology of Learning.

Unit – 5: **HRD in Organizations**: Government Organizations, Educational Institutions, Armed Forces, Police and Industry, Private Sector and Public Sector Units; Emerging Issues in HRD, Creating Awareness and Commitment to HRD, Industrial Relations and HRD, Utilization of HRD Efforts, Future of HRD, and International Comparison of HRD.

Unit – 6: **Performance Appraisal System**: Introduction, History, Objectives, Criteria, Benefits and Pitfalls of Performance Appraisal, Modern Method, 360 Degree Feedback and the New Appraisal Systems.

Books Recommended for Reference (recent editions)

1. Werner, Jon M and Randy L. Desimone, Human Resource Development, South-Western Educational Publishing.
2. Nadler, L (ed), Corporate Human Resources Development, Van Nostrand Reindhold.
3. Parek V and T. V. Rao, Designing and Planning Human Resource Systems, Oxford and IBH, New Delhi.
4. T. V. Rao and Udai Parek, Developing and Managing Human Resource System.
5. Peter Dowling, Lience Welch, Randall and Schuler, International Human Resource Management - Managing People in a Multinational Context, South Western College Publishing.
6. Michael Armstrong, A Handbook of Human Resources Management Practice, Kogan Page

Semester - II

Course – HC201: Business Environment and Government Policy

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To familiarize the students with the business environment prevailing in India and other parts of the world, and their implications on the business.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Conceptual Framework of Business Environment:** Concept, Significance, and Nature of Business Environment – Internal and External, Changing Dimensions of Business Environment, Techniques of Environmental Scanning and Monitoring, and Business Policy.

Unit – 2: **State Intervention in Business:** Theory of Government Intervention in Business, Nature of Government Intervention in India – Recent Trends; State Policies affecting business. Roles of Government – Regulatory, Promotional, Entrepreneurial and Planning, and Recent Trends.

Unit – 3: **Industrial Policies and Reforms:** Industrial Policies - A critical appraisal of New Industrial Policy 1991, Recent amendments to Industrial Policy, National Manufacturing Policy, Sickness in India – An overview of Sickness in Small Scale Industrial Units and Public Sector Enterprises, Causes for Sickness, Magnitude and Remedial Measures, Important Provisions of Sick Industrial Companies, (Special Provisions) Act, 1985 and their Applicability; FEMA; and Privatization and Disinvestment.

Unit – 4: **Competition Act, 2002:** Introduction, Definitions, Consumer, Enterprise, Goods, *etc*; Prohibition of Certain Agreements, Abuse of Dominant Position and Regulation of Combinations; Competition Commission of India - Duties, Powers and Functions of Commission; Duties of Director General; Competition Appellate Tribunal and Recent Changes.

Unit – 5: **Consumer Protection Act, 1986:** Introduction, Objectives, Applicability, Consumer and Rights of Consumers, Nature and Scope of Remedies available to Consumer and Recent Changes.

Unit – 6: **Global Environment:** Multinational Corporations, Foreign Collaborations and Indian Business – Foreign Direct Investment - Non-Resident Indians and Corporate Sector, Foreign Trade Policies and Recent Developments.

Books Recommended for Reference (recent editions)

1. E. Bhattacharya, International Business, Excel Publications.
2. V. K. Puri and S. K. Misra, Economic Environment of Business, Himalaya Publishing House.
3. K. Ashwathappa, Business Environment, Himalaya Publishing House.
4. Bertozzi-Burgunder, Business, Government, and Public Policy: Concepts and Practices, Prentice Hall of India.
5. Buchholz, Business Environment and Public Policy; Implication for Management and Strategy formulation, Prentice Hall of India.

6. F. Cherunilam, Business and Government, Himalaya Publishing House.
7. Victor, Strategic Management in the Regulating Environment: Cases and Industry Notes, Prentice Hall of India
8. Subba Rao, Business Policy and Strategic Management, Himalaya Publishing House.
9. GoI, Economic Survey (latest).
10. K. Ashwathappa, Essential of Business Environment, Himalaya Publishing House.
11. Ghosh and Kapoor, Business Policy and Environment, Himalaya Publishing House.
12. H Igar Ansoff, Corporate Strategy, Tata McGraw Hill.

Semester - II

Course – HC202: Advanced Marketing Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To facilitate understanding of the conceptual framework of Marketing and its connection with various strategies of Marketing in achieving Organizational Goals.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Marketing Concepts and Tools**: Meaning, Definitions of Marketing and Marketing Management, Core Marketing Concepts, Marketing Concept and Consumer Value, Marketing Myopia, and Marketing Environment.

Unit – 2: **Market Segmentation and Consumer Response:** Need for Segmentation, Requirements of Market Segments, Bases of Market Segmentation, Segmentation Strategies; Buying Motives, Input-Output Model, Pre- and Post-Purchase Behaviour Model, Sigmund Freudian Psycho-Analytical Model, and Maslow's Hierarchy of Needs.

Unit – 3: **Marketing Mix**: Product – Types of Products, Diversification, Product Life Cycle and New Product Development and related Strategies, Product Identification and related Strategies.

Pricing – Pricing Policies, Determinants of Pricing, Role of Costs in Pricing, Pricing Methods.

Place – Channels of Distribution, Channel Policies, Channels and Conflicts.

Promotion – Elements of Promotion, Motivating sales force, Sales Promotion Techniques, Advertising, Types of Advertising, Determining Advertising Budget, and Media Selection.

Unit – 4: **Marketing Research**: Meaning, Purpose, Sequence of Steps in Marketing Research, Areas of Application, Methods of Marketing Research, Limitations of Marketing Research and Ethical Issues in Marketing Research.

Unit – 5: **Green Marketing:** Need for Green Marketing, Green Marketing Strategies, Principles of Green Marketing, Golden Rules of Green Marketing, Green Marketing Mix and Challenges in Green Marketing.

Unit – 6: **Retail and Rural Marketing:** Retailing, Types of Retailers, Retail Marketing Strategies, Global and Indian Trends in Retailing; Rural Marketing – Importance, Factors influencing Rural Buying Behaviour, and Marketing Mix

Strategies in Rural Market.

Books Recommended for Reference

1. V. S. Ramaswamy and S Namakumari, Marketing Management, Macmillan Publishers
2. S K Baral and S C Bihari, Advanced Approach to Marketing Management, A.I.T.B.S Publishers
3. David Jobber, John Fahy, Foundations of Marketing, TMH
4. William D Perreault, E Jerome Mc Carthy, Basic Marketing - A Global Managerial Approach, McGraw-Hill Publishers
5. Michael J. Etzel, Bruce J Walker, William J Stanton, Ajay Pandit, Marketing - Concepts and Cases, McGraw-Hill Publishers
6. Philip Kotler, Kevin Lane and Keller, Marketing Management, Pearson Education Publication
7. Philip Kotler, Armstrong, Principles of Marketing, Pearson Education Publication
8. Alexander Chernev, Strategic Marketing Management, Cerebellum Press Publication
9. Geoffery K Francis, Modern Marketing Management, TMH Publication
10. Ralph Westfall, Stanley, F Starch, Marketing Research - Text and Cases, TMH Publication
11. C. Rajendra Kumar, Rural Marketing: New Dimension, Adhyayan Publisher
12. Jacquelyn A. Ottman, The New Rules of Green Marketing, Berret Koehler Publication

Semester – II

Course – HC203: Managerial Communication

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To make the students to understand the different aspects of Communication Skills.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** Meaning, Importance of Communication, Purpose of Communication, Process of Communication, Communication Structure in Organisations, Barriers in Communication, Pre-requisites for Effective Communication, and Communication Network.

Unit – 2: **Verbal and Non-Verbal Communication:** Meaning, Principles of successful Oral Communication, Barriers in Oral Communication, Conversation Control – Reflection and Empathy, Effective Principles of Oral Communication; Non-verbal Communication – Meaning, Characteristics, Classification, and Guidelines for developing Non-verbal Communication.

Unit – 3: **Written Communication:** Meaning, Importance of skills in Written Communication, Purpose of Writing, Elements of Writing, and Principles of Effective Writing; Business Letters and Reports – Introduction, Meaning, Importance, Types of Business Letters and Report Writing, Writing of Business

Letters and Reports, and Writing of Memos; Reading Comprehension - Discussion of Passages with questions to be answered.

Unit – 4: **Listening:** Meaning, Significance, Types, Myths about Listening, Barriers and Overcoming Measures, Stages of Listening, and Body Language of an Active Listener.

Unit – 5: **Presentation Skills:** Meaning, Elements of Presentation, Designing a Presentation, Six great Helpers in Presentation, and Steps to a Successful Presentation; Group Communication - Meetings, Seminars, Conferences, Workshops and Business Etiquettes.

Unit – 6: **Employment Communication:** Introduction, Writing CVs, Group Discussion, Interview Skills and Impact of Technological Advancement on Business Communication.

Books Recommended for Reference (recent editions)

1. M. K Seghal and V Khetrapals, Business Communication, Excel Books.
2. P. D Chaturvedi and Mukesh Chaturvedi, Business Communication: Concepts, Cases and Applications, Person Publications.
3. Asha Kaul, Business Communication, Himalaya Publishing House.
4. Rajesh Viswanathan, Business Communication, Himalaya Publishing House.
5. R. K Chopra, Communication Management, Himalaya Publishing House.
6. Dennis Tourish and Owen Hargie, Key Issues in Organizational Communication, Routledge.
7. Michael Kramer, Managing Uncertainty in Organizational Communication, Lawrence Erlbaum Associates.
8. Sandra M Oliver, Handbook of Corporation Communication and Public Relations: Pure and Applied, Routledge.
9. Renal Fox and John Fox, Organizational Discourse – A Language-Ideology, Power Perspective, Prager.
10. Robert R Ulmar, Communication and Organizational Crisis, Power Perspective, Prager.
11. Neil James, Klrilingat Klork, How to Write Clearly, Effectively and Professionally, Allien and Onwin.

Semester - II

Course – HC204: Business Mathematics and Statistics

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To make the Students understand the managerial uses of mathematics and application of statistical tools and techniques for decision-making.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Basic Mathematics of Finance:** Introduction, Nominal Rate of Interest and Effective Rate of Interest, Continuous Compounding, Compound Interest, Calculation at Varying Rate of Interest, Present Value, Interest and Discount,

Nominal Rate of Discount, Force of Discount, and Depreciation.

Unit – 2: **Differential Calculus:** The Concept of Derivatives, Derivative of a Function, Derivatives of Linear and Quadratic Equations, and Applications to Management and Economics; Derivative of a product of two Functions, Successive Differentiation, Partial Differentiation, Determination of Maxima and Minima, Optimization Problems in Business; Integral Calculus - Definite and Indefinite Integral, Rules of Integration, Some Standard Results in Integration, Integration by Substitution, Integration by Parts, and Applications to Business.

Unit – 3: **Probability, Random Variables and Theoretical Distributions:** Terminologies, Schools of Thought on (approaches to) the Concept of Probability, Permutation and Combination, Theorems of Probability - Conditional Probability, Bayes's Theorem; Calculation of Probability - Meaning of Random Variable, The Mean of a Random Variable, The Expected Value of a Random Variable, Binomial Distribution and Fitting a Binomial Distribution, Poisson Distribution and Fitting a Poisson Distribution, Normal Distribution and Fitting a Normal Curve.

Unit – 4: **Simulation Models**: Basic Concepts, Monte Carlo Method, Random Number Generation, and Business Applications of Simulation Models.

Unit – 5: **Decision Theory:** Introduction, Types of Decisions, Components of Decision Making, Decision Models, Types of Environment, Calculations of EMV, EVPI, EOL, Decision Making under Uncertainty, Decision Making under Risk, Decision Making under Conflict, Decision Making under Utilities, Marginal Analysis Method and Decision Tree Analysis, Posterior Probabilities and Bayesian Analysis.

Unit – 6: **Statistical Quality Control:** Causes of Variations in Quality Characteristics; Quality Control Charts - Purpose and Logic, Constructing a Control Chart, Process under Control and out of Control, Control Charts for Attributes, Fraction Defects and Numbers of Defects.

Books Recommended for Reference (recent editions)

1. Asthana B. N, Elements of Statistics, S. Chand
2. Gupta S. P, Statistical Methods, Sultan Chand & Sons
3. Gupta S. C, Fundamentals of Statistics, Himalaya Publishing House
4. Sancheti D. C and Kapoor V. K, Business Mathematics, Sultan Chand & Sons
5. Render B and Stair, R. M, Quantitative Analysis for Management, Allyn & Bacon Inc
6. Levin R. I and Rubin D. S, Statistics for Management Prentice Hall of India
7. Hooda, R. P, Statistics for Business and Economics, Harper Collins
8. N. P. Agarwal, Sonia Agarwal, and Himanshu Saxena, Quantitative Techniques, Professional RBD Publications
9. Hein, L. W, Quantitative Approach to Management Decisions, Prentice Hall
10. V. K Kapoor and S Kapoor, Operation Research Techniques for Management, Sultan Chand & Sons
11. S. D. Sharma, Operations Research, Kedar Nath Ram Nath & Com

Semester - II

Course – SC201A/B: Strategic Cost Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To equip the students for designing and implementing strategic cost management programme and system.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Activity Based Costing (ABC)**: Cost – Ascertainment, Control, Reduction, Avoidance and Management; Cost Management System; Cost Leadership Strategy; Strategic Cost Management (SCM); SCM Programme; and Importance of SCM.

Activity Based Costing - Inadequacies of Traditional Methods of Overhead Absorption, Concept of ABC, Kaplan and Cooper's approach to ABC, Cost Drivers and Cost Pools, Main Activities and their Cost Drivers, Allocation of Overheads under ABC – Characteristics, Steps, Implementation; Benefits and Limitations of ABC System.

Unit – 2: **Learning Curve Model:** Concept and Phases of Learning Curve, Graphical representation, Learning Curve Applications and Factors affecting Learning Curve, and Experience Curve.

Unit – 3: **Life Cycle Costing:** Concept and Characteristics activities and Phases in Product Life Cycle, Short Product and Extension of Product Life Cycle, Turning Point Indices in Product Life Cycle; and Project Life Cycle Costing.

Unit – 4: **Just-in-Time Approach:** Concept, Philosophy of JIT, Sources of Waste, Objectives of JIT, Features and Methodology of Implementation of JIT, Planning for adoption and Limitations of JIT Costing.

Unit – 5: **Target Costing:** Meaning and Definitions, Basic Concepts, Unique Features, and Cost determination procedure under Target Costing.

Unit – 6: **Balanced Score Card (BSC) and other Techniques**: Concept, Objectives, Four Basic Business Perspectives of BSC - Components and Measures of Performance; Kaizen Costing; Theory of Constraints; and Value Analysis and Value Engineering.

Books Recommended for Reference (recent editions)

1. J. Madegowda, Cost Management, Himalaya Publishing House, Mumbai.
2. Horngren et al., Introduction to Management Accounting, PHI, New Delhi.
3. Kaplan and Atkinson, Advanced Management Accounting, PHI Publications, New Delhi.
4. Ravi. M. Kishore, Cost Management, Taxman Publications, New Delhi.
5. Horngren, Foster and Datar, Cost Accounting, A Managerial Emphasis, PHI, New Delhi.
6. Edward Blocher, Cost Management, A strategic Emphasis, TMH, New Delhi.
7. Hilton, Cost Management, TMH, New Delhi.

8. John K Shank and Vijay Govindarajan, Strategic Cost Management, Free Press, Calcutta.
9. Roman L Weil and Michael W Maher, Handbook of Cost Management, John Wiley & Sons.
10. Don R Hansen and Maryarne M Mowen, Cost Management, Accounting and Control, Thomson.
11. Don T Decoster and Anthony A Atkinson, Advanced Management Accounting, John Wiley & Sons.
12. Leslie G Eldenburg and Sussan K Wolcott, Cost Management, John Wiley & Sons.

Semester - II

Course – SC201C/D: Credit Management in Banks

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To expose the students to the foundations of credit management, its processes and performance evaluation.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Bank Lending:** Attributes of Good Securities, Project Appraisal and Finance, Term Loan Sanction, Working Capital Finance, Kinds of Charging of Securities, Hypothecation, Pledge, Mortgage; Loan Documentation, and Execution of Loan Documentation.

Unit – 2: **Credit Management**: Concept of Credit Risk and Process of Risk Management, Building Blocks of Credit Risk Management, Credit Policy in Banks, Principles and Objectives of Credit Management, Sound Credit Culture, Credit Disbursal and Monitoring, Credit Creation, Limitations of Credit Creation, Loans - System Delivery of Bank Credit, Loan Syndication and its Process, Role and Functions Credit Information Bureau, Fair Practice Code for Bankers, Functions of BCSBI, and Prime Lending Rate.

Unit – 3: **Priority Sector Advances**: Categories and Target of Priority Sector Advances, Common RBI Guidelines on Priority Sector Lending, Recent Developments; Weaker Section of the Society, Micro Credit, Functions of Self Help Groups, KVI - Powers and Function of KVIC, Intensive Agriculture Operation; MUDRA Yojana, Credit Linked Capital Subsidy Scheme; Self Help Groups - Micro Finance and SHG, Development of Banking Habits among People, and Women Empowerment through SHG.

Unit – 4: **Lead Bank Scheme**: Role of Lead Bank Manager, Function of Lead Banks, Committees on Lead Bank Implementation Scheme, Recent Lead Bank Restructuring Scheme, Service Area Approach, Agri-Clinic and Agri-Business Centres, Differential Interest Rate Scheme, and Money Margin Scheme.

Unit – 5: **Management of NPAs**: Meaning and Definition of NPAs, Causes of NPAs, Prudential Guidelines on NPAs, Willful Defaults, SARFESI Act, 2002; Corporate Debt Restructuring, One-time Settlement, DRT Act, 1993, Establishment of Tribunal, Powers and Functions of Assets Reconstruction

Companies, and Compromise Settlements through Lok Adalats.

Unit – 6: **Performance Evaluation of Banks**: Bank Board of Financial Supervision, Bank Board Bureau, Functions of ROE Model, CAMEL's Rating, and Balanced Scorecard.

Books Recommended for Reference (recent editions)

1. J. F Sinkey, Commercial Bank Financial Management, Macmillan Publishing Co
2. Timothy W Kochi, Scott, Bank Management, Thomson
3. Justin Paul and Padmalatha Suresh, Management of Banking and Financial Services, Pearson
4. Kumar, Banking Law and Practice, Tamil Nadu Book House
5. S Natarajan and R. Parameswaran, Indian Banking, S. Chand
6. B S Khubchandani, Practice and Law of Banking, Macmillan India Limited
7. Pai Panandikar and N C Mehra, Rural Banking, NIBM
8. Mongia J N, Banking Around the World, Allied Publishers
9. Vasant Desai, Indian Banking – Nature and Problems, HPH
10. Charless L Prather, Money and Banking, Richard D Irwin Inc
11. IIBF, Accounting and Finance for Bankers, MacMillan
12. P. N Reddy and Appannaiah, Banking Theory and Practice, HPH

Semester - II

Course – SC201E: Services Marketing

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To expose students to different perspectives and concepts of Services Marketing and to help them in achieving conceptual clarity to develop skills for applying to the business problems.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Service and Service Environment:** Introduction, Nature and Definition of Services, Classification of Services, Evolution of Services as Value Contribution, Goods and Services Continuum, Contribution of Services Sector to the Economy, Evolving Environment of Services, Extended Services, Services in the Modern Economy, and Global and Indian Scenario.

Unit – 2: **Foundations of Services Marketing:** Introduction to Services Marketing, Service Marketing Philosophy, Marketing Concept and Orientation, Defining Services Marketing, Differences between Services and Goods, Marketing Challenges, Marketing Planning, Market Research and Services, Consumer Behaviour, Handling of Consumer Misbehavior, Evaluation of Service Alterations, Customer Satisfaction and Delight, and Post-Purchase Evaluation by Customers.

Unit – 3: **Services and Pricing of Services:** Introduction to 8 Ps of Marketing Mix, Product, Price, Place, Promotion, Physical Evidence of Services, Segmenting, Targeting and Positioning and Creating of Services, Identifying and Classifying

Supplementary Services, Product Life Cycle of Services, Branding of Services, New Service Development; Pricing of Services - Objectives, Approaches, Methods and Problems in Pricing.

Unit – 4: **Distribution of Services:** Distribution in Services Context, Service Location Decision, The Type of Contact, Employees role in Service Delivery, Options for Service Delivery, Service Delivery in Cyber Space, Decisions about Time and Place of Delivery, Modes of Delivery, Role of Intermediaries, Distribution Channels, Designing the Communication Mix for Services, Objectives of Communication, and Challenges and Opportunities.

Unit – 5: **Management of Service Delivery Process:** Blueprinting Services, Service Process Redesign, Service Marketing Triangle, Managing Internal and External Customers, Customer expectations of Services, Customer perceptions of Service and Measurement of Quality in Services, Servqual Model and other Measurement Methods; Creating a Culture of Service, Customer as Co-Producer, Balancing Demand and Capacity, Managing People for Service Advantages, Improving Service Quality and Productivity, The Gap Model, Customers role in Service Delivery, Services Market Segmentation, Positioning and Differentiation of Services, and Strategies for managing/closing the Five Gaps.

Unit – 6: **Information Technology (IT) and Services Marketing Applications:** Role of IT Services, E-services, Online Consumer Behaviour, Self Service Technologies, Services Marketing Applications - Financial Services, Hospitality Services, Education Services, IT Services, Hotel Services, Event Management Services, Consultancy Services, Retailing Services, Telecommunication Services, Not-for-Profit Services and Social Services, Government Services, NGO Services, *etc*.

Books Recommended for Reference (recent editions)

1. Hoffman, Services Marketing, Thomson.
2. Lovelock Chatterjee, Services Marketing: People, Technology and Strategy, Pearson Education.
3. Christopher Love Lock, Jochen Wirtz and Jayantha Chatterjee, Services Marketing, Pearson Education
4. C. Bhattacharjee, Services Marketing
5. Govind Apte, Service Marketing, Excel Books
6. Kenneth E. Clow and David L. Kurtz, Service Marketing, Biztantra, New Delhi
7. Adrain Payne, Essence of Services Marketing, PHI, New Delhi.
8. Jha, S. M, Services Marketing, Himalaya Publishing House
9. Barrie Hopson and Mike Scally, 12 Steps to Success through Service, Mercury Publication Canada
10. Bateson. J, Managing Services Marketing, Text and Readings, Dryden, Chicago
11. Philip Kotler and P.N. Blomm, Marketing Professional Services, Prentice Hall
12. Rampal M.K. and Gupta S. L, Service Marketing: Concepts, Application and Cases, Galgotia Publishing Company, New Delhi.

Semester - II

Course – SC202A: Goods and Services Tax

Weekly Teaching Hours: 3 | Examination Duration: 3 hours

Credits: 3 | Maximum Marks: 100

Objective: To expose the students to the different aspects of Goods and Service Tax proposed to be implemented from 2017-18 FY by the GoI

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Background of GST, What is GST? Process of introduction of VAT at the Centre and States; Advantages and Limitations of VAT; Justification for Introduction of GST - Shortcomings at the Central and State Levels; and Advantages at the Central and State Levels on introduction of GST; Process of Preparation for GST; Comprehensive Structure of GST Model.

Unit – 2: **Salient Features of GST Model**: Concurrent Dual GST; Dual GST Model; Applicability of GST; Apportionment of GST between Central and States; Input Tax Credit under GST; Cross Utilization of ITC between Central GST and State GST; Refund and Adjustment of GST; Collection of GST; Administration; Chargeability; Compounding Option; Returns under GST; Registration Number; Audit and Assessment.

Unit – 3: **GST Rate Structure**: GST Rates in Prominent Countries; Zero Ratings of Exports; GST on Imports; and Special Industrial Area Schemes.

Unit – 4: **Inter State Goods and Service Tax**: Procedure and major advantages of IGST Model. Transactions within a State under GST and Inter-State Transactions under GST.

Unit – 5: **Taxes and Duties Subsumed under GST**: Taxes and Duties Outside the purview of GST; Tax on items containing Alcohol; Tax on Petroleum Products; Other Taxes and Duties on Special Items; Tax on Tobacco Products; and Taxation of Services

Unit – 6: **GST Over Service Tax**: Constitutional Amendment; How GST shall be Payable by Tax-payers; Composition Scheme for Small Traders in GST Regime; Registration of Assesses under GST; Particular Transactions of Goods and Services that are taxed simultaneously under Central GST and State GST; and Other aspects relating to GST.

Books Recommended for Reference

As this course deals with Tax aspects proposed to be implemented from 2017-18 FY, no books are available at present. And in about 6 months' time, a number of experts are expected to publish the books on the subject. For the time being, the Board recommends that both the Course Teachers and the Students can refer the GST Bill prepared by the Ministry of Finance, GoI which is uploaded to the website of the Ministry.

Semester - I

Course – SC202B/D: Investment Management

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To enable the students to understand various techniques of analysis used in investment decisions, portfolio analysis and efficient portfolio management.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Investment and Investment Alternatives:** Meaning, Characteristics, Objectives, Investment Process, Investment Avenues, Investment *Vs* Speculation; Portfolio Management - Phases of Portfolio Management, Construction, Risk and Types of Risk attached to Investment, Security Return and Risk Analysis, and Measurement of Return and Risk.

Investment Alternatives: Non-Market Financial Assets - Bank Deposits, Post Office Savings Account, National Saving Certificates, Employee Provident Fund Scheme; Money Market Instruments - Bond or Debentures, Preference Share, Life Insurance, Consideration in choosing Life Insurance Policies, Investment in Gold, Real Estate, and Sources of Financial Information.

Unit – 2: **Portfolio Analysis and Management:** Traditional Portfolio Analysis, Effects of Combining Securities, Expected Return on a Portfolio, Single Index Model, Risk of a Portfolio, Reduction of Portfolio Risk through Diversification, Portfolio with more than two Securities, Markowitz Model and Location of Efficient Frontier.

Unit – 3: **Capital Assets Pricing Model:** Capital Assets Pricing Model - Assumptions, Capital Market Line, Security Market Line; Market Model, Arbitrage Pricing Theory and Factor Models, Factor Models and Return, Generating Process, One and Two Factor Models.

Unit – 4: **Efficient Market Theory:** Random Walk Theory, The Efficient Market Hypothesis, Forms of Market Efficiency - Weak, Semi-Strong and Strong Market, and their Significance; EMH *Vs* Fundamental and Technical Analysis.

Unit – 5: **Valuation of Securities:** Valuation of Fixed Income Securities - Bonds, Debentures, Preference Shares and Convertible Securities; Valuation of Variable Income Securities - Equity Shares; and Investment by Individuals.

Unit – 6: **Portfolio Performance and Evaluation**: Measurement and Evaluation, Measurement of Portfolio Performance, Risk and Return, Risk Adjustment and Performance Measures, Sharpe, Treynor and Jenson Models; Components of Portfolio Investment Performance, and Stock Selection and Timing.

Books Recommended for Reference (recent editions)

1. Cheney J and E Muses, Fundamental of Investments, Paul, New York
2. Fabozzi, Frank J, Investment Management, Prentice Hall
3. Bodie Zvi, kane Alex, Marcus J Alan and Mohanty Pitabas, Investment, The TMH
4. Avadhani V A, Security Analysis and Portfolio Management, Himalaya Publishing House

5. Pandian Punithavathy, Security Analysis and Portfolio Management, Vikas Publishing House
6. Domodaran, Investment Valuation, Jhon Wiley, New York.
7. Prasanna Chandra, Investment Analysis and Portfolio Management, TMH
8. Kevin S, Portfolio Management, PHI, New Delhi
9. Fuller Russew J and Farrel James L, Modern Investment and Security Analysis, TMH
10. Sharpe F William, Alexander J Gordon and Bailey V Jeffery, Investment Practice, PHI
11. Bhaua V K, Investment Management: Security Analysis and Portfolio Management, PHI
12. Francis Jack Clark, Investment Analysis and Management, TMH

Semester - II

Course – SC202C: Management of Life Insurance

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To enable the students to understand various dimensions of life insurance and the IRDA regulations regarding management of life insurance.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Principles of Life Insurance**: Life Insurance in ancient India, Regulation of Life Insurance, Concept of Growth of Actuarial Science, Life Insurance Needs at various Stages, Benefits of Life Insurance; Essential Elements of Insurance Contract - Utmost Good Faith, Insurable Interest, Representation, Warranty, Indemnity and Contribution.

Unit – 2: **Product Development and Life Insurance Products:** Concept of Product, Origin of New Product, New Product Development Process; Bancassurance - Models of Bancassurance, E- Insurance; and Emerging Trends in Insurance Sector.

Life Insurance Products: The basic elements of Life Insurance Products, Features of Term Insurance and Endowment Insurance, Role of Term Insurance and Endowment Insurance in Product Designing, Whole Life Assurance, Children's Life Insurance, Group Insurance, Different types of Life Insurance Products in Indian Market, Life Insurance Products available in the Overseas Market, Products of the Several Private Insurer's and Recent Trends in the Insurance Industry.

Unit – 3: **Annuities and Pensions:** Meaning of Annuities and Pensions, Need for an Annuity, Different types, Obligation of the Insurer regarding the payment of Annuity; Different Schemes available in India, Present Status and Future Prospects of Pension Funds in India.

Unit – 4: **Risk Assessment and Underwriting**: Concept of Underwriting, Different Classes of Lives and the Standard for Classification of Risks, Need for Selection, Purpose of Selection, Important factors to assess the Insurability of Individual, Sources of Information for Underwriting, Classification of

Underwriting Process, and Measures to be considered for the Sub-Standard Lives.

Unit – 5: **Policy Conditions and Privileges:** Days of Grace, Revival of Lapsed Policies, Paid Up Value, Surrender Value, Non-Forfeiture Regulation, and Nomination and Assignment

Unit – 6: **Claims Management**: Features of Insurance Claims, Operative Clause of Policy, Maturity Claims, and Death Claims, Early Claims, Claims Investigation Management of early Claims, Claim Concession Clause, Married Women's Property Act, and Accident and Disability Benefits.

Books Recommended for Reference (recent editions)

1. M. N Mishra and S B Mishra, Principle and Practice of Insurance, S. Chand and Co
2. Mishra K. C, Practice of Life Insurance, Cengage learning
3. Mishra K. C, Life Insurance Underwriting, Cengage Learning
4. T. S Mann, Law and Practice of Life Insurance in India, Deep and Deep
5. G. Krishna Swamy, Principle and Practice of Life Insurance, Excel Books
6. Swaroop C. Sahoo and Suresh C Das, Insurance Management, Himalaya Publishing House
7. Chris Paine, Reinsurance, Ane Books Pvt. Ltd
8. Dr. S. V Joga Rao, Principle of Insurance Law, Wadhwa and Co
9. Badla B. S, Insurance Fundamentals, Deep and Deep Publication
10. Jawahar Lal U, Insurance Industry, ICFAI Press
11. Tripathy and Paul, Insurance Theory and Practice, PHI
12. Harrington and Neihaus, Risk Management and Insurance, TMH

Semester - I

Course – SC202E: Competency Mapping and Succession Planning

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To familiarize the students with different aspects of competency mapping and succession planning.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction to Competency Mapping:** Developing Competencies - Meaning, Definition, and History of Competency Method; Characteristics of Competencies, Types of Competencies, Developing Competency Framework, and Job *Vs* Competencies.

Unit – 2: **Approaches to Competency Mapping:** Process of Competency Mapping, Tools for Mapping - Behavioral Event Interview, Repertory Grid, Critical Incident Technique, Subject Expert Discussions, Survey Method and Participant Observation, Role Analysis, and Competency Analysis.

Unit – 3: **Methodology of Competency Mapping:** Competency Model Development, People Capability Maturity Model, Developing Competency Framework,

Competency Profiling, Competency Mapping Tools, Use of Psychological Testing in Competency Mapping, and Competency-based Interviewing

Unit – 4: **Competency Assessment:** Meaning, Definition and Purpose of Assessment, Tools for Assessment - Assessment Center, 360 Degree Feedback, BEI, CIT, Validation of Competencies, Performance Records, Tests and Interviews.

Unit – 5: **Succession Planning:** Meaning, Planning for Succession Planning, Significance of Succession Planning and Managerial Succession Planning, and Development of a Succession Planning Programme.

Unit – 6: **Succession Planning and Career Development:** Meaning, Significance and Process of Career Planning, Career Stages, Inter-Correlation between Succession Planning and Career Development.

Books Recommended for Reference (recent editions)

1. Seema Sanghi, The Handbook of Competency Mapping, Sage Publications.
2. Spencer M Lyle and Spencer M Signe, Competence at Work, Jhon Wiley and Sons Inc.
3. Rao V. S. P, Human Resources Management, Excel Books.
4. Seema Sanghi, Human Resources Management, MacMillan.
5. Lynton R, Parek, U, Training for Development, Vistaar, New Delhi.
6. Michael Armstrong, A Handbook of Human Resource Management Practice, Kogan Page.

Semester - III

Course – HC301: Human Resource Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To facilitate understanding of the conceptual framework of Human Resource Management and its application in decision making.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** HRM - Concept, Significance, Objectives, Scope and Functions; HR Planning, Job Analysis and Design; Job Description and Job Specification; Role of HR Manager; and Strategic HRM – Using HRM to attain Competitive Advantage.

Unit – 2: **HRM Functions and HRIMS:** Recruitment, Selection, Induction and Placement, Recruitment Sources – Internal and External, Selection – Steps in Selection Process – Tests, Interviews; and Human Resource Information Management System (HRIMS).

Unit – 3: **Learning/Training and Development**: Learning Theories – Reinforcement Theory, Social Learning Theory, Goal Theories, Expectancy Theory, Adult Learning Theory, Pedagogy and Andragogy; Basic Principles of Learning, The Learning Process; Training – Need, Importance and Objectives, Methods of Training; Employee Discipline, Suspension, Dismissal and Retrenchment; Executive Development Programmes – Need and Techniques.

Unit – 4: **Compensation and Appraisal:** Compensation and Rewards, Factors influencing Compensation – Monetary and Non-Monetary Benefits; Performance-based Appraisals – Process of Performance Appraisal – Bias in Performance Appraisal, 360 Degree Performance Appraisal – BOS and BARS – Methods of Evaluation and Incentive Payments and Employee Welfare.

Unit – 5: **Labour Relations:** Industrial Relations; Trade Unions, Industrial Disputes and Settlements, Grievances Handling, Disciplinary Procedure, Suspension, Dismissal, Domestic Enquiry Legal Formalities, Layoff, Retrenchment, Closure, VRS Health and Safety.

Unit – 6: **HRM in the Era of Knowledge:** Knowledge Management – Concept, KM Architecture, Knowledge Conversion, Process of KM, Virtual Organizations – Feature, Types and Issues of HR; Learning Organizations, and Role of Leaders in Organizations.

Books Recommended for Reference (recent editions)

1. Desslor Gary, Human Resource Management, Pearson Education
2. Mathis and Jackson, Human Resource Management, Thomson
3. Flippo, Edwin B, Personnel Management, McGraw-Hill
4. Memoria and Gankar, Personnel Management: Text and Cases, Himalaya Publishing House
5. Monappa and Mirza, Personnel Management, TMH
6. Charles R Green, Strategic Human Resource Management, PHI
7. P. Subba Rao, Human Resource Management, Himalaya Publishing House
8. Deepak Kumar S D, Human Resource Management, Excel Books
9. Gupta C B, Human Resource Management, Sultan Chand & Sons
10. Decenzo, Robbins, Personnel/Human Resource Management, John Wiley & Sons Pvt Ltd.

Semester – III

Course – HC302: E-Commerce

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To make the students familiar with E-Commerce, E-Commerce Strategies, Technology and Application of Information Technology in Business.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Conceptual Framework of E-Commerce**: Introduction, Meaning, Definitions, Unique Features, Need and Scope, Online Extension of BAM Model, Transition to E-Commerce in India, Few Pioneering Indian Case Studies, Application of E-Commerce in different Sectors, Impact of E-Commerce on Business and Opportunities in E-Commerce, Advantages and Disadvantages of E-Commerce, IT Act, and Positive aspects for Corporate Sector.

Unit – 2: **Business Models for E-Commerce**: E-Business Models based on relationship of Transaction Parties and E-Business Models based on relationship of

Transaction Types.

Unit – 3: **E-Marketing and M-Commerce**: Traditional and Online Marketing, Internet Marketing Mix, Internet Marketing Trends, Target Markets, E-Marketing Strategies; E-Advertising – Methods, Advertising Strategies; M-Commerce – Infrastructure - Wireless-Standards and Applications.

Unit – 4: **E-Customer Relationship Management:** Meaning and Definitions, Features, Framework and Architecture of E-CRM, Components of E-CRM, Building E-CRM, Tools to maintain E-CRM, Strategies for E-CRM Solutions; Data Mining - Elements, Types, Process and Applications, Advantages and Disadvantages; and Typical Business Touchpoints.

Unit – 5: **E-Payments System:** Introduction, Special Features, Types - Digital Token-based EPS, Smart Cards, Credit Cards, E-Cheque, E-Cash, E-Purse, Debit Cards, Mobile Payment, Components of an effective EPS, Risk in EPS; EDI - Definition, Benefits, Limitations, Transaction and its Applications; EFT, and E-Supply Chain Management - Application in Business.

Unit – 6: **Accounting Software:** Need for Accounting Software, Types - Tally, SAP; Preparation of Vouchers, Invoice and Salary Statement; Maintenance of Inventory Records, Maintenance of Accounting Books and Financial Accounts; and Financial Report Generation.

Books Recommended for Reference (recent editions)

1. Joseph P T, E-Commerce: An Indian Perspective, PHI
2. Puja Walia Mann and Nidhi, E-Commerce, MJP Publishers
3. Krishnamurthy Sandeep, E-Commerce Management, Vidya Vikas Publication
4. Murthy C. S. V, E-Commerce – Concepts, Model, and Strategies, Himalaya Publishing House
5. Whitely D, E-Commerce Strategy, Technology and Applications, McGraw Hill
6. Kalakota and Whinston, Frontiers of E-Commerce, Pearson Education
7. Wetherbe Turban, Information Technology for Management, John Willey Publishers
8. Eliason Alan L, Business Computer Systems and Applications, Science Research Associates, Chicago
9. Vishnu Priya Singh, Tally 9, Computer-tech Publishers Ltd, New Delhi
10. Justice Yatindre Singh, Cyber Laws, Universal Law Publishing Company
11. Prajagopalan S. P, Computer Application in Business, Vikas Publishing House
12. Laudon Kenneth C and Carol Guercio Traver, E-commerce: Business, Technology and Society, Pearson Education
13. Leonard Jessup and Joseph Valacich, Information Systems Today: Managing in the Digital World, PHI

Semester - III

Course – HC303: Quantitative Techniques for Managerial Decisions

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: This course aims at developing an understanding of the application of Quantitative Techniques for optimal managerial decisions.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Linear Programming:** Introduction, Importance and Scope of Quantitative Techniques in Business Activities, Optimization Concept, Operations Research Models; Linear Programming - Introduction to Linear Programming, Problem Formulation, Product Mix and Managerial Applications, Graphical Method of Problem Solving, Alternate solution of Linear Programming Problems, Simplex Method, Duality in Linear Programming, Formulation of Dual Problems, Advantages, and Economic Interpretation of Dual Variables.

Unit – 2: **Transportation Models:** Introduction, Nature and Scope of Transportation and Allocation Models, Methods of Allocation, Different Methods for finding Initial Solution – VAM, N-W Corner Rule, and other Methods, Degeneracy, Finding Optimal Solution, Test for Optimality, Imbalance in Total Availability and Total Requirement, Impossible Shipments, Alternate Methods of Solutions, and Maximization as Objective Applications.

Unit – 3: **Assignment Problems:** Introduction, Row Minimum, Column Minimum, Iteration, Balanced, Unbalanced, Infeasible, Maximization, Objectives, Applications, and Travelling Salesman Problem.

Unit – 4: **Replacement Models:** Machines Replacement Models, Replacement of Items Deteriorating with Time, Replacement of Items that fail completely; and Description of Application Areas to other Replacement Problems, and Equipment Renewal Problems.

Unit – 5: **Network Models:** PERT and CPM – Introduction, Techniques, Network Components, Precedence, Events, Activities, Errors and Dummies, Critical Path Analysis, Float, Probabilities in PERT Analysis, Project Time calculation, Project Crashing, Time, and Cost Considerations.

Unit – 6: **Game Theory and Queuing Models:** Introduction, Assumptions of Game Theory, Two Person Zero Sum Games, Solution to Games, Saddle Point, Dominance Rule, Mixed Strategy, Graphical Method of Solving (2 × n) and (m × 2) Games, Importance and Limitations of Game Theory.

Queuing Models: Introduction, Characteristics of Queuing Models, Models for Arrival and Service Times, Single Poison Arrival with Exponential Service Rate, and Applications of Queuing Models.

Books Recommended for Reference (recent editions)

1. J K Sharma, Quantitative Techniques, Macmillan India
2. N D Vohra, Quantitative Techniques in Management, TMH
3. J K Sharma, Operations Research, Macmillan
4. K. Shridhar Bhat, Operation Research and Quantitative Techniques, Himalaya Publishing House
5. Anderson, Sweeney, Williams., Quantitative Methods for Business, Thomson
6. Srivastava and Others, Quantitative Techniques, New Age International
7. Barry Render, Ralph Stair and Michael Hanna, Quantitative Analysis, Pearson
8. Freederick Hillier and Gerald Lieberman, Operations Research, TMH

9. N. P Agarwal, Sonia Agarwal, and Himanshu Saxena, Quantitative Techniques, Professional RBD Publications
10. S. D Sharma, Operations Research, Kedar Nath Ram Nath and Co
11. Jiarhua W, The Theory of Games, Oxford University Press
12. Howard R, Dynamic Programming and Markov Process, Wiley
13. Hu T. C, Mathematical Programming, Academic Press

Semester - III

Course – HC304: Business Research Methodology

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To develop Research skills of students in investigating the research problems with a view to arrive at objective findings, interpretation of data and conclusions of their investigation.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Meaning and Significance of Research; Approaches to Research - Scientific and Non-scientific Approaches; Types of Research - Applied Research, Fundamental Research, Qualitative Research, Quantitative Research, *etc*; and Criteria for Good Research.

Business Research: Research in Business; Qualities of a good Researcher; Researcher and Manager Relationship; Research Process; Business Research Request and Proposal; and Ethics in Business Research.

Unit – 2: **Research Process and Research Design**: Pilot Survey; Formulation of Research Problem, Statement of Problem/s; Questionnaire Reliability and Validity Test; Scope of the Study; Generating Hypothesis; Testing Hypothesis; Analyzing and Conclusion, *etc*.

Concept of Research Design - Classification of Research Design; and Criteria for Good Research Design.

Unit – 3: **Collection of Data and Sampling**: Primary Data - Observation Method, Group Discussion, Interview Method, Questionnaire Method and Survey Method; and Secondary Data Collection.

Sampling: Concept of Sampling; Steps in Sampling; Sampling Techniques - Probability and Non-probability Methods; Sampling Frame; Sampling Unit; Sample Size; and Sampling and Non-sampling Errors.

Unit – 4: **Measurement and Scaling:** Scaling and its Techniques - Paired Comparison Scale, Likert Scale, Semantic Differential Scale and Thurstone Scale; Measurement and its Techniques - Nominal Scale, Ordinal Scale, Interval Scale and Ratio Scale; and Characteristic of sound Measurement and Scaling

Unit – 5: **Analysis and Presentation of Data:** Data Preparation and Description - Editing, Coding, Classification, Tabulation; Hypothesis Testing - Logic of Hypothesis Testing; Types of Hypothesis; Hypothesis Error; Measures of Central Tendency; Measures of Variation; Measures of Skewness; Statistical Testing Procedure; Types of Sample Tests; Types of Tests - Parametric Test-

Z-Test, T-Test, Chi-Square Test, One Way ANOVA, Pearson's Correlation and Non-parametric Test - Chi-Square Test, Two Way ANOVA, Wilcoxon Test, Nann-Whiteney Test, Friedman Test, Kruskal-Wallis Test and their Calculations; Factor Analysis; Regression Analysis; Cluster Analysis; and SPSS.

Unit – 6: **Research Report**: Types of Reports - Formal and Informal Report Writing; Criteria for good Research Report; Plagiarism; Target Audience; Pre-research Proposal; Progress Report; Final Report; Guidelines for effective Report Writing; Research Report Format; Instruction Manuals; Pre-Size Writing and Reporting; Final Presentation of a Report; and Practical Case Studies.

Books Recommended for Reference (recent editions)

1. Aggarwal. S and Bharadwaj S, Research Methodology, Kalyani Publications.
2. Krishnaswamy. O. R, Research Methodology, Himalaya Publishing House.
3. C. M. Chikkodi and Satyaprasad B, Business Statistics, Himalaya Publishing House.
4. Bhandarkar W. T, Methodology and Techniques of Social Research, Himalaya Publishing House.
5. Pannerselvam R, Research Methodology, Prentice Hall of India.
6. Gupta. S. C and Gupta I, Business Statistics, Himalaya Publishing House.
7. Donald R Cooper and Pamela S Schindler, Business Research Methods, Tata McGraw Hill
8. Aczl-Sounderpandian, Business Statistics, Tata McGraw Hill
9. Wilson. M, Business Statistics, Himalaya Publishing House.
10. Levin. R. I and Rubin D. S, Statistics for Management, Pearson
11. Trochim M. K, Research Methods, Sultan Chand
12. Alan Bryman, Social Research Methods, Oxford University Press

Semester - III

Course – SC301A/B: Marginal Costing for Managerial Decisions

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To equip the students with the foundations of Marginal Costing and the application of Marginal Costing for different managerial decisions.

Pedagogy: A combination of Lectures, Case Analysis, Problem Solving, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Marginal Costing – Introduction**: Marginal Costing – Meaning and Definitions; Marginal Cost; Marginal Cost and Marginal Costing – Synonymous Terminologies; Ascertainment of Marginal Cost – (1) Classification of Total Cost – Behaviour-wise Classification of Total Cost; Methods of Segregation; Accounting Treatment of Variable and Fixed Costs; Contribution; Types of Fixed Costs; and Profit-Volume Ratio.

Unit – 2: **Break-even Analysis**: Introduction; Approaches to Break-Even Analysis (BEA); Algebraic Approach to Mono-Product BEA - Break-even Point and Cash BEP, and Required Sales to earn Target Profit; Tabular Approach to Mono-Product BEA; Graphical Approaches to Mono-Product BEA - Break-

Even Charts - Angle of Incidence and Margin of Safety; Profit-Volume Graph of Mono-Product Concerns.

Unit – 3: **Multi-Product BEA**: Algebraic Approach to Multi-Product BEA; Graphical Approaches to Multi-Product BEA - Multi-Product Break-Even Chart, Weighted Average Approach to Multi-Product Break-Even Chart, and Profit-Volume Graph; and Assumptions underlying Break-Even Analysis.

Unit – 4: **Cost-Volume-Profit Analysis** (CVP Analysis): Introduction; BEA *Vs* CVP Analysis; Effects of changes in Fixed Costs, Unit Variable Cost, Selling Price, and Sales Quantity; Operating Leverage - Cost Structure, Sales and Operating Profit.

Unit – 5: **Absorption Costing, Variable Costing and Throughput Costing**: Introduction; Approaches for the determination of Profit - Economic and Accounting Approaches; Preparation of Income Statement under Absorption Costing, Variable Costing and under Throughput Costing - Product and Period Costs, Accounting treatment of Product and Period Costs, and Fixed Manufacturing Overheads, Valuation of Unsold Stock, Fixed Production Overhead Absorption Rate, Under- and Over-Absorption of Production Overheads, Method of Costing Sales; Reported Profit under specific circumstances; Reconciliation of Profit under Variable Costing with Profit under Absorption Costing and Under Throughput Costing; and Relevance of Variable Costing for External Reporting.

Unit – 6: **Cost Analysis for Managerial Decisions**: Introduction; Managerial Decisions - Influencing Factors and Relevant Information; Application of Marginal Costing for Managerial Decisions - Product Diversification, Make or Buy Decisions, Pricing Decisions, Joint and By-product Costing – Methods of apportioning Joint Costs and Sell or Further Process Decisions, Profitability and Scarce Resource Allocation, Temporary Shut-down, and Optimal Level of Activity.

Books Recommended for Reference (recent editions)

1. J. Madegowda, Marginal Costing for Managerial Decisions, Prateeksha Publishers.
2. J. Madegowda, Advanced Management Accounting, Himalaya Publishing House.
3. Ray. H. Garrison, Management Accounting - Concepts for Planning, Control, Decision Making, Business Publications Inc.
4. Desmond Goch, Finance and Accounts for managers, Pay Books Ltd.
5. Sydney Davidson, et al, Hand Book of Cost Accounting.
6. Charles. T. Horngren, Introduction to Managerial Accounting, Prentice-Hall International Inc.
7. Richard M. Lynch and Robert. W. Williamson, Accounting for Management Planning and Control, Tata McGraw Hill.
8. Charles. T. Horngren and George Foster, Cost Accounting – A Managerial Emphasis, Prentice-Hall of India Pvt., Ltd.
9. C. Bursk and John. F. Chapman, New Decisions-Making Tools for Managers, The New American Library Inc.
10. Robert. I. Dickey, Accountants Cost Hand Book, The Ronald Press Co.
11. Colin Drury, Management and Cost Accounting, The English Language Book

Society.

12. W. Thomas, Readings in Cost Accounting, Budgeting and Control, South-Western Publishing.

Semester – III/IV

Course – SC301C/D and SC401B: Indian Accounting Standards
Course – SC302A: Indian Accounting Standards (Ind AS) – I

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To familiarize the students with the corporate financial reporting Standards as notified by the Ministry of Corporate Affairs, GoI.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Regulatory Framework in India; Companies Act, 2013; Development in Financial Reporting in India; and India and IFRS.

Unit – 2: **Conceptual Framework**: Ind AS - 8: Accounting Policies, Changes in Accounting Estimates and Errors; Ind AS - 10: Events after Reporting Period; and Ind AS - 33: Earnings per Share.

Unit – 3: **Valuation and Measurement of Assets**: Ind AS - 16: Property, Plant and Equipment; Ind AS - 38: Intangible Assets; Ind AS - 40: Investment Property; Ind AS - 2: Inventories; Ind AS - 20: Accounting for Government Grants; Ind AS - 23: Borrowing Costs; Ind AS - 105: Non-current Assets held for Sale and Discontinued Operations; and Ind AS – 36: Impairment of Assets.

Unit – 4: **Valuation and Measurement of Liabilities**: Ind AS - 19: Employee Benefits; and Ind AS - 37: Provisions, and Contingent Liabilities and Contingent Assets.

Unit – 5: **Revenue and Expenses**: Ind AS - 18: Revenue; Ind AS - 11: Construction Contracts; and Ind AS - 21: The Effects of Changes in Foreign Exchange Rates.

Unit – 6: **Other Ind AS**: Ind AS – 104: Insurance Contracts; Ind AS - 106: Exploration for and Evaluation of Mineral Resources; Ind AS – 114: Regulatory Deferral Accounts; Ind AS – 29: Financial Reporting in Hyper-inflationary Economies; and Ind AS – 34: Interim financial Reporting.

Books Recommended for Reference

1. Greuning Van Hennie, International Financial Reporting Standards - A Practical Guide.
2. International Financial Reporting Standards (IFRSs), Taxman.
3. Haskins E Mark and Ferris R Kenneth and Selling J Thomas, International Financial Reporting and Analysis: A Contextual Emphasis.
4. Nobes Christopher and Parker Robert, Comparative International Accounting.
5. Mohapatra A.K. Das, International Accounting.
6. The Companies Act, 2013, Publications Division, Government of Indian
7. Mukesh Saraf, Practical Implementation and Application Guide of Indian Accounting

Standards (Ind AS) IFR-converged Ind AS, Bharat Law House.

8. B. D. Chatterjee, Illustrated Guide to Indian Accounting Standards (Ind AS), Taxman.
9. T. P. Ghosh, Illustrated Guide to Indian Accounting Standards (Ind AS), Taxman.
10. Companies (Indian Accounting Standards) Rules, 2015 (Ind AS) with Referencer, Bharat Law House Pvt. Ltd.
11. Frederick D. S Choi and Gray K Meek, International Accounting, Pearson Education
12. Sandagaran S. M, International Accounting, Thomson Publication.

Semester - II

Course – SC301E: Retailing and Brand Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To expose the students to different perspectives and concepts of Retailing and Brand Management and to help them in achieving conceptual clarity to develop skills for applying these concepts to the business problems.

Course Inputs

Unit – 1: **Retailing:** Introduction, Retailing - Definition, Significance and Importance, Indian *Vs* Global Scenario, Types of Retailing - Store Retailing, Non-Store Retailing; Types of Retailers, Retail Location - Factors affecting Retail Location Decision; Site Selection - Factors influencing Site Selection - Steps in Selecting Site; Location Based Retail Strategies, e-tailers, Theories of Retail Development, Retail Mix, and Single and Multiband Retailing.

Unit – 2: **Store Design:** Introduction, Store Layout - Types of Layouts, Factors affecting Store Layout; Retailing Image Mix, Store Façade, Store Administration, Floor Space Management, Space Mix, Managing Store Inventories and Displays, Customer Service, CRM in Retailing, Cashiering Process, Managing In-Store Promotions and Events, Role of Store Managers, Segmenting and Targeting in Retail, Shopper Marketing - Components, and Visual Merchandising.

Unit – 3: **Retail Supply Chain Management:** Definition, Integrated Supply Chain Planning, Vendor Development, Quick Response, Inventory Planning, Floor Ready Merchandise, Electronic Data Exchanges and Bar Coding Management, Reverse Logistics, and Emerging Issues.

Unit – 4: **Brand Management - Introduction:** Concept of Brand, Evolution, Perspectives, Anatomy, Types of Brand Names, Brand Name Associations, Brand *Vs* Products, Advantages of Brands to Consumers and Firms, Brand Elements, Branding Challenges and Opportunities; Brand Positioning - Basic Concepts, Alternatives, Risk, Brands and Consumers, Strategies for Positioning the Brands for Competitive Advantage, Points of Parity, Points of Difference, Buying Decisions, Perspectives on Consumer Behavior, Building Strong Brand- Methods and Implications.

Unit – 5: **Brand Management:** Dimensions, Brand Associations and Image, Brand Identity – Kapferer's Brand-Identity Prism Model; Perspective Levels, Managing Brand Image; Stages - Functional, Symbolic and Experiential Brands; Brand Equity - Sources of Equity, Brand Equity Models, Brand Audits, Brand Loyalty and Cult Brands, Leveraging Brands, Brand Extensions, Extendibility, Line Extensions, Line Trap, Co-Branding and Licensing Brand,

Reinforcing and Revitalization of Brand - Need, Methods, Brand Architecture, Product Line Range Umbrella and Endorsement Brands.

Unit – 6: **Brand Valuation**: Methods of Valuation, Implications for Buying and Selling Brands; Applications - Branding Industrial Products, Services and Retailers; Building Brands Online, Indianization of Foreign Brands and Taking Indian Brands Global, Issues and Challenges, and Brand Portfolio Management.

Books Recommended for Reference (recent editions)

1. Kevin Lane Keller, Strategic Brand Management: Building, Measuring, and Managing Brand Equity, Prentice Hall
2. J. N. Kepferer, The New Strategic Brand Management (Creating and Sustaining Brand Equity Long Term), Kogan Page Publishers India.
3. David A Aaker, Managing Brand Equity, Free Press
4. Ramanuj Majumdar, Product Management in India, PHI Learning Pvt India
5. Jagadish Shet and Authual Parvathiyar, Handbook of Relationship Marketing
6. S. A. Chunawalla, Compendium of Brand Management, Himalaya Publishing House
7. Harsha Varma, Brand Management, Excel Books
8. Kirti Dutta, Brand Management: Principles and Practices, Oxford University Press
9. Subroto Sengupta, Brand Positioning: Strategies for Competitive Advantage, Tata McGraw Hill Education
10. M G Parameswaran, Building Brand Value – Five Steps to Building Powerful Brands, Tata McGraw Hill

Semester - III

Course – SC302B/D: Derivatives Market

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to understand the concepts and use of Derivatives in Risk Management.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Concept of Derivatives, Evolution of Derivatives, Emergence of Derivatives Market - Participants, Functions, and Development of Exchange Traded Derivatives, Exchange Traded *Vs* Over-The-Counter Derivatives, Types of Derivatives, Overview of Indian Derivatives Market and the Regulatory Framework of Derivatives Trading in India.

Unit – 2: **Forwards and Futures Market – Pricing, Trading and Settlement Mechanism**: Concept of Forward and Futures Contracts, Features, Forward and Futures Trading Mechanism, Forward Markets as forerunners of Futures Markets, Types of Futures Contracts, Major distinctions between Forwards and Futures Contracts, Theories of Forward and Futures Pricing, Pricing of Forwards and Futures.

Unit – 3: **Options Market**: Concept of Option Contracts, Development of Options Markets, Types of Options – Call Option and Put Option, Premium, Exercise Price, Expiration Dates, Payoffs from Options, Open Interest, Moneyness of

Options, Intrinsic Value and Time Value of Option, Styles of Options – European, American and Bermudian Options, and Difference between Futures and Options.

Unit – 4: **Option Pricing:** Factors affecting Option Pricing, Put-Call Parity Relationship, Option Greeks, Option Pricing Models – Black-Scholes Option Pricing Model, Binomial Option Pricing Model,

Unit – 5: **Trading Strategies**: Basic Strategies, Spreads – Bull Spread with Call, Bull Spread with Put, Bear Spread with Call, Bear Spread with Put, Butterfly Spread, Box Spread, Combinations – Straddle, Strangle, Strips and Straps.

Unit – 6: **Swaps and Other Derivatives:** Swaps – Interest Rate Swaps and Currency Swaps, Economic Motives for Swaps, Uses of Swaps to manage Risk; Warrants, Exotics, Weather, Energy and Insurance Derivatives, Uses of Derivatives in Risk Management and Critiques of Derivatives.

Books Recommended for Reference (recent editions)

1. Hull C John, Options, Futures and Other Derivatives, Pearson Education Publishers.
2. N. D, Vohra and B R Baghi, Futures and Options, Tata McGraw-Hill Publishing Company Ltd.
3. David A Dubofsky and Thomas W Miller, Derivatives: Valuation and Risk Management, Oxford University Press, Newyork.
4. S. L. Gupta, Financial Derivatives: Theory, Concepts and Problems, Prentice Hall of India.
5. Red Head, Financial Derivatives: An Introduction to Futures, Forwards, Options, Prentice Hall of India.
6. S. S. S. Kumar, Financial Derivatives, Prentice Hall of India.
7. T.V. Somanathan, Derivatives, Tata McGraw-Hill Publishing Company Ltd.
8. www.sebi.com, NSE Manual of Indian Futures and Options
9. Kolb Robert W, Options: An Introduction, Kolb Publishing.
10. Kolb Robert W, Understanding Futures Markets, Kolb Publishing.
11. G. Kotreshwar, Risk Management – Insurance and Derivatives, Himalaya Publishing House.
12. Susan Thomas, Invest India, Tata McGraw-Hill Publishing Company Ltd.

Semester - III

Course – SC302C: Management of Non-Life Insurance

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To provide a working knowledge of Non-life Insurance Products and Companies, and Reinsurance as a risk management tool.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Principle of General Insurance**: Introduction, Essential Elements and Principles of General Insurance - Indemnity, Utmost Good Faith, Subrogation, Insurable Interest, and Contribution; Nationalization of GIC, GIC and its

Subsidiaries, Organization Management of GIC; and Role of Tariff Advisory Committee.

Unit – 2: **Fire Insurance and Motor Insurance**: Definition of Fire Insurance, Risk Covered under Fire Insurance Policy, Kinds of Fire Insurance Policies, Standard Policy Coverage, and Special Coverage; Add-on-Covers, Consequential Loss Insurance; Motor Insurance, Types of Motor Insurance, Motor Vehicle Act,1988, Third Party Motor Insurance Policy, Surveyor and Loss Assessor in Fire Insurance.

Unit – 3: **Marine Insurance:** History, Meaning and Definition, Contents of Marine Policy, Maritime Perils, Clauses incorporated in a Marine Policy, Kinds of Marine Insurance Policies, Marine Losses, Payment of Claims, General Average and Particular Average, Constructive Total Loss, Partial Loss; and Marine Claim Documents.

Unit – 4: **Liability and Engineering Insurance**: Law of Tort, Types of Liability Insurance, Public Liability Insurance Act, 1991, Workmen Compensation Act, 1923; Types of Engineering Insurance, and Contractors all Risk Engineering Insurance.

Unit – 5: **Rural Insurance In India:** Development pf Rural Insurance, Opportunities and Challenges, Types of Rural Insurance, Distribution Channels and Strategies adopted by Insurance Companies, and Insurance Schemes for Rural and Social Sectors.

Unit – 6: **Health and Other Insurance:** Reason for the Growth, Health Insurance Schemes in India, Problems of Health Insurance, Health Insurance Portability, Doctor Packages Policy, and Cancer Insurance Policy; Burglary Insurance in India, Micro Insurance, Agriculture Insurance, Terrorism Risk Insurance, Crop Insurance; Current Scenario; Reinsurance – Evolution of Reinsurance, Need for Reinsurance, and Classification of Reinsurance.

Books Recommended for Reference (recent editions)

1. K. C Mishra and G. E Thomas, General Insurance, Cengage Learning
2. K.C Mishra, Fire and Marine Underwriting, Cengage Learning
3. Insurance Operations, ICFAI Press
4. K. C Mishra, Principle and Practice of General Insurance, Cengage Learning
5. M. N Mishra and S B Mishra, Principle and Practice of Insurance, S. Chand and Co
6. T. S Mann, Law and Practice of Life Insurance in India, Deep and Deep
7. Badla B. S, Insurance Fundamentals, Deep and Deep Publication
8. Kothari and Bathi, Principles and Practice of Insurance, Sahitya Bhavan
9. Redja, Principles of Risk Management and Insurance, TMH
10. Denis Riley, Consequential Loss Insurance and Claims, Sweet Maxwell
11. Mathew M J, Insurance Principles and Practice, RBSA Publishers
12. Palande P. S. Shah R. S and Lunawat M, Insurance in India: Changing Policies and Emerging Opportunities, Response Books

Semester - III

Course – SC302E: Industrial Relations and Employee Welfare

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To foster in-depth knowledge of Regulations and Policy Framework governing Industrial Relations and Labour Welfare Measures.

Pedagogy: A combination of Lectures, Practical Excises (Individual and Group visit to industrial units and interaction with executives), Case Studies/Case Laws on Industrial Relations and Employee Welfare.

Course Inputs

Unit – 1: **Industrial Relations (IR) in India:** Concept, Perspective, Evaluation of IR, Anatomy of IR, Industrial Unrest, State and IR Policy, Changing Concepts of Management and Labour Relations, Emerging Trends in IR, and Future of IR in India.

Unit – 2: **Trade Unionism in India:** Trade Union Movement in India - Problems and Challenges of Trade Unions, Functions of Trade Unions - Strengthening Trade Unions; Indian Trade Unions Act, 1926 – Registration, Need for Recognition and Rights.

Unit – 3: **IR Policies:** State Policy on IR, National Commission on Labour and IR Policy, Discipline and Indiscipline, Misconduct, Disciplinary Procedure, Disciplinary Techniques, Concepts of Industrial Employment (Standing Orders) Act, 1946; Collective Bargaining - Collective Bargaining Process, Workers Participation in Management, Joint Consultation and Workers Participation in Management, and Emerging Issues in Workers Participation in India.

Unit – 4: **Industrial Disputes**: Industrial Disputes Act, 1947 – Objectives, Important Definitions, Authorities under the Act; Causes of Industrial Disputes, Types of Industrial Disputes, Prevention of Industrial Disputes, Reference of Disputes Settlement – Strikes, Lock-Outs, Lay Off, Retrenchment; Unfair Labour Practices, Standing Orders, Service Rules, Misconduct, Principles of Natural Justice, Domestic Enquiry and Remedial Counseling.

Unit – 5: **Labour Legislations:** Social Security and Welfare Legislations, Concept of Social Security, ILO and Social Security, Social Security Measures In India - Workmen's Compensation Act,1923; Employees State Insurance Act, 1948; Employees Provident Fund and (Miscellaneous Provisions) Act, 1952; Maternity Benefit Act,1961; Payment of Gratuity Act, 1972, and Payment of Bonus Act 1965.

Unit – 6: **Welfare Legislations and other Emerging Issues:** The Factories Act, 1948; Plantation Labour Act, 1951; Contract Labour (Regulations and Abolitions) Act, 1970; Shops and Establishment Act, and Latest Rules regarding IR in IT and ITES Industries.

Labour Legislation pertaining to employees working in Night Shifts; Specific Provisions for Female Employees, Ethical issues arising due to Night Shift and HR Intervention; and Impact of Night Shift working on Family and Social Life.

Books Recommended for Reference (recent editions)

1. C B Memoria, Dynamics of Industrial Relations in India, Vikas Publishing
2. V. P. Michael, Human Resource Management and Industrial Relations, Himalaya Publishing House
3. P C Tripathi, Personnel Management and Industrial Relations, S Chand
4. P Subba Rao, Human Resources Management and Industrial Relations, S Chand
5. Arun Monappa and Ranjeet Nambudiri, Industrial Relations and Labour Laws, Tata McGraw Hill
6. C. S Venkata Ratnam, Industrial Relations, Oxford University Press
7. B. D. Singh, Industrial Relations, Excel Books
8. B. D. Singh, Labour Laws for Managers, Excel Books

Semester IV

Course – HC401: Strategic Management and Corporate Governance

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To enable the students to develop an understanding of the basic inputs in making and implementing corporate strategic decisions and also to familiarize with the issues and practices involved in corporate decisions.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** Characteristics, Dimensions, Approaches to Strategic Decision Making, Level of Strategic Management, Strategic Management Process – Components of Strategic Management Model, Policy and Strategic Management, Strategic Management *Vs* Operational Management, and Strategic Role of Board of Directors and Top Management.

Unit – 2: **Strategic Intent:** Concept of Mission and Vision, Constituents of Corporate Mission, Stakeholder – Goals and Corporate Mission; Objectives - Concept, Hierarchy and Importance of Objectives Setting, Goals and Objectives.

Unit – 3: **External and Internal Environmental Analysis:** Concept of Environment, Types and Importance; PEST Analysis; Analysis of Michal Porter's Five Forces Model, Strategic Groups and Preparation of ETOP Internal Analysis – Concept of Competitive Advantage, Generic Building Blocks, Core Competencies and Competitive Advantage – Resources and Capabilities; Internal Factor Analysis and Preparation of SAP.

Unit – 4: **Strategy Formulation and Implementation:** Strategy Framework for Analyzing Competition – Porters Value Chain Analysis, Competitive Advantage of a Firm, Formulation of Strategy at Corporate, Business and Functional Levels, Types of Strategies – Offensive Strategy, Defensive Strategy, Vertical Integration Strategy, Horizontal Strategy, Strategic Analysis and Choice, Strategy Implementation; Inter-Relationship between Formulation and Implementation.

Unit – 5: **Strategic Evaluation and Control:** Concept and Purpose of Strategic Evaluation and Analysis, Gap Analysis; Strategic Control System; RoI, Budgeting, Auditing Systems; Feedback and Information Systems.

Unit – 6: **Corporate Governance:** Concepts of Corporate Governance, Origin and Need for Registered Companies, Importance, Models of Corporate Governance, Committees and Authorities on Corporate Governance – Recommendations of Cadbury Committee, Confederation of Indian Industries, Code of Corporate Governance, Kumaramangalam Birla Committee Recommendations, Board Committees – Audit Committee, Compensation Committee, Nomination Committee – Constitution and Need, Rights and Duties, Responsibilities, Business Ethics and Corporate Social Responsibilities.

Books Recommended for Reference (recent editions)

1. Hill and Jones, Strategic Management – Text and Cases, All India Publishers, Chennai.
2. Peers and Robinson, Strategic Management, AITBS, New Delhi.
3. P. Ghemawat, Commitment: The Dynamics of Strategy, Harvard Business School Press, Boston.
4. Michal. E. Porter, The Competitive Advantage of Nations, Macmillan, New Delhi
5. Lawrence R Jaunch, Business Policy and Strategic Management, McGraw Hill
6. Fred R. David, Strategic Management Concepts and Cases, PHI
7. Sharma R. A, Strategic Management in Indian Companies, Deep and Deep Publications
8. Subba Rao, P, Business Strategic Management, Himalaya Publications
9. Ravi M. Kishore, Strategic Management – Text and Cases, Taxman's Publishers Ltd.
10. R. M. Srivatsava, Corporate Strategy and Planning, TMH
11. Sanjiv Agarwal, Corporate Governance – Concepts and Dimensions, Snow White Publications Pvt Ltd.
12. Report on Corporate Governance, Confederation of Indian Industries, Bombay
13. Report of Cadbury Committee on Financial Aspects of Corporate Governance, London Stock Exchange, London
14. C. S. V. Murthy, Business Ethics and Corporate Governance, Himalaya Publishing House

Semester - IV

Course – HC402: Global Business Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To make the students understand and demonstrate issues of international business in world economy.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Global Business; International Business - Meaning, Scope, International Orientations, Motives for Internationalization of Firms,

Environmental Factors influencing International Business, and Strategic Decisions in International Business.

Unit – 2: **International Trade Theories:** Theory of Mercantilism, Absolute Advantage Theory, Comparative Cost Advantage Theory, Hecksher-Ohlin Theory, New Product Life Cycle Theory**,** New Trade Theory, Porter's Diamond Model and Implications for International Business.

Unit – 3: **Foreign Direct Investment:** Theories of FDI, Benefits and Costs of FDI, Determinants of FDI, Laws and Regulations governing FDI in India, FDI in Indian Retail Sector, and Impact of FDI on Indian Economy.

Unit – 4: **Strategies For International Business:** Profiting from Global Expansion, Global Expansion and Business Level Strategy, Pressures for Cost Reduction and Local Responsiveness; International Strategies - International, Multi-domestic, Global, and Transnational Strategies; Strategic alliances – Types of Competitive Strategic Alliances, and Advantages and Disadvantages of Strategic Alliances.

Unit – 5: **International Business and International Institutions**: WTO – Objectives of WTO, Structure of WTO, Fundamental Principles of WTO, Functions of WTO, India and WTO; IMF – Role of IMF in Balance of Payments and SDR, India and IMF; UNCTAD – Role of UNCTAD in Developing Countries, and India and UNCTAD.

Unit – 6: **Regional Trade Blocs and Other Issues:** Concept of Regional Trade bloc, Purpose of Regional Trade Blocs, European Union, BRICS, SAARC, ASEAN, NAFTA, APEC, OAU and GCC.

Intellectual Property Rights: Nature of Intellectual Property, TRIPs, Problems and Fears of Developing Nations regarding TRIPs, and International Characteristics of Intellectual Property.

Books Recommended for Reference

1. Alan M. Rugman and Richard M. Hodgetts, International Business, Pearson Publication
2. Donald Ball, International Business, TMH Publication
3. Justin Paul, International Business, PHI Publication
4. Vyuptakesh Sharan, International Business - Concept, Environment and Strategy, Pearson Education Publication.
5. Francis Cherunilam, International Business -Text and Cases, PHI Publication
6. Charles W. L. Hill, Global Business Today, TMH Publication
7. Therese Flaherty, Global Operations Management, TMH Publication
8. Subba Rao, International Business, Himalaya Publishing House
9. Sundaram and Black, International Business Management, PHI Publication
10. Srivastava R.M., International Strategic Management, Himalaya Publishing House.
11. John. J. Wild and Kenneth J. Wild, International Business - The Challenges of Globalisation, Pearson Education.
12. N. Prasanna, FDI in India – Issues and Challenges, Regal Publications.

Semester - IV

Course – HC403: Production and Operations Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To equip the students with the tools and techniques of production and operations management.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction:** Nature of Production, Production as a System, Evolution of Production Function, Production as an Organizational Function, Decision Making in Production, Importance of Production Management and Operation Management, Characteristics of Modern Production and Operation Function.

Unit – 2: **Industrial Location and Facility Layout:** Introduction, Location Theories, Freedom of Location, Errors in Selection, Steps in Location Selection, Relative Importance of Location Factors, and Location Models.

Facility Layout: Introduction, Meaning, Definition and Scope, Factors Influencing Layout, Principles of Layout, Types of Layout, Revision of Layout, Layout Planning, Layout Tools and Techniques, Criteria for Selection and Design of Layouts.

Unit – 3: **Production Design, Development, Planning and Control:** Production Design - Definition, Importance, Factors affecting Product Design.

Product Policy - Standardization, Simplification, Diversification,

Product Development - Meaning, Importance, Factors responsible for Development, Techniques of Product Development.

Production Planning - Meaning, Objectives, Scope, Importance and Procedure of Production Planning, Routing and Scheduling, Dispatch, Follow up,

Production Control - Meaning, Objectives, and Factors affecting Production Control.

Unit – 4: **Scheduling and Work Study:** Scheduling- Introduction, Operation Planning and Scheduling, Scheduling Techniques for Job Shop, and Scheduling Methodology, Sequencing Problems, Processing N Jobs through two Machines, Processing N Jobs through three Machines.

Work Study - Introduction, Definition, Objectives, Benefits, Relationship of Time and Motion Study, Work Study Procedure, Method Study;

Work Measurement - Introduction, Definition, Objectives, Benefits of Work Measurement and Techniques of Work Measurement.

Unit – 5: **Purchase and Stores Management:** Introduction, Vendor Relations, Selection of Vendor, Vendor Rating, Vendor Development; Material Handling - Meaning, Importance, Principles of Material Handling and Costs; and Material Requirement Planning.

Unit – 6: **Quality Management:** Meaning, Dimensions of Quality, Cost of Quality, Measuring and Reporting, Quality Cost, Effects of Quality Management on Productivity; Total Quality Management and Business Partners, Customers,

Information Technology, Role of Employees in the improvement of Quality, Quality Circle, Six Sigma, and ISO 9000 Standards Certification.

Books Recommended for Reference (recent editions)

1. Cook Thomas M and Russel R A, Contemporary Operations Management, PHI
2. Ashwathappa, K, Production and Operations Management, Himalaya Publishing House.
3. R. Pannerselvam, Production and Operations Management, PHI Learning Private Ltd.
4. Patel Chunawala, S. A and Patel D. R, Production and Operations Management, Himalaya Publishing House.
5. S. N Chary, Production and Operations Management, Himalaya Publishing House.
6. B.S. Goel, Production and Operations Management, Pragati Prakashan.
7. Russell and Taylor, Production and Operations Management, Pearson Education Publications.
8. Matrinich S Joseph, Production and Operations Management: An Applied Modern Approach, W S E Willy Publications.
9. Ashwathappa, K and Shridhara Bhat K, Production and Operations Management, Himalaya Publishing House.
10. Kachru Upendra, Production and Operations Management, Excel Book Publications.
11. Mahadevan, Operations Management: Theory and Practice, Pearson Education Publications.
12. Norman G, Production and Operations Management, Dryden Press
13. Shoes and Barry, Operations Management, McGraw Hill

Semester - IV

Course – HC404: Entrepreneurial Development and Project Management

Weekly Teaching Hours: 3 Examination Duration: 3 hours

Credits: 3 Maximum Marks: 100

Objective: To expose the students to the foundations and different dimensions of Entrepreneurial Development and Project Management.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Entrepreneurship and MSMEs**: Need, Scope, Entrepreneurial Competencies and Traits, Factors affecting Entrepreneurial Development, Entrepreneurial Motivation, Conceptual Model of Entrepreneurship, Entrepreneur *Vs* Intrapreneur, and Classification of Entrepreneurs.

Micro, Small and Medium Enterprises (MSMEs): Meaning and Definitions of MSMEs, Features, Scope, Objectives, Relationship between Small and Large Units; Indian MSME Sector - Nature, Contribution to Economy, Problems and Government Schemes; and MSMEs Act, 2006.

Unit – 2: **Entrepreneurial Development Programmes and Small Business**: Relevance and Achievements of EDPs, Role of Government in Organizing such Programmes, Women and Rural Entrepreneurs - Present Status in India, and

Steps taken for their Promotion.

Small Business: Concept and Definition, Role of Small Business in Modern Indian Economy, Small Entrepreneur in International Business, Steps for starting a Small Industry, Registration as SSI, Role of SIDBI, Advantages and Problems of SSIs, Institutional Support Mechanism in India, EDI, Incubation Centres, Incentives and Facilities, and Government Policies for SSIs.

Unit – 3: **Project**: Definition, Characteristics, Types, Steps in identification of Projects, Project Life Cycle.

Project Management - Meaning, Scope and Importance, Role of Project Manager.

Project Appraisal - Preparation of a Real Time Project, Feasibility Report containing Technical Appraisal, Environment Appraisal, Market Appraisal and Managerial Appraisal.

Project Identification - Environment for Business Opportunities, Idea Generation, Short Listing and Selection of Product/Service, Stages in Venture Appraisal, Factory Design and Layout, and Feasibility Report Preparation.

Unit – 4: **Project Planning**: Functions, Project Objectives and Policies, Identifying Strategic Project Variables; Statement of Work; Mild Stone Schedules Tools for Planning Hierarchy of Plans; and Forms of Project Organization

Unit – 5: **Project Financing**: Project Cost Estimation and Working Capital Requirement, Sources of Fund, Preparation of Projected Income Statement, *etc*; Implementation of Projects - Graphic representation of Project Activities, Network Analysis, Management and Control of Projects, Project Scheduling, MIS in Project, Problems of Project Implementation, and Project Audit.

Unit – 6: **Project Management and Key Performance Indicators (KPIs)**: Concept of KPIs, Nature, Scope, Functions, Objectives and Significance; Financial KPIs; Non-financial KPIs; Role of KPIs in MSMEs; Practices of Financial and Non-financial KPIs In MSMEs; Challenges for KPI Practices in MSMEs and Project Management in MSMEs.

Books Recommended for Reference (recent editions)

1. Singh Narendra, Project Management and Control, Himalaya Publishing House.
2. Prasanna Chandra, Projects: Planning, Analysis, Selection, Implementation and Review, Tata McGraw Hill.
3. P. Gopala Krishnan and V. E Rama Moorthy, Project Management, MacMillan India.
4. Chandra Prasanna, Project Preparation, Appraisal and Implementation, Tata McGraw Hill.
5. A. N Desai, Entrepreneurship Management, Ashish Publishing House.
6. Vasanth Desai, The Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House.
7. Nicholas, Project Management for Business and Technology: Principles and Practice, Prentice Hall of India.
8. Hall B. L, Pickle and Yance, Small Business Management, John Wiley & Sons, USA.
9. Kenneth R. Van Vloorthis, Entrepreneurship and Small Business Management, Allyn and Bacon.

10. C. M. Bammback and J. R. Manscusu, Entrepreneurship and Venture Management, Prentice Hall of India.
11. Yound, Trevour L, Planning and Implementing Project, Sterling Publishing Ltd.
12. C. A Dailey, Entrepreneurship Management, McGraw Hill.

Semester – IV

Course – HC405: Inplant Training and Project Report

Objective: The primary objective of making the students to involve in the project work is to expose them to the practical field. The study is a plethora of Principles, Canons, Rules and Regulations, Theories and Tenets in the class-room set-up. In order to understand the versatility of the same in application, they are enthused to take up project work. The industry-related, farm-related, field-related and business-related problems may be chosen for the study. Thus the findings of the study would help the problem encounterers to solve them.

Procedure: After the examination of M. Com – II Semester, the students have to finalize the topics for their Project Reports, select the industrial unit for their inplant training and work there for a minimum of 1½ months, observe how different Departments are functioning and collect the necessary data and report. This is to be completed before the commencement of the classes of M. Com – III Semester. During the III – Semester, the students have to collect the data from different sources including the books, journals, reports, websites, *etc*. Based on this, the students shall prepare the Project Report under the guidance of a teacher (allotted by the Department) and submit one copy to the Department at least one week prior to the close of M. Com – IV Semester classes.

Project Report: The size of the report shall be between 80 to 90 pages – 1½ line space, Times New Roman, 12 font, both sides aligned, and 1.10" margins all sides. The student shall submit one copy to the Department at least one week prior to the close of M. Com Semester – IV classes.

Credits: 3

Semester - IV

Course – SC401A: Indian Accounting Standards (Ind AS) - II

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to understand the IFRS-converged Indian Accounting Standards as notified by the Ministry of Corporate Affairs, GoI.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Group Accounting**: Ind AS - 27: Separate Financial Statements; Ind AS - 28: Investments in Associates and Joint Ventures; Ind AS - 110: Consolidated Financial Statements; Ind AS - 103: Business Combinations; Ind AS - 111: Joint Arrangements; and Ind AS - 112: Disclosure of Interest in other Entities.

Unit – 2: **Technical and Specialized Standards**: Ind AS - 17: Lease Accounting; Ind AS - 12: Income Taxes; Ind AS - 102: Share Based Payments; Ind AS - 108: Operating Segments; and Ind AS - 41: Agriculture.

Unit – 3: **Financial Instruments**: Ind AS - 109, Ind AS – 107, Ind AS – 32, and Ind AS -

39: Financial Instruments.

Unit – 4: **Fair Value**: Ind AS - 113: Fair Value Measurement.

Unit – 5: **First-Time Adoption**: Ind AS - 101: First-Time Adoption; and Challenges and Issues.

Unit – 6: **Developments in IFRS**: Developments in IFRS Space including new Lease Standard, new Conceptual Framework, and new Revenue Standard.

Books Recommended for Reference

1. Greuning Van Hennie., International Financial Reporting Standards - A Practical Guide.
2. International Financial Reporting Standards (IFRSs), Taxman.
3. Haskins E Mark and Ferris R Kenneth and Selling J Thomas, International Financial Reporting and Analysis: A Contextual Emphasis.
4. Nobes Christopher and Parker Robert, Comparative International Accounting.
5. Mohapatra A.K. Das, International Accounting.
6. The Companies Act, 2013, Publications Division, Government of Indian
7. Mukesh Saraf, Practical Implementation and Application Guide of Indian Accounting Standards (Ind AS) IFRS Converged Ind AS (English), Bharat Law House.
8. B. D. Chatterjee, Illustrated Guide to Indian Accounting Standards (Ind AS), Taxman.
9. T. P. Ghosh, Illustrated Guide to Indian Accounting Standards (Ind AS), Taxman.
10. Companies (Indian Accounting Standards) Rules, 2015 (Ind AS) with Referencer, Bharat Law House Pvt. Ltd.
11. Frederick D. S Choi and Gray K Meek, International Accounting, Pearson Education
12. Sandagaran S. M, International Accounting, Thomson Publications.

Semester - IV

Course – SC401C/D: International Banking

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To acquaint the students with different aspects of International Banking.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **International Banking**: Meaning, Definition, and Brief history of International Banking, Reasons for the growth of International Banking, Characteristics and Dimensions of International Banking, Size of International Banking Market; Recent trends in International Banking, and Organizational features of International Banking, and Risks in International Banks.

Unit – 2: **Operations of International Banking and Documentary Credit**: Introduction, Historical Background, Factors behind Overseas Branch Expansion, Objectives of Indian Banks' Branches Abroad, Constraints of Indian Banking, Marketing Culture, and Management of Balance of Payment.

Documentary Credit: Basics of Letter of Credit, Types of Letters of Credit, Documents under a Letter of Credit, INCOTERMS, Uniform Customs and

Practices for Documentary Credit; Export and Import Policy - Historical Perspectives, Importance of EXIM Policy, and Current EXIM Policy.

Unit – 3: **Correspondent Banking:** Introduction, Factors contributing to the growth of Correspondent Banking, Clearing House Functions, Payments and Collections, Letters of Credit and Bankers Acceptance, Trade Development and Referrals, Credit Services, and Euro's Challenges to Correspondent Banking.

Unit – 4: **Trade Blocks:** WTO, International Cartels - OPEC, Bilateral and Multilateral Treaties, North American Free Trade Agreements (NAFTA), UNCTAD, US – Russia Bilateral Investment Treaty, German-India Bilateral Treaty, Trade Aid and Development; International Financial Center - An Overview, Functions of International Centers, and Regional Financial Center.

Unit – 5: **Regulatory Framework**: Regulations of International Banking, Regulations, Deregulations, Re-Regulations (IMF); Regulatory Arbitrage, Birth of Offshore Banking, Basel Concordant, Assessment of Country, Sovereign Risk, and Country Risk Management.

Unit – 6: **International Capital Flows**: Capital Flows, The East-Asian Crisis, Chile and Mexican Crisis, Other Sources of Capital Flight, International Liquidity, Institutional Fiancé for Export and Import in India, Incentives available to Exporters, Role of Custom, C and F Agents, Forfeiting, Financing Import, Source of Forex Flows, EXIM Bank, Exchange Control Regulation related to Merchant Transactions, and Export Credit Guarantee Corporation of India Limited.

Books Recommended for Reference (recent editions)

1. Bose Rupanarayan, Fundamentals of International Banking, McMillan
2. Indian Institute of Banking and Finance, International Banking Operations.
3. International Banking, ICFAI Publications
4. International Banking - Legal and Regulatory Aspects, McMillan
5. Francis Cherunilam, International Business Environment, HPH
6. Walmsky Julian, The Foreign Exchange and Money Markets
7. Rajwade A V, Foreign Exchange, International Finance and Risk Management
8. Don Dixon and Bishop Paul, The Foreign Exchange Handbook
9. Madhukar R. K, Dynamics of Bank Marketing, UBS Publishers
10. Vyuptakesh Sharan, International Business, Pearson Education
11. Alan M Rugman, Richard H Hodgetts, International Business, Pearson Education
12. Justin Paul, International Business, PHI

Semester - **IV**

Course – SC401E: International Marketing Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To equip the students with different perspectives and concepts of International Marketing Management and to help them in obtaining conceptual clarity for applying them to international marketing problems.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars,

Assignments, *etc*.

Course Inputs

Unit – 1: **Conceptual Framework of International Marketing Management:** Objectives of International Marketing (IM); Challenges and Opportunities in IM; Difference between Domestic and International Trade; Quality considerations in IM; Underlying Forces of IM; Major Participants in IM; Importance of IM; Culture and Social Factors, Culture and Its Impact on IM, Political and Legal Forces, and Negotiating with International Customers, Partners and Regulators.

Unit – 2: **International Business Theories, Policies and Environment:** Introduction, Political and Legal Environment, Cultural Environment, Financial and Monetary Environment; Variables in International Market Environment, Foreign Trade, Production Possibility Curve (PPC), Principle of Absolute Advantage, Principle of Relative Advantage, Exchange Ratio and Trade, Factor Endowment Theory, Recent Import Export Policy and procedures, and Facilities and Incentives for Export Business.

Unit – 3: **International Marketing Mix Decisions**

- Production Decisions: Product and Analysis of Product Components, Product Adoption, Physical or Mandatory Requirements and Adaption, Product Alternatives, Screening Products for Adoption; Product Standardization *Vs* Product Adoption; Green Marketing and Product Development; Brand - Global, National and Private; Packaging, International Product Life Cycle, Promoting Industrial Product, Marketing Services Globally, Entering Global Markets, and Market Environment for Business Services.
- Distribution Decisions: Distribution Patterns, Channel Terminologies, Channel Constraints, Determination of Channel Types, Alternative Middlemen Choices – Home Country Middlemen, Foreign Country Middlemen, and Government affiliated Middlemen.
- Promotion Decisions: Promotion Mix Concept, Sales Promotion, Nature and Restrictions, Overseas Product Exhibitions, Global Advertising Concept, Global Creative Challenges, Media Mix Alternative, Advertising agency, Standardized International Advertising, and Developing Cultural Awareness.

Unit – 4: **Foreign Market Entry Strategies:** Global Segmentation; Targeting and Positioning; Entry Strategy, Foreign Market Entry Strategies - Exporting, Branches, Subsidiaries, Licensing, Agents and Distributors, Joint Ventures, Manufacturing Assembly Operations, Management Operations, Management Contracts, Turnkey Operations, Acquisitions, Internet, Franchising, Consortia, Counter-Trade, Strategic International Alliances, Foreign Direct Investment, and Factoring and Forfeiting.

Unit – 5: **International Pricing and Financial Strategy:** International Pricing Decisions and Influencing Factors, Approaches to International Pricing - Uniform Pricing *Vs* Market-by-Market Pricing, Price Distortion, Inflation, Transfer Pricing, Administered Pricing, Cartels, Government-influenced Pricing, Counter-Trade; Arranging Finance for Exports - Financial and Fiscal Incentives provided by the Government and Foreign Exchange facilities by the Reserve Bank of India and

EXIM Bank; Institutional support from Government, Semi-Government and Autonomous Organizations for Exporters; Obtaining Export Credit Insurance Exchange Rates, Understanding Foreign Exchanges Rates and protection against their adverse Movement; Labeling, Packaging, Packing and Marketing Goods for Orientation to GATT and Functions of WTO.

Unit – 6: **Information System and Marketing Research:** Definition and Meaning of Global Marketing Information System, Process of Marketing Research, Analyzing Global Opportunities - Screening International Marketing Opportunities, Criteria for selecting Target Countries, Grouping International Markets, Analyzing International Buyers/Business Markets and Government Markets and International Marketing Research Process.

Books Recommended for Reference (recent editions)

1. Rakesh Mohan Joshi, International Marketing, Oxford University Press
2. Phillip Cateora, John Graham and Mary Gilly, International Marketing, McGraw-Hill
3. Svend Hollensen, Global Marketing – A Decision Oriented Approach, Prentice Hall
4. Frank Bradley, International Marketing Strategy, Pearson Education
5. Johansson, J. K, Global Marketing: Foreign Entry, Local Marketing, and Global Management, McGraw-Hill
6. Crinkota, M. R, International Marketing, Dryden Press, Boston.
7. Fayerweather, John, International Marketing, Prentice Hall
8. Jain, S. C, International Marketing, CBS Publication, New Delhi.
9. Keegan, Warren J, Global Marketing Management, Prentice Hall, New Delhi.

Semester - IV

Course – SC402A: Cost Accounting Standards and Other Issues

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To equip the students with necessary understanding of Cost Accounting Standards developed and issued by the Institute of Cost Accountants of India and other Issues in Cost Accounting.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Cost Accounting Standards 1 - 6**: Overview of Cost Accounting Standards – Introduction, Objectives, Scope of CASs; Generally Accepted Cost Accounting Principles (GACAP); CAS – 1: Classification of Cost; CAS – 2: Capacity Determination; CAS – 3: Production and Operation Overheads; CAS – 4: Cost of Production for Captive Consumption; CAS – 5: Average (Equalized) Cost of Transportation; and CAS – 6: Material Cost.

Unit – 2: **Cost Accounting Standards 7 – 15**: CAS – 7: Employee Cost; CAS – 8: Cost of Utilities; CAS – 9: Packing Material Cost; CAS – 10: Direct Expenses; CAS – 11: Administrative Overheads; CAS – 12: Repairs and Maintenance Cost; CAS – 13: Cost of Service Cost Centre; CAS – 14: Pollution Control Cost; and CAS – 15: Selling and Distribution Overheads.

Unit – 3: **Cost Accounting Standards 16 – 24**: CAS – 16: Depreciation and

Amortization; CAS – 17: Interest and Financing Charges; CAS – 18: Research and Development Cost; CAS – 19: Joint Cost; CAS – 20: Royalty and Technical Know-how Fee; CAS – 21: Quality Control; CAS – 22: Manufacturing Cost; CAS – 23: Overburden Removal Cost; and CAS – 24: Treatment of Revenue in Cost Statement.

Unit – 4: **Uniform Costing:** Introduction, Meaning and Definitions of Uniform Costing; Application of Uniform Costing system; Pre-requisites for introducing Uniform Costing System, Objectives, Fields for Uniformity; Uniform Cost Manual; and Advantages and Limitations of Uniform Costing.

Unit – 5: **Cost Control Accounts – Non-integrated and Integrated Accounting Systems:** Introduction, Non–integrated Accounting System – Principal Ledgers, Principal Accounts, Treatment of Over- and Under-absorbed Overheads; Reconciliation – Reasons for difference in reported Profits, Procedure for Reconciliation (as the students have studied 'Reconciliation' at the B.Com level, the Course Teacher is required to provide only a brief lecture but to focus on solving advanced problems); Integrated Accounting System – Procedure of integrating Cost Books of Account into Financial Books of Account; and Cost Control and Cost Reduction.

Unit – 6: **Cost Audit:** Concept, Objectives, Scope, Organization and Programme of Cost Audit; Qualification, Appointment, Remuneration and Removal of Cost Auditor, Rights, Duties, Responsibilities and Liabilities of Cost Auditor in accordance with the Provisions of the Company Act, 2013.

Books Recommended for Reference (recent editions)

1. J. Madegowda, Advanced Cost Accounting, Himalaya Publishing House
2. Sanjeev Singhal and R Sankaraiah, A Practical Guide to Cost Accounting Standards, Rules and Audit incorporating the GACAPs, CCH India
3. Cost Accounting Standards issued by the Institute of Cost Accountants of India (available in its website)
4. William N. Lanen, Shannon W. Anderson, Michael W. Maher, Fundamentals of Cost Accounting, Tata McGraw-Hill
5. Leslie G. Eldenburg and Susan K. Wolcott, Cost Management.
6. B. M Lall Nigam and I. C Jain, Cost Accounting Principles and Practice, PHI
7. Ravi M. Kishore, Advanced Cost Accounting and Cost Systems, Taxman
8. S. P. Iyengar, Cost Accounting Principles and Practice, Sultan Chand & Sons
9. S. N. Maheshwari and S. N. Mittal, Cost Accounting Theory, Shree Mahavir Book Depot
10. V. K. Saxena and C. D Vashisth, Cost Accounting, Sultan Chand & Sons

Semester - IV

Course – SC402B/D: Global Business Finance

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: The object of this course is to make the students to acquaint with the International Financial Management in order to assist the MNCs in respect of international financial matters.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **International Financial Institutions and Markets:** An overview of Global Business Finance, Distinguishing Features, Objectives, Significance, Factors responsible for increased role of Global Business Finance, Challenges, Finance Function in the Global context, Global Finance Manager, Role of Global Finance Manager in MNCs, and Differences between Global Financial Management and Domestic Financial Management.

International Financial Institutions and Markets: Origin, Objectives, Structure and Operation of – Bank for International Settlement (BIS), International Monetary Fund (IMF), World Bank Group - International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC); International Development Agency (IDA), Multilateral Investment Guarantee Agency (MIGA) and International Conference for Settlement of Investment Disputes (ICSID), Development Banks, Euro Currency Markets, Euro Banking, Market for International Securities – International Bonds, Euro Notes and Euro Commercial Papers, and Medium Term Euro Notes.

Unit – 2: **Foreign Exchange Market and Exchange Rate Determination:** Concept of Forex Market, Features and Structure of Forex Market, Functions and Role of Forex Market, Participants of Forex Market, Mechanics of Currency Trading, Foreign Exchange Market in India, Types of Transactions and Settlement Dates, Exchange Rate and Theories of Exchange Rate Determination, Factors influencing Exchange Rate, Determination of Exchange Rate in the Spot Market and Forward Market, Calculation of Outright Rate, Bid Price, Ask Price, Quotation, Types of Quotation, Currency Futures - Forward Contracts *Vs* Future Contracts, Arbitrage, Covered Interest Arbitrage, Hedging and Speculation.

Unit – 3: **Foreign Exchange Exposure and Risk:** Introduction, Nature of Exposure and Risk, Types of Foreign Exchange Exposures – Translation, Transaction and Economic Exposure, Management of Foreign Exchange Exposure Risk through Hedging – Internal and External Techniques; and Balance of Payment.

Unit – 4: **Cost of Capital and Financial Structure of MNCs:** Introduction, Determination of Cost of Capital - Cost of Debt, Cost of Preference Shares, Cost of Equity Capital, Cost of Retained Earnings, Weighted Average Cost of Capital; Financial Structure of Multinational Groups, and Capital Structure for Foreign Subsidies.

Unit – 5: **International Capital Budgeting Decisions:** Introduction, Basic Concepts of International Capital Budgeting, Issues in Foreign Investment Analysis - Estimation of Cash Flows, Cost of Capital, and Portfolio Consideration of MNCs.

Unit – 6: **Short-Term International Financial Management:** Introduction, International Cash Management in a Multinational Group, Management of Receivables and Inventory, and International Working Capital Management.

Books Recommended for Reference (recent editions)

1. Alan C Shapiro, Multinational Financial Management, John Wiley Publication.

2. Eun and Resnik, International Financial Management, TMH Publication.
3. Reid W. Click, Joshua D. Coval, The Theory and Practice of International Financial Management, Prentice Hall of India Pvt. Ltd
4. Maurice D. Levi, International Finance, McGraw Hill International Editions
5. Jeff Madhura, International Finance Management, South Western Thomson Learning.
6. IAN Giddy, Global Financial Market, AITBS, New Delhi.
7. Jeevanadan C, Foreign Exchange and Risk Management, Sultan Chand and Sons
8. V. K Bhalla, International Finance Management, Galgotia Publishing Company
9. P G Apte, International Financial Management, THM Publication.
10. P K Jain, Josette Peyrard, Surendra S Yadav, International Financial Management, Macmillan India Ltd.
11. Chatterjee B. K, Principles of Foreign Exchange, Himalaya Publishing House
12. Madhu Vij, International Financial Management, Excel Books.

Semester - IV

Course – SC402C: Actuarial Science

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To enable the students to understand the procedural aspects of calculating the premium and application of Actuarial Science in Insurance.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction to Actuarial Science:** History of Actuarial Science, Area of Application of Actuarial Science, Objectives of Actuarial Science, Meaning and Definition of an Actuary, Role, Responsibilities and Powers of an appointed Actuary, Actuarial Profession and Product Design, IRDA Regulation for Appointment of an Actuary, Actuary Society in India and Abroad; Global Insurance Scenario and Challenges for an Actuary,

Unit – 2: **Annuities:** Compound Interest Rate Theory. Classification of Annuities, Accumulated and Present Value of an Annuity - Immediate, Due, Certain and Deferred Annuity; Perpetuity - Immediate and Due.

Unit – 3: **Probability:** General Principles, Theories, Events, Dependent and Independent, Mutually Exclusive, Probabilities of Death And Survival.

Unit – 4: **Mortality and Premium**: Concept of Mortality, Components of Mortality Table, Sources of Mortality Table, Stages of Construction of Mortality Table; Graduation - Purpose of Graduation; Premium - Mortality, Interest and Expenses, Types of Premium, and Loading for Expenses.

Unit – 5: **Commutations Functions:** Different Plans of Insurance, Formulae for Different Plans, Commutation Function; Calculation of Accumulated and Present Value of Premium for different Insurance Plans - Whole Life, Endowment, Pure Endowment, and Temporary Assurance.

Unit – 6: **Valuation:** Theoretical aspects, Data required, Method of Valuation; Valuation of Surplus - Need and Sources and Distribution of Surplus; Policy Value -

Prospective and Retrospectives Policy.

Books Recommended for Reference (recent editions)

1. Karl Borch, Mathematical Theory of Insurance, Lexington Books
2. K. C Mishra and C. S Kumar, Elements of Actuarial Science, Cengage learning
3. ICRIM (Hyderabad), Actuarial Principles and Practices
4. Badla B. S, Insurance Fundamentals, Deep and Deep Publication
5. Jawahar Lal U, Insurance Industry, ICFAI Press
6. Donald D. W. A, Compound Interest and Annuities, Cambridge University Press
7. R. E. Underwood, The Elements of Actuarial Science, Pitman
8. Harry Freeman, Mathematics for Actuarial Students, Cambridge University Press
9. T. S. Mann, Law and Practice of Insurance in India, Deep and Deep Publications
10. Mishra K. C, Practice of Life Insurance, Cengage Learning
11. Mishra K. C, Life Insurance Underwriting, Cengage Learning
12. K. C. Mishra and R. C. Gupta, Financial Management and Insurance Accounting, Cengage Learning

Semester - IV

Course – SC402E: International Human Resource Management

Weekly Teaching Hours: 4 Examination Duration: 3 hours

Credits: 4 Maximum Marks: 100

Objective: To equip the students to understand the importance of International HRM in the modern business world and with skills for applying these concepts/models to the problems relating to the management of HR.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **International Human Resource Management (IHRM)**: Fundamentals of IHRM; Approaches to IHRM; Difference between Domestic HRM and IHRM, Managing International HR Activates - HR Planning, Recruitment and Selection, Training and Development, Performance Management, Remuneration, Socio-Politico-Economic System – US, UK, Japan and India – A comparative analysis; M&A – Integration of acquired employees in newer Cultures, Global Mobility and HR - International Postings, Internationalization of HRM - Socio-cultural context, and Organizational dynamics and IHRM.

Unit – 2: **HR Functions in International Context:** Different Approaches to Multinational Staffing Decisions - Ethnocentric, Polycentric, Geocentric, Region-Centric; Selection - Factors in Expatriate Selection – Technical Ability, Cross-Cultural Suitability, Family Requirements, MNE Requirements Context; Backdrop of International Training - Current Scenario in International Training and Development, Training and Development of International Staff, Types of Expatriate Training, Types of Cross Cultural Training, Career Development, Knowledge Transfer in Multinational Companies; Performance Management Systems in International Context, HRM Practices in different Countries - Japan, USA, UK, Turkey, Middle East, India and China.

Unit – 3: **International Staffing, Compensation and Benefits:** Nature of IHRM, HR Requirements, Domestic and International Labor Market, Sources, Executive Nationality Staffing Policies, International Staffing and International Compensation Programme, Designing Compensation Programme – Approaches to International Compensation, Incentives and Corporate Commitments; Japanese Model - Components, Objectives and Methods of Compensation; Taxation Aspects; Changing Trends in International Employment, International Migration and its impact on Recruitment, and International Talent Management.

Unit – 4: **Culture and International HRM:** Role of Culture in International HRM, Culture and Employee Management Issues, Organizational Processes in IHRM, Linking HR to International Expansion Strategies, Challenges of International Human Resource Management, Expatriation and Repatriation, Selection Methodology of Expatriation - Process of Repatriation, Job related Adjustments, and Organizational Development

Unit – 5: **Managing HR in Virtual Organizations:** Meaning and Types of Virtual Organizations - Difference between Traditional and Virtual Organizations, Features of Virtual Organization, Managing HR in Virtual Organizations, Challenges of International Performance Management, Career Management and International HRM.

Unit – 6: **Industrial Relation and International HRM Practices:** International Labour Relations; Key Issues, Response of labour to MNCs, Social Dumping, International Joint Venture and HRM, International HRM Strategies - Differentiation or Integration and Emerging Trends.

Books Recommended for Reference (recent editions)

1. Peter J Dowling, Denice E Welch, Randall S Schuler, International Human Resource Management, Thompson
2. Monir H Tayeb, International Human Resource Management, Oxford University Press
3. Hugh Scullion and Margarel Linehan, International Human Resource Management, McMillan
4. Evans, The Global Challenge: Framework for International HRM, McGraw Hill
5. Hillary Harris, Christ, Brewster and Paul Spamon, International HRM, VMP Publishers
6. Terence Jackson, International HRM, Sage Publication
7. Anne Wil Harzing and Joris Van, International HRM, Sage Publication.
8. Peter. J. Dowling, Marion. Festing and Allen Engle, International Human Resource Management
9. Randall S Schular, Dennis R Briscoe and Liss Beth Claus, International Human Resource Management.
10. Rao P L, International Human Resources Management, Excel Books.

Question Paper Pattern for Semester-end Examinations

Each Question Paper shall be divided into four Sections *viz.*, Section – A (Objective Type Questions), Section – B (Conceptual), Section – C (Analytical), and Section – D (Application).

Section – A: Maximum Marks: 5

One question comprising five sub-questions (objective type – one-word answer questions, fill in the blanks, matching, and/or multiple choice questions) and the students have to answer all the five sub-questions.

Each sub-question carries one mark.

For the purpose of convenience, the students shall answer all the five sub-questions of this Section at one place continuously in the first page.

Section – B: Maximum Marks: 20

Four questions shall be answered out of five questions. Out of five questions, three shall be problems in the case of Quantitative Courses.

Each question carries five marks.

Section – C: Maximum Marks: 20

Two questions shall be answered out of three questions. Out of three questions, two shall be problems in the case of Quantitative Courses.

Each Question carries ten marks.

Section - D: Maximum Marks: 30

Two questions shall be answered out of three questions. Out of three questions, two shall be problems in the case of Quantitative Courses.

Each Question carries fifteen marks.

Note: (1) In the case of theory courses, one case shall be included in Section – C or D.

(2) Calculator, Mathematical Table and Present Value Table are allowed.

Elective (Inter-disciplinary) Courses offered for the Students of other Disciplines/Departments

Semester - II

Course – EL201: Personal Financial Planning

Weekly Teaching Hours: 2 Examination Duration: 1½ hours

Credits: 2 Maximum Marks: 50

Objective: To provide an overview to the students of other Disciplines about different personal financial plans for investment, tax, retirement, *etc*.

Pedagogy: A combination of Lectures, Problem Solving, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Financial Planning:** Introduction, Importance, Process, Professionalism in Financial Planning, Concepts of Money Value, Net Worth, Simple and Compound Interest.

Unit – 2: **Saving and Investment Plans:** Introduction, Savings Instruments – Setting Up a Savings Plan – Tax Saving Schemes; Need for Investment, Financial Markets and Instruments, Investment Planning Strategies and Case Studies

Unit – 3: **Insurance Plans:** Introduction, Features of Insurance, Role of Insurance in Personal Financial Planning, Product Profile of Life and Non-Life Insurance Policies, Tax Benefits and Case Studies.

Unit – 4: **Retirement Planning:** Introduction, Importance, Process of Retirement Planning, Types of Pension and Annuity Plans and Case Studies.

Books Recommended for Reference (recent editions)

1. Khan M. Y, Financial Services, Tata McGraw Hill
2. Kotreshwar G, Risk management, Insurance and Derivatives, Himalaya Publishing House
3. Avadhani V. A, Management of Financial Services, Anmol Publications
4. ICFAI, Personal Financial Planning
5. Mishra K. C and Steward Doss, Personal Financial Planning, Cengage Learning India
6. Jeff Madura, Personal Financial Planning, Pearson Edition

Semester - II

Course – EL202: Principles of Marketing

Weekly Teaching Hours: 2 Examination Duration: 1½ hours

Credits: 2 Maximum Marks: 50

Objective: To provide an overview to the students of other Disciplines about the foundations of Marketing.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Marketing and Consumer Behaviour:** Definition, Nature and Scope of Marketing, Approaches to Study Marketing, and Core Concepts of Marketing.

Consumer Behaviour: Factors influencing Buying Behaviour, Buying Motives, Stages of Buying Decision, Consumer Behaviour in adopting New Products, and Organizational Buying Behaviour.

Unit – 2: **Product Management:** Types of Products, Product Mix and Product Line, Product Life Cycle and New Product Development and related Strategies.

Unit – 3: **Pricing:** Pricing Objectives, Pricing Methods, Pricing Procedure, Nature and Uses of Price Discounts.

Unit – 4: **Distribution Management and E-Marketing:** Channel of Distribution, Nature of Marketing Channels, Role of Marketing Channels**,** Channel Policies.

E-Marketing: Growth of Online Marketing, Advantages and Disadvantages of Online Marketing, Opportunities and Challenges in Online Marketing.

Books Recommended for Reference

1. David Jobber, John Fahy, Foundations of Marketing, TMH Publishers
2. Russel Edward, The Fundamentals of Marketing, AVA Publishing
3. William J. Stanton, Fundamentals of Marketing, McGraw-Hill Publication
4. S K Baral and S C Bihari, Advanced Approach to Marketing Management, A.I.T.B.S Publishers
5. William D Perreault, E Jerome Mc Carthy, Basic Marketing - A Global Managerial Approach, McGraw-Hill Publishers
6. Michael J. Etzel, Bruce J Walker, William J Stanton, Ajay Pandit, Marketing-Concepts and Cases, McGraw-Hill Publishers
7. Philip Kotler, Kevin Lane and Keller, Marketing Management, Pearson Education Publication
8. Philip Kotler, Armstrong, Principles of Marketing, Pearson Education Publication
9. Alexander Chernev, Strategic Marketing Management, Cerebellum Press Publication
10. Geoffery K Francis, Modern Marketing Management, TMH Publication
11. Abha Mathur, Principles of Marketing, Mewar University Press
12. Jeff Tanner, Mary Anne Raymond, Principles of Marketing, Flat World Knowledge

Semester - III

Course – EL301: Micro Finance

Weekly Teaching Hours: 2 Examination Duration: 1½ hours

Credits: 2 Maximum Marks: 50

Objective: To make the students understand the Indian Micro Finance Sector and its contribution for women empowerment and financial inclusion.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Introduction**: Meaning, Definition, History of Micro Finance, Micro Finance Products and Services, Micro Finance and Rural Financial Services, Micro Finance as a tool for Development, Problems of Micro Finance in India; Micro Finance *Vs* Micro Credit.

Unit – 2: **Micro Finance Models:** Credit Lending Models of Micro Finance - Co-operative Model, Grameen Joint Liability Group Model, SHG Model,

Federated SHG Model, Status of Micro Finance in India; SHG-Bank Linkage Progammes in India - Introduction, History, Progress under SHG-Bank Linkage Programme in India.

Unit – 3: **Micro Finance and Women Empowerment:** Concept of Women Empowerment, Women Empowerment through SHGs, Role of Micro Finance in Women Empowerment, Socio-Economic Empowerment of Women, and Challenges to Women Empowerment and Micro Finance.

Unit – 4: **Financial Inclusion and Micro Finance:** Concept of Financial Inclusion, Definition, Importance of Financial Inclusion, Causes of Financial Exclusion, Need for Financial Inclusion, Role of Micro Finance in Financial Inclusion, Tools of Financial Inclusion and Methods, and Achievements of Financial Inclusion in India.

Books Recommended for Reference (recent editions)

1. Debadutta K. Panda, Understanding Micro Finance, Wiley
2. P. Gupta, Introduction to Managing Micro Finance, Cyber Tech publication
3. Prabhu Ghate, Micro Finance in India, Sage Publication
4. Rohit N. Desai, Micro Finance (Evolution, Achievements and Challenges), Galaxy Book Company
5. NABARD's Annual Report
6. Report of Rangarajan Committee on Financial Inclusion, Government of India.

Semester –III

Course – EL302: Income Tax Law and Practice

Weekly Teaching Hours: 2 Examination Duration: 1.30minutes

Credits: Maximum Marks: 50

Objective: The course aims at making students conversant with the concept of corporate tax laws and also their implications on Tax planning and management.

Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, *etc*.

Course Inputs

Unit – 1: **Basic Concepts**: Income Tax; Corporate Tax; Assessee; Assessment Year; Previous Year; Company, Different kinds of Companies; and Incidence of Tax.

Unit – 2: **Tax Planning**: Meaning of Tax Planning, Tax Avoidance, Tax Evasion and Tax Management – Features, and Scope for Tax Planning.

Unit – 3: **Computation of Tax Liability**: Income from Salary; Income from House Property; Income from Business; Capital Gains; Income from Other Sources; Carry Forward and Set Off of Losses; Deduction from Gross Total Income; Computation of Net Income; Computation of Tax Liability; and Dividend Tax. Exemptions for Assesse with reference to all assesses.

Unit – 4: **E-Filing and Assessment:** E-filing Procedure; Assessment Procedure and Types of Assessment.

Books Recommended for Reference (recent editions)

1. Vinod K Singhania and Kapil Singhania, Direct Tax Planning and Management,

Taxman Publication.
2. Vinod, K. Singhania, Direct Taxes - Law and Practices, Taxman Publication.
3. Mehrotra, H. C, Income Tax Law and Accounts including Tax Planning, Sahitya Bhawan Publications.
4. Narang and Gaur, Income Tax, Himalaya Publishing House.
5. Prasad B, Direct Taxes - Law and Practices, Wishwa Prakashana
6. T. N. Manoharan, Students Handbook on Income Tax Law, Snow White Publications
7. V. S. Sundaram, Commentaries on the Law of Income-Tax in India, Law Publisher.
8. A. C. Sampath Iyengar, Law of Income Tax, Bharat Publishing House.
9. Bhagavati Prasad, Direct Taxes Laws and Practice, Wishwa Prakashana
10. Mehrotra and Goyanka, Direct Taxes - Tax Planning and Management, Sahitya Bhavan.

Question Paper Pattern for Elective Courses

(offered by the DoS in Commerce, Kuvempu University for the students of other Disciplines at the Post-Graduate Level)

Duration: 1½ hours,

Maximum Marks: 40,

Students shall answer five questions out of eight questions, and

Each question carries 8 marks.

Structure of Master of Commerce (Proposed, 2013-14)

Course Code	Academic Programme, Semester and Course	Teach-ing Hours per Week	Credits	Maximum Marks			Examination Duration (hours)
				Internal Assessment	Semester-end Examination	Total	
	M.Com, Semester – I						
HC101	Management and Behavioural Process	3	3	25	75	100	3
HC102	Economics for Business Decisions	4	4	25	75	100	3
HC103	Advanced Financial Management	4	4	25	75	100	3
HC104	Accounting Theory and Analysis	5	5	25	75	100	3
SC101	Soft Core Stream, Course – I	4	4	25	75	100	3
SC102	Soft Core Stream, Course – II	3	3	25	75	100	3
	Semester – I, Total	23	23	150	450	600	
	M.Com, Semester – II						
HC201	Business Environment and Government Policy	4	4	25	75	100	3
HC202	Marketing Management	4	4	25	75	100	3
HC203	Managerial Communication	3	3	25	75	100	3
HC204	Quantitative Techniques for Managerial Decisions - I	4	4	25	75	100	3
SC201	Soft Core Stream, Course - III	4	4	25	75	100	3
SC202	Soft Core Stream, Course - IV	3	3	25	75	100	3
EI - 1	Inter-disciplinary Course - I	2	2	10	40	50	1½
	Semester – II, Total	24	24	160	490	650	
	M.Com, Semester – III						
HC301	Human Resource Management	4	4	25	75	100	3
HC302	E-commerce for Business	3	3	25	75	100	3
HC303	Quantitative Techniques for Managerial Decisions - II	5	5	25	75	100	3
HC304	Business Research Methods	4	4	25	75	100	3
SC301	Soft Core Stream, Course - V	4	4	25	75	100	3
SC302	Soft Core Stream, Course - VI	3	3	25	75	100	3
EI - 2	Inter-disciplinary Course - II	2	2	10	40	50	1½
	Semester – III, Total	25	25	160	490	650	

FMA IFS

SCM IM

MCMD FD

6 6,7 7,8 8,9 10,11 14,15 17,18 19 20,21 21,22 22,23 26,27 29,30 30,31 31,32 32,33 33,36 39,40

M.Com, Semester – IV								
HC401	Corporate Strategy and Governance	3	3	25	75	100	3	42,43
HC402	International Business	4	4	25	75	100	3	43,44
HC403	Production and Operations Management	4	4	25	75	100	3	44,45
HC404	Entrepreneurship Development	3	3	25	75	100	3	45,46
HC405	Inplant Training and Project Report	3	3	25	75	100		47
SC401	Soft Core Stream, Course – VII	4	4	25	75	100	3	47,48
SC402	Soft Core Stream, Course – VIII	4	4	25	75	100	3	52,53
	Semester – IV, Total	25	25	175	525	700		
	Semesters – I to IV, Grand Total	97	97	645	1955	2600		

IFRS
GBF

Soft Core Stream – A: Accounting and Taxation

- SC101A: Advanced Management Accounting
- SC102A: Corporate Tax Planning and Management – I (Direct Taxes)
- SC201A: Strategic Cost Management
- SC202A: Corporate Tax Planning and Management – II (Indirect Taxes)
- SC301A: Marginal Costing for Managerial Decisions
- SC302A: Karnataka State Taxes
- SC401A: International Financial Reporting Standards
- SC402A: International Accounting

Soft Core Stream – B: Accounting and Finance

- SC101B: Advanced Management Accounting
- SC102B: Indian Financial System
- SC201B: Strategic Cost Management
- SC202B: Investment Management
- SC301B: Marginal Costing for Managerial Decisions
- SC302B: Financial Derivatives
- SC401B: International Financial Reporting Standards
- SC402B: Global Business Finance

Soft Core Stream – C: Banking and Insurance

- SC101C: Indian Banking System
- SC102C: Principles and Practice of Insurance
- SC201C: Customer Relationship Management
- SC202C: Management of Life and Non-life Insurance
- SC301C: Credit Management in Banks
- SC302C: Risk Management and Re-insurance
- SC401C: International Banking
- SC402C: Actuarial Science

Kuvempu University, Master of Commerce, Semester - I

Course - HC101: Management and Behavioural Process

- Objective: To expose the students to the fundamental concepts of Management, its processes and the behavioural dynamics in organizations.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 3; and Credits: 3
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Introduction:** Meaning and Nature of Management, Management Approaches, Processes, Managerial Skills, Tasks and Responsibilities of a Professional Manager, Functions of Management, Organizational Structure and Process.
- **Unit - 2: Organisational Behaviour:** Meaning and Definition, Nature, Fundamental Concepts, Scope of Organizational Behaviour, Contributing Disciplines to the field of Organizational Behaviour, Organizational Behaviour Model.
- **Unit - 3: Foundation of Individual Behaviour:** Causes of Human Behaviour – Personality – Perception,– Learning - Attitudes – Values – Job satisfaction.
- **Unit - 4: Foundation of Group Behaviour:** Determinants of group behaviour, Group Process, Group Tasks, Types of Groups, Group Norms, Group Cohesiveness, Decision Making in Groups.
- **Unit - 5: Organisational Change and Development:** Organisational Culture, Work Stress, Organisational Change and Development, Organisational Effectiveness.

Books Recommended for Reference

01. Koontz O' Donnel., Principles of Management, AITBS, New Delhi
02. L.M. Prasad., Principles of Management, Sultan Chand, New Delhi
03. Keith Davis., Human Behaviour at Work, PHI, New Delhi
04. Stephen P. Robbins., Organisational Behaviour, Pearson Education, New Delhi
05. Ivancevich, Konopaske and Matteson., Organisational Behavior and Management, TMH
06. P.G. Aquinas., Organisational Behaviour, EB
07. Subba Rao., Management and Organisational Behaviour, HPH
08. Don Hell Siegel *et al.*, Organisational Behaviour, South Western Thomson Learning

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Kuvempu University, Master of Commerce, Semester - I

Course – HC102: Economics for Business Decisions

- Objective: To enable the students to acquire the analytical skills through the integration of knowledge of Economic Theory with decision making techniques and also acquaint the students with topics of Managerial Economics that are crucial to understand the behaviour of business firms in global environment.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Introduction:** Economy and Economics, Essential Processes and Problems of Economy, Nature and Scope of Managerial Economics, Managerial Economics and Other Disciplines, Decision Process, Opportunity Cost Principle, Risk and Uncertainty, Time Value of Money.
- **Unit - 2: Demand Analysis, Estimation and Forecasting**: Concept of Demand, Determinants of Demand, Types of Demand, Demand Function, Elasticity of Demand, Estimation of Demand, Forecasting, Forecasting Techniques.
- **Unit – 3: Production Analysis**: Production Function, Returns to a Factor, Isoquants, and Least Cost combination of Inputs.
- **Unit - 4: Cost and Revenue Analysis**: Concept of Cost, Determinants of Cost, Short Run Cost Curve, Long Run Cost Curve, Cost Function, Estimating Cost Function, Methods for Determining Cost Function, Economies Vs Diseconomies of Scale, Estimating Cost Output Relationship, Cost Control and Cost Reduction; Revenue Concept, Company Revenue Vs Government Revenue, Break Even Analysis.
- **Unit - 5: Product Pricing and Market Structure**: Market Structure, Perfect Competition, Monopolistic Competition, Oligopoly and Monopoly; Importance of Pricing, Cost plus Pricing, Cyclical Pricing, Transfer Pricing, Rebates and Coupons, Pricing in Public Interest, Price Discrimination, Other Pricing Practices.
- **Unit - 6: Economics for Global Manager**: Comparative Advantage, Exchange Rate, Balance of Payment, Trade Restriction.

Books Recommended for Reference

01. Joel Dean., Managerial Economics, Allied Publishers
02. Atmanand., Managerial Economics, EB
03. Varshney and Maheshwari., Managerial Economics, Sultan Chand, New Delhi
04. Dominick Salvatore., Managerial Economics, Thomson
05. Damodaran., Managerial Economics, Oxford
06. Keating and Wilson, Managerial Economics, Biztantra
07. Craig Peterson, Chris Lewis and Sudhir Jain., Managerial Economics, Pearson
08. Chirstopher Thomas and Charles Maurice., Managerial Economics, TMH
09. Mankar., Business Economics, McMillan
10. Yogesh Maheshwari., Managerial Economics,
11. William J Baumol and Alan., Managerial Economics, Thomson Publication
12. Francis Cherunilam., International Economics
13. H L Bhatia., International Economics, Vikas publication

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Kuvempu University, Master of Commerce, Semester - I

Course - HC103: Advanced Financial Management

- Objective: To familiarize the students with the theoretical framework of Finance and Financial Management. At the end of the Course, the students should be well versed with the Subject to enable them to apply the same to the practical fields.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Finance Functions:** Decisions in Finance, Objectives of Financial Management, Profits Vs Wealth Maximization, and Time Value of Money.
- **Unit - 2: Financing Decisions:** Leverages, Capital Structure Theories, Sources of Funds, and Cost of Capital.
- **Unit - 3: Investment Decisions:** Capital Expenditure, Capital Budgeting – Features, Evaluation Process and Methods – Pay-back Period Method, Accounting Rate of Return Method, Discounted Pay-back Period Method, Net Present Value Method, Internal Rate of Return Method and Profitability Index Method.
- **Unit - 4: Risk in Capital Budgeting:** Risk Evaluation Methods, Risk Adjusted Rate of Return, Certainty Equivalent Co-efficient Method, Sensitivity Analysis, Probability Techniques, and Decision Tree Analysis.
- **Unit - 5: Dividend Decisions**: Concept, Factors influencing Dividend Policy, Stock Split, Bonus Shares, Shares Buyback, Legal aspects of Dividend, Types of Dividend Policy and Theories of Dividend Policy.
- **Unit - 6: Working Capital Management:** Meaning, Scope, Operating Cycle, Excess and Inadequate Working Capital, Cash Management – Motives and Objectives of Cash Management; Receivables Management – Meaning, Scope, and Management of Accounts Receivable through Factoring Services; Inventory Management – Meaning, Scope, Motives and Objectives of Inventory Management, Risk and Benefits of Holding Inventory and Inventory Management Techniques - Levels of Inventory.

Books Recommended for Reference

01. Van Horne., Financial Management
02. Brigham., Financial Management
03. Prasanna Chandra., Financial Management, TMH, New Delhi.
04. Pandey I M., Financial Management
05. Kulkarni and Satyaprasad., Financial Management
06. Khan and Jain., Financial Management, TMH, New Delhi
07. Vyuptakesh Sharan, Fundamentals of Financial Management, Pearson Education.
08. Sudhindra Bhat., Financial Management
09. Sudharshan Reddy., Financial Management.
10. Kishore M Ravi., Cost Accounting and Financial Management, Taxman, New Delhi.

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Kuvempu University, Master of Commerce, Semester - I

Course - HC104: Accounting Theory and Analysis

- **Objective:** To enable the students equip with the theoretical framework of Accounting and the current unresolved issues in Accounting.
- **Pedagogy:** A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 5; and Credits: 5
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit – 1: Generally Accepted Accounting Principles**: Introduction; Need for, and Meaning of Accounting Principles; Accounting Principles-Practices-GAAPs – Historical Developments; Structure of GAAPs; Accounting Assumptions – Business Entity, Going Concern Concept, and Money Measurement Concept; Accounting Concepts – Accounting Period Concept, Objectivity, and Dual-Aspect Concept; Accounting Principles – Cost Principle, Matching principle, Realization Principle, and Systems of Accounting; Accounting Conventions – Conservatism, Consistency, Materiality and Disclosure; and GAAPs in recent years.
- **Unit – 2: Accounting Theory**: Introduction; Meaning and Importance of Accounting Theory; Classification of Accounting Theories – Structural Theories, Interpretational Theories, and Behavioural Theories; Approaches to the development of Accounting Theories – Descriptive Approach, Normative Approach, and Ethical Approach; Equity Theories – Proprietary Theory, Entity Theory, and Fund Theory.
- **Unit - 3: Accounting for Intangibles:** Concept and Importance of Intangibles in Corporate Success; Objectives of Intangible Asset Accounting, Types of Intangible Assets; Accounting Treatment of Costs Intangible Assets – Internally Developed and Acquired.
- **Unit - 4: Creative Accounting:** Concept of Creative Accounting, Significance of Creative Accounting, Motives behind Creative Accounting, Modes of Creative Accounting, Objections against Creative Accounting; Creative Accounting and Accounting Professionals.
- **Unit - 5: Accounting for Price Level Changes:** Limitations of Conventional Accounting; Concept of Inflation Accounting , Inflation Accounting Vs Accounting for Price Level Changes, Factors responsible for Price Level Accounting, Methods of Accounting for Price Level Changes – Current Purchasing Power Method, Current Cost Accounting Method; and Price Level Accounting and Indian Scenario.
- **Unit - 6: Human Resource Accounting:** Need for HRA, Concept of Human Resource Accounting, Methods for Valuation of Human Resources – Acquisition Cost Method, Replacement Cost Method, Discounted Future Wages Model, Present Value of Future Earnings Method, Competitive Bidding Model; and Human Resource Accounting Practices in Indian Corporate.

Books Recommended For Reference

01. J. Madegowda., Advanced Management Accounting, Himalaya Publishing House, 2nd ed, 2012
02. S. N. Maheshwari Advanced Accounting, Vikas New Delhi.
03. Jain and Narang, Accounting Theory, Kalyani, New Delhi
04. Jawahar Lal and Lele, Accounting Theory, Himalaya, Bombay
05. R Narasimha, Financial Accounting, an Integrated Approach, PHI. New Delhi.
06. Vithal and Sharma, Accounting for Management, McMillan, Bangalore.
07. Kapferer, J N, Strategic Brand Management – A New Approach to Creating and Evaluating Brand Equity, Abhinava, Delhi.
08. Estes Ralph, Corporate Social Accounting, John Willy, New York
09. Ghosh, P. K, Maheshwari, G. C and Goyal, R. N., Studies in Accounting Theory, Wiley Eastern Ltd., New Delhi.

10. Geidler, L. J and Geidler, L. N, Social Accounting – Theory, Issues and Cases Melville, Los Angles
11. Sujit Sikidar and Alok, K Pramanik, Accounting and Auditing, Deep and Deep, New Delhi.

Recommended Journals

01. Management Accounting
02. Chartered Accountant
03. Chartered Secretary
04. Accounting Review
05. Accounting and Finance
06. Journal of Commerce
07. Harvard Business Review

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Kuvempu University, Master of Commerce, Semester - I
Soft Core Stream – A: Accounting and Taxation
Soft Core Stream – B: Accounting and Finance

Course – SC101A/SC101B: Advanced Management Accounting

- Objective: The objective of the course is to enable the students to acquire adequate knowledge of concepts, methods and techniques of Management Accounting and to make the students develop competence with their usage in managerial decision making and control.
- Pedagogy: A combinations of Lectures, Case Analysis, Group Discussions, Project Assignments and Seminar
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit – 1: Introduction to Management Accounting:** Management Accounting – Nature, Scope and Functions, Financial vs Management Accounting, Cost Vs Management Accounting; Role of Management Accountant, and Strategic Management Accounting.
- **Unit – 2: Analysis of Financial Statement:** Financial Statements – Meaning, Objectives, Types, Uses, and Limitations; Redrafting of Financial Statements – Single-step and Multi-step Financial Statements; Techniques of Analysis, Comparative Statements, Common-size Statements, Trend Analysis, and Ratio Analysis.
- **Unit – 3: Statements of Changes in Financial Position:** Funds Flow Analysis – Meaning – Preparation of Funds Flow Statement; Cash Flow Analysis – Meaning , Preparation of Cash Flow Statement and also as per Accounting Standard – 3.
- **Unit – 4: Budgetary Control:** Budgetary Control – Meaning, Nature and Importance of Budgetary Control; Preparation of different types of Functional Budgets; Fixed and Flexible Budgets; and Zero-base Budget.
- **Unit – 5: Standard Costing:** Standard Costing – Concept, Advantages; Types of Standards; Variance Analysis, Materials, Labour and Overhead Variances; and Managerial Uses of Variances.
- **Unit – 6: Responsibility Accounting and Divisional Performance Measurement:** Introduction, Concept of Responsibility Accounting, Divisionalization, Responsibility Centres – Cost Centres, Revenue Centres,

Profit Centres, and Investment Centres; Responsibility Performance Evaluation and Reporting, Measures of Performance, Return on Investment (RoI) Vs Residual Income (RI); Non-financial Performance Measures; Transfer Pricing and Methods.

Suggested Books for Reference

01. J. Madegowda, Advanced Management Accounting, 2nd ed, 2012, Himalaya Publishing House, Mumbai.
02. Atkinson Anthony, A., Rajiv D. Banker, Robert Kaplan and S. Mark Young, Management Accounting, Prentice Hall.
03. Horngreen, Charles T., and Gary L. Sundem and William O. Stratton, Introduction to Management Accounting, Prentice Hall of India.
04. Drury Colin, Management and Cost Accounting, Thomson Learning.
05. Garison R.H. and E. W. Noreeb, Managerial Accounting, McGraw Hill.
06. Ronald W. Hilton, Managerial Accounting, McGraw Hill Education.
07. Jawahar Lal, Advanced Management Accounting, Text, Problems and Cases, S. Chand & Co., New Delhi.
08. Vij, Madhu, Management Accounting, McMillan.

Recommended Journals and Business Dailies for Reference

01. Management Accounting
02. Chartered Accountant
03. Chartered Secretary
04. Indian Journal of Accounting
05. Chartered Financial Analysis

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Kuvempu University, Master of Commerce, Semester - I
Soft Core Stream – C: Banking and Insurance
Soft Core Stream – D: Banking and Finance

Course – SC101C/SC101D: Indian Banking System

- Objective: To provide an understanding of the banking system in India and also usage of technology in banking operations.
- Pedagogy: A combinations of Lectures, Case Analysis, Group Discussions, Project Assignments and Seminar
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Introduction:** History of Indian Banking, Unit and Branch Banking, Universal Banking, Co-operative Banking, Phases of Indian Banking, Impact of Nationalization and Liberalization on Indian Banking, Challenges after Nationalization and Liberalization, and Risks in Indian Banking System.
- **Unit - 2: Regulatory Framework:** Central Bank - Evolution, Functions, and Role of RBI in Indian Financial System, Organizational Structure, Important Provisions of RBI Act of 1934, and Banking Regulation and Supervision.
- **Unit - 3: Capital Adequacy Requirements:** Capital Adequacy of Banks, Capital Adequacy Norms, Prudential Norms, Capital Funds, Risk Adjustment Assets and Off Balance Sheet Items, Maintenance of CRAR (Capital to Risk Assets Ratio), Solving Problems, Basel Accord Framework, Impact of Basel Accords on Indian

- Pedagogy: A Combination of Lectures, Case Analysis, Group discussion, Project Assignments and Seminars.
- Teaching Hours per week: 3; and Credits: 3
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Basic Concepts:** Income Tax, Assessee, Assessment Year, Previous Year, Income, Gross Total Income, Taxable Income, Company, Indian Company, Domestic Company, Widely-held Company, Closely-held Company, Residential Status of Corporate Assessee and Incidence of tax.
- **Unit - 2: Computation of Corporate Tax**: Head-wise computation of income (focus on Business Income), Set off And Carry Forward of Losses, Deductions from Gross Total Income (applicable to Corporate Assessee), Determination of Tax Liability, Corporate Tax, Minimum Alternate Tax (MAT) and Dividend Tax.
- **Unit - 3: Tax Planning and Management:** Concept of Tax Planning, Tax Management, Tax Avoidance and Tax Evasion; Differences between Tax Planning and Tax Management, and Tax Evasion and Tax Avoidance.
- **Unit - 4: Tax Planning with reference to Financial Management Decisions:** Capital Structure Decision and Dividend Policy (Cash Dividend Vs Bonus Shares).
- **Unit - 5: Tax Planning and Managerial Decisions:** Make or Buy Decision, Own or Lease Decision.
- **Unit - 6: Special Tax Provisions:** Special Economic Zones, Export-oriented Undertakings, and Infrastructure Projects.
- **Unit - 7: Tax Planning and Corporate Restructuring:** Amalgamation and Demerger.
- **Unit - 8: Assessment Procedure:** Types of Assessment, Advance Payment of Tax.

Books Recommended for Reference

01. Ahuja G K and Ravi Gupta., Systematic Approach to Income Tax and Central Sales Tax, Bharat Law House, New Delhi.
02. Singhania Vinod K and Singhania Monica., Direct Tax Planning and Management, Taxman Publication, New Delhi.
03. Singhania, V.K., Direct Taxes: Law and Practice, Taxman Publication, New Delhi.
04. Lokhotia R N, Corporate Tax Planning, Vision Publications, New Delhi
05. Lal, B. B and Vashisht, Direct Taxes, Pearson Education.
06. Mehrotra H C and Goyal S P., Income Tax Law and Practice, Sahitya Bhavan Publications, Agra
07. Circulars issued by CBDT
08. Income Tax Rules, 1962

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Kuvempu University, Master of Commerce, Semester - I
Soft Core Stream – B: Accounting and Finance
Soft Core Stream – D: Banking and Finance
Course - SC102B/SC102D: Indian Financial System

- Objective: To familiarize the students about the structure of Indian Financial System and to provide them complete knowledge of a few Financial Services

- Pedagogy: A combination of Lectures, Case Analysis, Role Plays, Group Discussions, Seminars, Assignments, etc
- Teaching Hours per Week: 3; and Credits: 3
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Indian Financial System:** Regulatory Bodies – Reserve Bank of India, Securities and Exchange Board of India, Financial Services, Financial Markets, Financial Institutions (an overview of the structure).
- **Unit - 2: Primary Market**: Meaning, Functions, Players, Instruments and Process involved in Primary Market.
- **Unit - 3: Secondary Market**: Bombay Stock Exchange, National Stock Exchange, Securities and Exchange Board of India – Functions; Stock Trading Corporation.
- **Unit - 4: Money Market**: Meaning, Scope, Functions, Players, Instruments, DFHI, Money Market Operations, Call Money Market and Deficiencies of Indian Money Market.
- **Unit - 5: Leasing**: Introduction, Meaning and Types of Leasing, Leasing from the point of view of Lessee and Lessor; Hire Purchase Agreements.
- **Unit - 6: Factoring**: Meaning and Types; Venture Capital – Meaning, Types, Process of obtaining Venture Capital; Securitization of Debts – Meaning and Scope.
- **Unit - 7: Merchant Banking**: Meaning, Categories, Functions; Credit Rating, Meaning, Importance and Process of Rating.

Recommended Books for Reference

01. Bhole, L. M., Financial Markets and Institutions, TMH, New Delhi
02. Khan, M. Y., Indian Financial System – Theory and Practice, Vikas Publishing House, New Delhi
03. Prasanna Chandra., Financial Management – Theory and Practice, TMH, New Delhi
04. Khan M Y., Financial Services, Tata McGraw Hill, New Delhi
05. Machiraju., Merchant Banking
06. Verma J. C., Credit Rating: Concepts, Procedures & Practice, 3rd edition, Bharat Publishing House, New Delhi.
07. Verma J. C., Manual of Merchant Banking (Concepts, Practices & Procedures), 4th edition, Bharat Law House, New Delhi.
08. Arora Mamta., Credit Rating in India: Institutions, Methods and Evaluation, New Century Publications, Delhi.
09. Sharma, G.L and Singh, Y.P (Ed), Contemporary Issues in Finance and Taxation, Academic Foundation, Delhi.
10. SEBI Bulletins, Circulars, Regulations
11. Business Dailies (one of the following is compulsory for every student) – (a) The Hindu Business Line, (b) The Economic Times, (c) The Financial Times (d) The Business Standard.
12. Business Magazines and Journals for contemporary issues in financial sector.

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- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 3; and Credits: 3
- Examination Duration: 3 hours: Maximum Marks: 100

Course Inputs

- **Unit - 1: Human Resource Development:** Concept and Evolution, Human Resource Mobilizations, HRD Conceptual Base, Strategic Interventions in HRD Sector and Target Groups, HRD Mechanisms, Processes and Outcomes, HRD Instruments, HRD.
- **Unit - 2: HRD and Management:** Attitude of Top Management towards HRD, Motivational aspects of HRD, Trends and Practices, Line Manager and HRD.
- **Unit - 3: HRD Activities:** HRD Culture and Climate, Elements of HRD Climate, Measurement of HRD Climate, Factors to HRD Climate, Determinant Needs, Developmental Supervisor, HRD for Workers - HRD Mechanisms for Workers, Role of Trade Unions.
- **Unit - 4: HRD in Organizations:** Government Organizations, Educational Institutions, Armed Forces, Police and Industry, Private Sectors and Public Sectors Units; Emerging Issues in HRD, Creating Awareness and Commitment to HRD; Industrial Relations and HRD, Utilization of HRD Efforts, Future of HRD, International Comparison of HRD
- **Unit - 5: Performance Appraisal System:** Introduction, History, Objectives, Criteria, Benefits and Pitfalls of Performance Appraisal. Modern Method, 360 Degree Feedback, and the New Appraisal Systems.

Books Recommended for Reference

01. Werner, Jon M. and Randy L. Desimone, Human Resource Development, South-Western Educational Publishing.
02. Nadler, L (Ed), Corporate Human Resources Development, Van Nostrand Reinhold.
03. Parek V and T.V. Rao, Designing and Planning Human Resource Systems, Oxford and IBH, New Delhi.
04. T.V. Rao and Udai Pareek, Developing and Managing Human Resource System
05. Peter Dowling, Lience Welch, Randall, Schuler, International Human Resource Management – Managing People in a Multinational Context, South Western College Publishing.

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Kuvempu University, Master of Commerce, Semester - II

Course – HC201: Business Environment and Government Policy

- Objective: To acquaint the students with the National and Global Environment pertaining to Business.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Business Environment and Policy:** Introduction, Meaning of Business Environment, Dimensions of Business Environment, Internal Environment, External Environment; Micro and Macro Environment, Economic Environment, Political and Government Environment, Socio-cultural Environment, Demographic Environment, Legal Environment, Competitive Analysis, Technological Environment, Emerging Scenario, and Business Policy.
- **Unit - 2: Business and Government:** Theory of Government Intervention in Business, Economic Roles of Government, Regulatory Role, Promotion Role, Entrepreneurial Role and Planning Role; Recent Changes.
- **Unit - 3: Small Scale Industries:** Introduction, Rationale, Evaluation, Problems, Weaknesses in Government Policy, Recommendations of Abid Hussain Committee, New Policy 1991 and its Evaluation and Recent Measures.
- **Unit - 4: Industrial Sickness:** Introduction, Definitions, An Overview of Sickness in Small Scale and Large Scale Organizations including Public Enterprises, Causes for Sickness in Small Scale Industrial Units and Public Sector Enterprises, Important Provisions of Sick Industrial Companies (Special Provisions) Act, 1985 and Applicability, BIFR – Functions, and Functions of Operating Agencies.
- **Unit – 5: Privatization and Disinvestment**: Expansion of Public Sector and its Defects, Privatization Reaction, Ways of Privatization, Obstacles, Conditions for success of Privatization, Benefits of Privatization, Arguments against Privatization, Sins and Pitfalls of Privatization, Rangarajan Committee and Privatization in India.
- **Unit - 6: Competition Act, 2020:** Introduction, Definitions – Consumer, Enterprise, Goods, etc; Prohibition of certain Agreements, Abuse of Dominant Position and Regulation of Combinations; Competition Commission of India; Duties, Powers and Functions of Commission; Duties of Director General; Competition Appellate Tribunal; and Miscellaneous.
- **Unit - 7: Consumer Protection Act, 1986:** Introduction, Objectives, Applicability, Consumer and Right of Consumers, Nature and Scope of Remedies available to Consumer.

Books Recommended For Reference

01. Dr. J. Madegowda (ed), Readings in Business Environment and Policy, Deep and Deep.
02. Francis Cherunilam, Business Environment, Himalaya Publishing House.
03. K. Ashwathappa, Business Environment for Strategic Management, Himalaya Publishing House.
04. Ghosh and Kapoor, Business Policy and Environment, Sultan Chand and Sons
05. C. Ronald Christensen et al., Business Policy – Text and Cases, Richard. D. Irwin Inc.
06. H Igar Ansoff, Corporate Strategy, Tata McGraw Hill.
07. K. Ashwathappa, Essentials of Business Environment, Himalaya Publishing House.
08. Francis Cherunilam, Business and Government, Himalaya Publishing House.

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Kuvempu University, Master of Commerce, Semester - II

Course – HC202: Marketing Management

- Objective: To facilitate understanding of the conceptual framework of Marketing and its applications in decision making under various environmental situations.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Introduction:** Need to study Marketing as a Discipline, Approaches to study Marketing, Definitions of Marketing Management, Core Concepts, Marketing Environment, Marketing Systems, Macro and Micro Variables.
- **Unit - 2: Marketing Research:** Meaning and Definitions, Areas of Application, Types of Data, Methods of Research – Field Investigation, Observation, Experimentation, Desk Research, Procedure for conducting Research, and Limitations.
- **Unit - 3: Market Segmentation and Consumer Behaviour:** Need for Segmentation, Guidelines for selecting a Target Market, Bases of Market Segmentation, Segmentation Strategies; Buying Motives, Input-Output Model, Pre-purchase Behaviour Model, Sigmund Freudian Psycho-analytical Model, Maslow's Hierarchy of Needs, Post-purchase B.M, Organizational Buyer Behaviour Model.
- **Unit - 4: Marketing Mix:** Meaning of Product, Product Expectations, New Products Failure and Reasons, Product Classification, Product Life Cycle and related Strategies, Product Mix and related Strategies; New Product Development and related Strategies, Product Identification and related Strategies – Pricing Practices and Decisions; Major Channels of Distribution, Factors influencing Channel Selection, Channel Policies; and Promotional Decisions.
- **Unit - 5: Advertising:** Introduction, Source, Message and Channel Factor, Advertising Objectives and Budgeting, Types of Advertising; Communication, Types of Communication – Systems Approach to Persuasive Communication; Elements of Promotion – Motivation and Promotion, Motivating Sales Force, Dealers and Consumers, and Sales Promotion Techniques.

Books Recommended for Reference

01. Philip Kotler, Marketing Management – Analysis, Planning and Control
02. William. J. Stanton, Charles Futrell, Fundamentals of Marketing, Prentice Hall
03. Mamoria and Joshi, Principles and Practice of Marketing in India, Himalaya Publications
04. E. Jerome McCarthy, Essentials of Marketing
05. Edward. W. Cundiff, Richard. R., Still, Norman, A. P. Govani, Fundamentals of Modern Marketing
06. David. J. Luck, Hugh. G. Wales, Donald. A. Taylor, Ronald. S. Rubin, Marketing Research
07. Philip Kotler, Principles of Marketing, Prentice Hall
08. Ralph Westfall, Stanley. F. Starch, Marketing Research (Text and Cases), Tata McGraw Hill
09. Geoffery. K. Francis, Modern Marketing Management, Tata McGraw Hill

10. S. A. Sherlekar, Modern Business Organisational and Management, Himalaya Publications
11. S. A. Sherlekar, Marketing Management, Himalaya Publications
12. G. B. Giles, Marketing
13. E. W. Cundiff and R. R. Still, Basic Marketing, Prentice Hall
14. J. A. Howard and J. N. Seth, Theory of Buyer Behaviour
15. .Boyd and Westfall, Marketing Research – Text and Cases
16. M. L. Bhasin, Indian Marketing
17. Subrato Sengupta, Brand Accounting
18. Kotler, Swee Hoonang Leong and Tan, Marketing Management – An Asian Perspective
19. J. C. Gandhi, Marketing
20. Chunawala and Sethia, Foundation of Advertising – Theory and Practice

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Kuvempu University, Master of Commerce, Semester - II

Course – HC203: Managerial Communication

- Objective: To make the students to understand the different aspects of Communication Skills.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussions, Seminars, Assignments, etc.
- Teaching Hours per Week: 3; and Credits: 3
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Introduction**: Meaning, Importance of Communication, Purpose of Communication, Process of Communication, Communication Structure in Organization, Barriers in Communication, Pre-requisites for Effective Communication, and Communication network.
- **Unit - 2: Verbal and Non-verbal Communication:** Meaning, Principles of successful Oral Communication, Barriers in Oral Communication, Conversation control - reflection and empathy, Effective Principles of Oral Communication; Non-verbal Communication - Meaning, Characteristics, Classification, and Guidelines for developing Non-verbal Communication.
- **Unit - 3: Listening:** Meaning, Significance, Types, Myths about Listening, Barriers and Overcoming Measures, Stages of Listening, Body Language of an Active Listener.
- **Unit - 4: Written Communication:** Meaning, Importance of Skills in Written Communication, Purpose of Writing, Elements of Writing, and Principles of Effective Writing.
- **Unit - 5: Business Letters and Reports:** Introduction, Meaning, Importance, Types of Business Letters and Report Writing, Writing of Business Letters and Reports, and Writing of Memos.
- **Unit - 6: Presentation Skills:** Meaning, Elements of Presentation, Designing a Presentation, Six great Helpers in Presentation, and Steps to a successful Presentation.
- **Unit - 7: Employment Communication:** Introduction, Writing CVs, Group Discussion, Interview Skills and Impact of Technological Advancement on Business Communication.

- **Unit - 8: Group Communication:** Meetings, Seminars, Conferences, Workshops, and Business Etiquettes.
- **Unit - 9: Reading Comprehension:** Discussion of passages with questions to be answered.

Books Recommended for Reference

01. Business Communication, Asha Kaul, Himalaya Publishing House.
02. Business Communication, M. K. Seghal and V. Khetrapal, Excel Books.
03. Soft Skills, ICFAI Publication.
04. Business Communication: Concepts, Cases and Applications, P. D. Chaturvedi, Mukhesh Chaturvedi, Pearson Publication.

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Kuvempu University, Master of Commerce, Semester - II

Course - HC204: Quantitative Techniques for Managerial Decisions - I

- Objectives: To make the students learn managerial uses of mathematics and application of statistical tools and techniques for decision-making.
- Pedagogy: A Combination of Lectures, Case Analysis, Group Discussion, Project Assignment and Seminars, etc.
- Teaching Hours per Week: 4 and Credits: 4
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Basic Mathematics of Finance:** Introduction, Nominal Rate of Interest and Effective Rate of Interest, Continuous Compounding, Compound Interest, Calculation at Varying Rate of Interest, Present Value, Interest and Discount, Nominal Rate of Discount, Force of Discount, Depreciation.
- **Unit - 2: Calculus:** Concept of Limit, Continuity, Some Important Derivations, Role of Change of Quantities, Cost Function, Revenue Function, Profit Function, Maxima and Minima of a Function, Integration and its Applications, Constant of Integrate Theorem on Integration.
- **Unit - 3: Probability Distribution:** Introduction, Additive and Multiplication Theorems, Conditional Probability, Binomial, Poisson and Normal Distribution.
- **Unit - 4: Decision Theory:** Introduction, Decision Making under Uncertainty, Decision Making under Risk, Marginal Analysis Method, and Decision Tree Technique.
- **Unit - 5: Statistical Estimation and Testing:** Point and Internal Estimation of Population Mean, Proportion and Variance, Statistical Testing, Hypotheses and Errors, Sample Size, Large and Small Sampling Tests – Z Tests, T Tests, F Tests, Chi-Square Tests and Non-Parametric Tests.
- **Unit - 6: Statistical Quality Control:** Causes of Variations in Quality Characteristics, Quality Control Charts – Purpose and Logic, Constructing a Control Chart, Process under Control and Out of Control, Control Charts for Attributes, Fraction Defects and Number of Defects.

Books Recommended for Reference

01. Hooda, R.P: Statistics for Business and Economics, McMillan, New Delhi
02. Heinz, Kohilar: Statistics for Business and Economics, Harper Collins, New York.
03. Hein, L.W: Quantitative Approach to Management Decisions, Prentice Hall, New Jersey.

04. Lawrence B. Morse: Statistics for Business and Economics, Harper Collins, New York.
05. N. P. Agarwal, Sonia Agarwal: Quantitative Techniques, New Delhi.
06. Padmalochan Hazarika, Business Mathematics, S Chand
07. P. N. Arora and S. Arora, Statistics for Management, S Chand
08. Satish Chander Srivastava, Quantitative Techniques, Anmol
09. B. M. Aggarwal, Business Mathematics and Statistics, ANE Books
10. Richard I. Levin, Statistics for Management, Pearson
11. Kothari, Quantitative Techniques.

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Kuvempu University, Master of Commerce, Semester - II
Soft Core Stream – A: Accounting and Taxation
Soft Core Stream – B: Accounting and Finance

Course – SC201A/SC201B: Strategic Cost Management

- Objective: To provide an understanding of the basics of Strategic Cost Management.
- Pedagogy: A combinations of Lectures, Case Analysis, Group Discussion, Project Assignments and Seminar.
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Activity Based Costing:** Inadequacies of Traditional Methods of Overhead Absorption, Concept of Activity Based Costing, Kaplan and Cooper's approach to Activity Based Costing, Cost Drivers and Cost Pools, Main Activities and their Cost Drivers, Allocation of Overhead under Activity Based Costing – Characteristics, Steps, Implementation and Benefits of Activity Based Costing System.
- **Unit - 2: Learning Curve Model:** Concept and Phases of Learning Curve, Graphical representation, Learning Curve Applications and Factors, affecting Learning Curve, and Experience Curve.
- **Unit - 3: Life Cycle Costing:** Concept and Characteristics activities and Phases in Product Life Cycle, Short Product and Extension of Product Life Cycle, Turning Point Indices in Product Life Cycle.
- **Unit - 4: Just-in-Time Approach:** Concept, Philosophy of JIT, Sources of Waste, Aims and Objectives of JIT, Features and Methodology in Implementation of JIT, Planning for adoption and Limitations of JIT Costing.
- **Unit - 5: Target Costing:** Meaning and Definitions, Basic Concepts, Unique Features, Cost Determination Procedure under Target Costing.
- **Unit – 6: Cost Audit:** Meaning, Importance and Provisions of Companies Act relating to Cost Audit; Objectives and Scope of Cost Audit, Advantages of Cost Audit; Concepts of Efficiency Audit, Proprietary Audit, Social Audit, and System Audit.
- **Unit – 7: Balanced Score Card (BSC):** Concept, Objectives, Perspectives of BSC, Multiple Scorecard Measures to a Single Strategy.

Recommended Books for Reference

01. Horngren et al., Introduction to Management Accounting, PHI, New Delhi,
02. Kaplan and Atkinson, Advanced Management Accounting, PHI Publications, New Delhi.

03. Ravi. M. Kishore, Advanced Management Accounting, Taxman Publications, New Delhi.
04. Babhatosh Banerjee, Cost Accounting, World Press, Calcutta.
05. N.K Prasad, Cost Accounting, Book Syndicate, Calcutta,
06. Horngren, Foster and Datar, Cost Accounting. A Managerial Emphasis, PHI, New Delhi.
07. Edward Blocher, Cost Management. A strategic Emphasis, TMH, New Delhi.
08. Hilton, Cost Management, TMH, New Delhi.
09. Govindraju et al, Strategic Cost Management, Free Press, Calcutta.
10. Jain and Narang, Advanced Cost Accounting, Kalyani, New Delhi.

Recommended Journals and Business Dailies for Reference

01. Management Accounting
02. Chartered Accountant
03. Chartered Secretary
04. Indian Journal of Accounting
05. Chartered Financial Analysis

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Kuvempu University, Master of Commerce, Semester - II
Soft Core Stream, C: Banking and Insurance
Soft Core Stream, D: Banking and Finance

Course – SC201C/201D: Customer Relationship Management

- **Objective:** This Course aims at enabling the Students to apply Marketing Concepts and Principles to the unique Challenges and Opportunities of Services Marketing to create Customer Value
- **Pedagogy:** A combination of Lectures, Case Analysis, Group Discussions, Seminars, Assignments, etc.
- Teaching Hours per Week: 4:and Credits: 4
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Relationship Marketing:** Meaning, Evolution, Transaction Marketing Vs Relationship Marketing, Role of Relationship Marketing in today's market, Relationship Marketing in Consumer Market, Relationship Marketing in Mass Market, Relationship Marketing in Service Sector.
- **Unit - 2: Customer Relationship Management:** Introduction, Significance of CRM, Planning of CRM Programme, Customer Profitability in Relationship Marketing, Buyer and Seller Relationship Model.
- **Unit - 3: Building Customer Relationship Management:** Customer Acquisition- Meaning, Requisites for Effective Acquisition and ACTMAN model; Customer Retention- Concept of Customer Retention, Stages of Retention in the Customer Life Cycle; Customer Loyalty- Types, Loyalty Ladder and Loyalty Solutions.
- **Unit - 4: CRM Process**: Introduction, Objectives and Benefits of CRM Process, Steps in CRM Process, CRM Business Transformation, CRM Process for Marketing organization.
- **Unit - 5: E-CRM:** Concepts, Evolution, CRM Vs E-CRM, Basic Requirements of E-CRM, CRM Channels to Customer Interaction and Dimensions of E-CRM.

- **Unit - 2: CENVAT:** CENVAT Scheme – Meaning, Features, Advantages, Conditions for availing CENVAT Credit, Utilization of CENVAT Credit, Documents and Accounts to ensure Payment of Duty, CENVAT Credit in Respect of Inputs, Capital Goods from First Stage and Second Stage Dealer, Issue of Invoice, Transfer of Credit, Recovery of Wrongly Availed Credit of Special Excise Duty, Accounting Treatment of CENVAT.
- **Unit - 3: Customs Duties:** Meaning, Types of Duties, Import and Export Procedures, Clearance of Goods from Customs Authorities, Bill of Entry and its Types, Shipping Bill and its Types, Baggage Rules.
- **Unit - 4: Service Tax:** Introduction, Meaning, Provisions of Service Tax by Finance Act, 1994; Rate of Service Tax, Recent changes in Service Tax, Taxable Services, Valuation of Taxable Service for Levy of Service Tax, Registration, Persons Responsible for Collecting Service Tax to Furnish prescribed Return, Some practical aspects pertaining to Service Tax Assessment, and Provisional Assessment.

Books Recommended for Reference

01. Datey V S., Indirect Tax – Law and Practice, Taxman Publications, New Delhi
02. Pogare Dinakara., Indirect Tax Laws, Sultan Chand.
03. Rakesh Bhargava and V. Pattabhiraman., MODVAT and Credit of Money Scheme, Taxman, New Delhi
04. Tyagi B.P., Public Finance, Jai Prakash Publications
05. Singhania Vinod., Corporate Tax Planning and Management, Taxman, New Delhi
06. Lal B.B., Direct Taxes, Konark Publishers Pvt. Ltd
07. Balachandran, V, Indirect Taxation, Sultan Chand and sons.

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Kuvempu University, Master of Commerce, Semester - II
Soft Core Stream – B: Accounting and Finance
Soft Core Stream – D: Banking and Finance

Course - SC202B/SC202D: Investment Management

- Objective: To acquaint the students with various concepts of Investment Management and to help them to understand various issues of Investments
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussions, Seminars, Assignments, etc
- Teaching Hours per Week: 3; and Credits: 3
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Investments**: Meaning, Process, Elements of Investments, Avenues of Investment, Approaches to Investment Analysis, Security Return and Risk Analysis, and Measurement of Return and Risk.
- **Unit - 2: Types of Investments**: Financial Investments, Securities and Derivatives (Direct and Indirect Investments); Non-financial Investments, Real Estate, Gold and other types, and their Characteristics; and Sources of Financial Information.
- **Unit - 3: Portfolio Analysis and Management**: Traditional Portfolio Analysis, Effects of Combining Securities, Diversification, Markowitz Model, and Location of the Efficiency Frontier.

- **Unit - 4: Capital Asset Pricing**: Capital Asset Pricing Model (CAPM), Assumptions, Capital Market Line, Security Market Line; Market Model, Arbitrage Pricing Theory and Factor Models, Factor Models and Return Generating Process, and One and Two Factor Model.
- **Unit - 5: Efficient Market Theory:** Random Walk Theory, The Efficient Market Hypothesis, Forms of Market Efficiency, EMH Vs Fundamental and Technical Analysis.
- **Unit - 6: Portfolio Performance**: Measurement and Evaluation, Measurement of Portfolio Performance, Risk and Return, Risk Adjustment and Performance Measures, Sharpe, Treynor and Jensen Models; Components of Portfolio Investment Performance, Stock Selection and Market Timing.
- **Unit - 7: Valuation of Fixed Income Securities and Variable Income Securities**: Bonds, Debentures, Preference Shares and Convertible Securities, and Equity Shares.

Books Recommended for Reference

01. Bodie ZVI, Kane Alex, Marcus J Alan and Mohanty Pitabas., Investments, The Tata McGraw-Hill Publishing Company Limited, New Delhi.
02. Sharpe F William, Alexander J Gordon and Bailey V Jeffery., Investments, Prentice-Hall of India Private Limited, New Delhi.
03. Fischer E Donald and Jordan J Ronald., Security Analysis and Portfolio Management, Prentice-Hall of India Private Limited, New Delhi.
04. Kevin S., Portfolio Management, PHI, New Delhi.
05. Pandian Punithavathy, Security Analysis and Portfolio Management, Vikas Publishing House Private Limited, New Delhi.
06. Chandra Prasanna., Investment Analysis and Portfolio Management, The Tata McGraw-Hill Publishing Company Limited, New Delhi.
07. Avadhani V A., Security Analysis and Portfolio Management, Himalaya Publishing House, Mumbai.
08. Agarwala K.N and Deeksha Agarwal., Bulls, Bears and the Mouse, Macmillan, New Delhi
09. Cheney J and E Muses., Fundamentals of Investments, Paul, New York
10. Clark, James Francis., Investment – Analysis and Management, McGraw Hill, International Edition
11. Dalton, John M., How the Stock Markets Work, PHI, New Delhi
12. Domodran., Investment Valuation, John Wiley, New York
13. Fabozzl, Frank J., Investment Management, Prentice Hall, International Edition.
14. Choudhry Moorad., The Bond and Money Markets-Strategy, Trading, Analysis, Buttonworth-Heinemann, Woburn.
15. Kishore M Ravi, Financial Management, The Tata McGraw-Hill Publishing Company Limited, New Delhi.
16. Pandey I M., Financial Management, Vikas Publishing House Private Limited, New Delhi.
17. Khan M Y., Financial Management, TMH, New Delhi.
18. ICFAI, Portfolio Management, The ICFAI University, Hyderabad.
19. Business Dailies (one of the following is compulsory for every student) – (a) The Hindu Business Line, (b) The Economic Times, (c) The Financial Times, (d) The Business Standard.
20. Business Magazines and Journals for contemporary issues in financial sector.

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Course Inputs

- **Unit - 1: Introduction to Competency Mapping**: Developing Competencies, Meaning, Definition, and History of Competency Method; Characteristics of Competencies, Types of Competencies, Developing Competency Model, Job Vs Competencies.
- **Unit - 2: Approaches to Competency Mapping**: Process of Competency Mapping, Tools for Mapping - Behavioural Event Interview, Repertory Grid, Critical Incident Technique, Subject Expert Discussions, Survey Method and Participant Observation.
- **Unit - 3: Competency-based Training**: Competency-based Development, Competency-based Pay, and Designing the Questionnaire.
- **Unit - 4: Competency Assessment**: Meaning, Definition and Purpose of Assessment, Tools for Assessment - Assessment Centre, 360 Degree Feedback, Performance Records, Tests and Interviews.
- **Unit - 5: Succession planning**: Meaning, Planning for Succession Planning, Significance of Succession Planning, and Managerial Succession Planning.
- **Unit 6: Succession Planning and Career Development**: Meaning, Significance and Process of Career Planning, Career Stages, Inter-correlation between Succession Planning and Career Development.

Books Recommended for Reference

01. Seema Sanghi, The Handbook of Competency Mapping, SAGE Publications.
02. Spencer M Lyle and Spencer M Signe, Competence at Work, John Wiley and Sons Inc.
03. Rao. V. S. P. Human Resource Management, Excel Book.
04. Seema Sanghi, Human Resource Management, MacMillan.
05. Lynton R, Pareek, U, Training for Development, Vistaar, New Delhi.

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Kuvempu University, Master of Commerce, Semester - III

Course – HC301: Human Resource Management

- Objective: The objective of the course is to acquaint the students with the techniques and principles to manage human resource of an organization enable the students to employ these techniques to harness the best of each individual working in the organizations.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Introduction**: Meaning and Definition, Scope, Objectives of Human Resource Management, Evolution, And Functions of Human Resource Management.
- **Unit - 2: Human Resource Planning**: Meaning and Importance of Human Resource Planning, Process of Human Resource Planning, objectives of Human Resource Planning; Job Analysis – Meaning, Importance, Purpose, and Techniques of Job Analysis; Job Description and Job Evaluation – Techniques, and Job Design.
- **Unit - 3: Recruitment, Selection and Training**: Meaning and Definitions, Factors affecting Recruitment, Sources of Recruitment (Internal and External),

Basic Selection Model, Psychological Tests for Selection; Meaning and Definitions of Training, Importance, Need for, and Methods of Training.

- **Unit - 4: Organizational Strategy, Structure, Culture and Policy:** Approaches to Strategic Human Resource Management, Strategic Human Resource Management and Business Strategy, Strategic Human Resource Management Strategy, Structure, Culture and Policy, Organizational Culture and Human Resource Management, Human Resource Management Structures and Policy, Formulation of Human Resource Strategies, Strategic Fit, Strategic Human Resource Management Models.
- **Unit - 5: Human Resource Information Management System**: Need for Human Resource Information Management System, Nature and Benefits of Human Resource Information Management System, Types of Human Resource Information Management System Data, Strategic Human Resource Planning and Human Resource Information Management System, Productive Human Resource Information Management System.
- **Unit - 6: Compensation Management:** Meaning and Definitions of Compensation Management, Objectives, Principles, Factors influencing Wage Fixation, Incentive Schemes, Determination of Compensation.

Books Recommended for Reference

01. Strategic Human Resource Management, Alan Nankering Robert Compton, Arian Biard.
02. A Handbook of Human Resource Management Practice, Michael Armstrong.
03. Managing Human Resources, Luis R. Gomez Mejia, David B. Balkin and Robert L. Cardy, PHI.
04. Human Resource Management, Beardwell and Len Holder, Macmillan India Ltd.,
05. Managing Human Resources, Straus and Sayles, Prentice Hall Inc.
06. Graham, H. T, and R. Bennet, Human Resources Management, Pitman, London.
07. Edwin Flippo, Principles of Personnel Management, Tata McGraw Hill.
08. Hersey and Blanchard, Management of Organizational Behaviour, PHI.
09. Performance Appraisal, Theory and Practice, Aima Vikas Management Series, New Delhi.
10. C. B. Mamoria, Personnel Management, Himalayan Publishing House.

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Kuvempu University, Master of Commerce, Semester - III

Course – HC302: E-Commerce for Business

- Objective: To expose the students to the whole gamut of E-Commerce.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, Practice in the Computer Laboratory, etc.
- Teaching Hours per Week: 3 (2 hours of theory and 2 hours of practical); and Credits: 3
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: History of E-Commerce**: Introduction, Advantages and Disadvantages of E-Commerce, Online Extension of BAM Model, Transition to E-Commerce in India, Some pioneering Indian Case Studies - TELCO, Hindustan Lever, Asian Paints, CRISIL, and ICICI Bank; E-Transition Challenges for Indian Corporate, Major Provisions of The Information Technology Act, 2000.

- **Unit - 2: Advanced Internet Concepts**: Chronological History of the Internet, Internet Governance, Client Server Network Security, Fire Walls and Network Security; Data and Message Security, Encrypted Documents and E-mail; Network Infrastructure for E-commerce and Network Security Components of The I-Way – Network Access Equipment, Global Information Distribution Networks, Public Policy Issues Shaping The I – Way Utility of and Demonstration of Client–Server Architecture.
- **Unit - 3: Business Models for E-commerce**: E-business Model based on relationship of Transaction Parties, and E-business Model based on relationship of Transaction Types.
- **Unit - 4: E-marketing and E-CRM**: Traditional Marketing, Identifying Web Presence Goals, Browsing Behaviour Model, Online Marketing, E-advertising, Internet Marketing Trends, Target Markets, E-branding, Marketing Strategies, Customer Relationship Management - Typical Business Touch Points.
- **Unit - 5: E-payment System**: Types of E-payment Systems, Digital Token based, Smart Cards, Credit Card based E-payment Systems, Risk and E-payments Systems, Designing E-payment System, Cheque Payment System on the Internet, Electronic Data Interchange – EDI Applications in Business, Legal, Security and Privacy Issues, Internet-based EDI, Supply Chain Management, and Demo of E-payment Methods.
- **Unit - 6: Accounting Software and E-commerce**: Need for Accounting Software, and Software Types – Tally 10, SAP.

Books Recommended for Reference

01. Joseph P T., E-Commerce, A Managerial Perspective, PHI, New Delhi.
02. Krishnamurthy Sandeep., E-Commerce Management, Vidya Vikas Publication
03. Ravi Kalakota and Andrew B. Winston, Frontiers of E-commerce, Pearson Education.
04. Kamalesh K. Bajaj and Debjani Nag, E-commerce - The Cutting Edge of Business, Tata McGraw Hill, New Delhi.

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Kuvempu University, Master of Commerce, Semester - III

Course – HC303: Quantitative Techniques for Managerial Decisions - II

- Objective: This Course aims at developing an understanding of the application of Quantitative Techniques for optimal managerial decisions.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussions, Seminars, Assignments, etc
- Teaching Hours per Week: 5; and Credits:5
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Introduction and Linear Programming**: Introduction, Importance and Scope, Quantitative Techniques in Business Activities, Optimization Concept, Operations Research Models, Linear Programming, Introduction to Linear Programming, Problem Formulation, Product Mix and various Managerial Applications, Graphical Method of Problem Solving, Alternate Solution of Linear Programming Problems, Simplex Method, Duality in Linear Programming, Formulation of Dual Problems, Advantages, Its Economic Interpretation, and Sensitivity Analysis.

- **Unit - 2: Transportation Models**: Nature and Scope of Transportation and Allocation Models, Methods of Allocation, Different Methods for Finding Initial Solution – Vam, N-W Corner Rule, and Other Methods, Degeneracy, Finding Optimal Solution, Tests for Optimality, Imbalance in Total Availability and Total Requirement, Impossible Shipments, Alternate Methods of Solutions, and Maximization as Objective Applications.
- **Unit - 3: Assignment Problems**: Row Minimum, Column Minimum, Iteration, Balanced, Unbalanced, Infeasible, Maximization, Objectives, Applications, Traveling Salesman Problem.
- **Unit - 4: Queuing Theory (Waiting Line)**: Single Server/Single Queue, Essential Features of Queuing System, Single Queue, Operating Characteristics of Queuing System, Probability Distribution in Queuing System, Multi Server, Description of Other Queuing Models, Sequencing Problems, Processing N Jobs through two Machines, Processing N Jobs through three Machines.
- **Unit – 5: Replacement Models:** Machines Replacement Models, Replacement of Items Deteriorating with Time, Replacement of Items that Fail completely; and Description of Application Areas like Staffing Problems.
- **Unit - 6: Network Models**; Introduction to PERT and CPM Techniques, Network Components, Precedence, Events, Activities, Errors and Dummies, Critical Path Analysis, Float, Probabilities in PERT Analysis, Project Time Calculation, Project Crashing, Time, and Cost Considerations.

Books Recommended for Reference

01. J K Sharma., Quantitative Techniques, Macmillan
02. N D Vohra., Quantitative Techniques in Management, TMH
03. Anderson, Sweeney, Williams., Quantitative Methods for Business, Thomson
04. Srivastava and Others., Quantitative Techniques, New Age International
05. J K Sharma., Operations Research, MacMillan
06. Barry Render, Ralph Stair and Michael Hanna., Quantitative Analysis, Pearson
07. Frederick Hillier and Gerald Lieberman., Operations Research, TMH

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Kuvempu University, Master of Commerce, Semester - III

Course – HC304: Business Research Methods

- Objective: To develop the research skills of students in investigating the research problems with a view to arrive at objective findings, interpretation of data and conclusions of their investigation in the form of systematic reports.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussions, Seminars, Assignments, etc.
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Introduction**: Meaning and Significance of Research in Management, Different Approaches to Research – Scientific Method and Non-scientific Methods; Types of Research – Historical Studies, Case Studies, Survey and Experimental Studies; Criteria for good Research, and Manager and Researcher Relationship.
- **Unit - 2: Formulation of Research Problem**: Defining Research Problem, Generating Research Hypotheses, Research Process, Research Design,

Classification of Research Designs, Need for Research Design, Features of good Research Design; and Research Proposal.

- **Unit - 3: Sources of Data**: Primary Vs Secondary Data; Sources of Primary Data – Observation, Interview Methods, Survey Method, Questionnaire Construction and Design; Secondary Data and their Sources.
- **Unit - 4: Sampling Techniques**: Meaning, Steps in Sampling; Types of Sample Design – Probability and Non-probability Sampling Designs, Size of Sample, Sampling Errors, Concept of Measurement and Scaling, Scaling Techniques, and Characteristics of sound Measurement.
- **Unit - 5: Processing of Research Data**: Editing, Coding, Classification and Tabulation.
- **Unit - 6: Hypothesis Testing**: Null and Alternate Hypothesis; Level of Significance; One and Two Sample Tests, Measures of Central Tendency; Measures of Variation; Measures of Dispersion and Skewness, Test of Randomness, Correlation and Regression Analysis, ANOVA Discriminate Analysis, Cluster Analysis, and Data Analysis by Software Packages.
- **Unit - 7: Report Writing**: Types of Reports, Objectives and Functions, Formal and Informal Report Writing Process, Target Audience, Pre-research Proposals, Progress Reports, Final Reports, Guidelines for effective Writing, Research Report Format, Presentation of a Report, Persuasive Nature of Reports, Reports for Decision Making; Instructions Manuals, Precise Writing and Reporting.

Books Recommended for Reference

01. Pouline V Young., Research Methods in Social Science, PHI, New Delhi
02. Good and Hat., Research Methods, PHI
03. O. R. Krishnaswami and Rangantham., Methodology of Research, HPH
04. Donald Cooper and Pamela Schindler, Business Research Methods, TMH
05. Dipak Kumar Bhattacharyya., Research Methodology, EB
06. K. N. Krishnaswamy, Sivakumar and Mathirajan., Management Research Methodology, Pearson
07. William Zikmund., Business Research Methods, Thomson
08. Panneerselvam., Research Methodology, PHI
09. Daniel Riordan and Steven Pauley., Technical Report Writing Today, Biztantra
10. Alan Bryman and Emma Bell., Business Research Methods, Oxford
11. Levin and Others., Statistics for Management, Pearson, New Delhi
12. S. P. Gupta., Statistical Methods, Sultan Chand, New Delhi
13. B. G. Sathya Prasad., Business Statistics, HPH

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Kuvempu University, Master of Commerce, Semester - III
Soft Core Stream – A: Accounting and Taxation
Soft Core Stream – B: Accounting and Finance

Course – SC301A/SC301B: Marginal Costing for Managerial Decisions

- Objective: To make the students understand about the basics of Marginal Costing and the role of Marginal costing in different decisional areas.
- Pedagogy: A combinations of Lectures, Case Analysis, Group Discussions, Project Assignments and Seminar.
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit – 1: Marginal Costing – An Introduction:** Introduction; Costing, Cost Accounting and Cost Accountancy – Meaning and Definitions; Objectives of Cost Accounting; Utility of Cost Accounting; Cost Concepts; Methods of Costing; Systems and Techniques of Costing; Need for Marginal Costing, Marginal Costing – Meaning and Definitions; Marginal Cost; Ascertainment of Marginal Cost – (1) Classification of Total Cost – Functional Classification, Element-wise Classification, Classification based on Identifiability, Controllability, and Behaviour-wise Classification of Total Cost (a) Variable Cost, (b) Fixed Cost or Fixed Overhead Expenses, (c) Semi-Variable Cost or Semi-Variable Overhead Expenses – (i) Fixed plus Variable Costs, (ii) Initially Fixed, then Fixed plus Variable Cost and (iii) Step Costs; Segregation Methods - Comparison Method, Range or High and Low Method, Average Method, Equation Method, Stand-by Cost Method, Analytical Method or Degree of Variability Method, Scatter Graph Method, Average Cost Line Method, and Least Squares Method; Computation of Marginal Cost; Marginal Cost and Marginal Costing – Synonymous Terminologies; Accounting Treatment of Variable and Fixed Costs; Contribution; Types of Fixed Costs; Profit-Volume Ratio; and Illustrations
- **Unit - 2: Break-even Analysis:** Introduction; Approaches to break-even analysis; Algebraic Approach to mono-product break-even analysis - Break-even point (units) or Break-even quantity, Break-even point (`) or Break-even sales revenue, and Break-even point in terms of capacity utilization; Required sales to earn target or desired profit - Determination of required sales to earn desired profit before tax, Determination of required sales to earn desired profit after tax, and Required sales to earn desired profit per unit of sale, as a percentage of sales revenue or investment; Tabular Approach to mono-product break-even analysis; Graphical Approaches to mono-product break-even analysis - Break-Even Charts - Using variable cost, total cost and sales revenue - Angle of Incidence and Margin of Safety, Alternative form of break-even chart using fixed cost, total cost and sales revenue, Third type of break-even chart using fixed cost, contribution and sales revenue, and Fourth type of break-even chart using average cost and average revenue, A Note on incorporation of Profit Line in break-even charts; Profit-Volume Graph – Mono-product concerns; Multi-Product Break-Even Analysis - Algebraic Approach to multi-product break-even analysis - Similarities between mono-product and multi-product break-even analysis, Impact of changes in sales mix on break-even point, Concentration on only one Product for Break-Even, Procedure for determination of break-even quantity, Procedure for determination of break-even sales revenue, Apportionment of fixed cost and determination of break-even point, Activity-Based Costing and overhead distribution, and Presence of both common and specific fixed costs, and break-even analysis; Graphical Approaches to multi-product break-even analysis - Multi-product break-even chart, Weighted Average Approach to multi-product break-even chart, and Profit-Volume Graph – Multi-product concerns; Assumptions underlying break-even analysis – An Evaluation - Costs can be classified and/or segregated into variable and fixed costs, Linear Vs Non-Linear Relationship or Curvi-Linear break-even analysis, Relevant range, Volume of output coincides with the volume of sales, and Single product or constant sales mix; and Illustrations.

- **Unit - 3: Cost-Volume-Profit Analysis** (CVP Analysis): Introduction; Break-Even Analysis and Cost-Volume-Profit Analysis; Effects of changes in fixed costs - Impact on break-even point, Impact on margin of safety, Impact on profit, Impact on profitability, and Impact on total costs; Effects of changes in unit variable cost - Impact on total variable cost and variable cost ratio, Impact on contribution and P/V Ratio, Impact on break-even point, Impact on margin of safety, Impact on profit and profitability, and Impact on unit cost and total cost; Effects of changes in selling price - Impact on Variable Cost Ratio, Impact on contribution and P/V Ratio, Impact on break-even point, Impact on margin of safety, and Impact on profit and profitability; Effects of changes in sales quantity - Impact on costs – variable and total, Impact on sales revenue, Impact on contribution, P/V Ratio and break-even point, Impact on margin of safety, and Impact on profit and profitability; Operating Leverage, Cost Structure, Sales and Operating Profit; and Illustrations.
- **Unit - 4: Absorption Costing, Variable Costing and Throughput Costing:** Introduction; Approaches for the determination of profit - Economic Approach to profit determination, and Accounting Approaches to profit determination - Financial Accounting Approach, and Cost Accounting Approaches; Income Statement under Absorption Costing - Product costs and period costs, Accounting treatment of product costs and period costs, Accounting treatment of fixed manufacturing overhead expenses, Valuation of unsold stock of finished goods, Fixed production overhead absorption rate, Under- and over-absorption of production overhead expenses, Method of costing sales, and Absorption Costing – An Evaluation; Income Statement under Variable Costing - Product costs and period costs, Accounting treatment of product costs and period costs, Accounting treatment of fixed manufacturing overhead expenses, Valuation of unsold stock of finished goods, Method of costing sales, and Variable Costing – An Evaluation; Income Statement under Throughput Costing - Classification of total cost – product costs and period costs, Accounting treatment of product costs and period costs, Valuation of closing stock, Overhead absorption rate and over- and under-absorption, and Throughput Costing – An Evaluation; Reported profit under specific circumstances – A comparison of Absorption Costing, Variable Costing and Throughput Costing - When the sales quantity is equal to the volume of output, When the sales quantity is lower than the volume of output, When the sales quantity exceeds the volume of output, When the sales quantity over the years remains constant but the volume of output fluctuates, When the volume of output over years remains constant but the sales quantity fluctuates, and When both the volume of output and sales quantity differ from one period to another; Reconciliation of profit under Variable Costing with Profit under Absorption Costing and under Throughput Costing; Relevance of Variable Costing for external reporting; and Illustrations.
- **Unit - 5: Cost Analysis for Managerial Decisions:** Introduction; Managerial Decisions – Meaning and Importance; Influencing Factors; Relevant Information; Kinds of Managerial Decisions - Product Diversification, Make o Buy Decisions, Pricing Decisions, Sell or Further Process Decisions, Profitability and Resource Allocation, Temporary Shut-down, Optimal Level of Activity, and Alternative Methods of Production; and Illustrations.

Recommended Books for Reference

01. J. Madegowda, Marginal Costing for Managerial Decisions, Prateeksha Publishers, Jaipur, 2013.
02. J. Madegowda, Advanced Management Accounting, 2012, 3rd ed, Himalaya Publishing House.
03. The Research and Publications Committee, Glossary of Management Accounting Terms, ICWAI.
04. Ray. H. Garrison, Management Accounting- Concepts for Planning, Control, Decision Making, Business Publications Inc.
05. Desmond Goch, Finance and Accounts for managers, Pay Books Ltd.
06. Colin Drury, Management and Cost Accounting, The English Language Book Society.
07. Sydney Davidson, et al, Hand Book of Cost Accounting.
08. Charles. T. Horngren, introduction to Managerial Accounting, Prentice-Hall international Inc.
09. Richard M. Lynch and Robert. W. Williamson, Accounting for Management Planning and Control, Tata McGraw Hill.
10. Adolph Matz E. Usry, Cost Accounting- Planning and Control, Taraporewale Sons and Co. Ltd.
11. Charles. T. Horngren and George Foster, Cost Accounting – A Managerial Emphasis, Prentice-Hall of India Pvt., Ltd.
12. C. Bursk and John. F. Chapman, New Decisions-Making Tools for Managers, The New American Library Inc.
13. W. Thomas, Readings in Cost Accounting, Budgeting and Control, South-Western Publishing.
14. Robert. I. Dickey, Accountants Cost Hand Book, The Ronald Press Co.

Recommended Journals and Business Dailies for Reference

01. Management Accounting
02. Chartered Accountant
03. Chartered Secretary
04. Indian Journal of Accounting
05. Chartered Financial Analysis

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Kuvempu University, Master of Commerce, Semester - III
Soft Core Stream, C: Banking and Insurance
Soft Core Stream, D: Banking and Finance

Course – SC301C/301D: Credit Management in Banks

- **Objective**: To acquaint the Students with the Policy of Bank Lending and various Techniques used in Lending and Managing Credit
- **Pedagogy:** A combination of Lectures, Case Analysis, Group Discussions, Seminars, Assignments, etc
- Teaching Hours per Week: 4:and Credits: 4
- Examination Duration:3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Credit Risk Management**: Meaning and Definitions, Credit Risk, Credit Creation, Limitation on Credit Creation; Annual Policy Statement of RBI, Loans - System for Delivery of Bank Credit, Credit Syndication, Exposure Limits and Group Approach, Credit Information Bureau, Fair Practices Code for

13. David Gilbert, Retail Marketing Management
14. Swapna Pradhan, Retailing Management
15. Ron Hasty and James Reardon, Retail Management
16. Swapna Pradhan, Retail Marketing Management

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Kuvempu University, Master of Commerce, Semester - III
Soft Core Stream – A: Accounting and Taxation
Course - SC 302A: Karnataka State Taxes

- Objectives: To impart knowledge regarding the changing scenario in Karnataka State Taxes and its implications
- Pedagogy: Instructional Strategy: A Combination of Lectures, Case Analysis, Group Discussions, Project Assignments and seminars.
- Teaching Hours per week: 3; and Credits: 3
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Value Added Tax:** Meaning, Forms of VAT, Merits and Demerits of VAT.
- **Unit - 2: Karnataka Value Added Tax Act** and Rules as amended upto Date, Definition of Incidence and Levy of Tax, Registration,, Accounts and Documents, Administration and Collection of Tax, Authorities and Appellate Tribunal, Appeals, Offences and Penalties, and Illustrated Problems.
- **Unit - 3: VAT Compliant Tally 7.2** with Practical.
- **Unit - 4:** Karnataka Tax on Professions, Trade, Callings and Employment.
- **Unit - 5:** Karnataka Tax on Luxuries (Hotel and Lodging Houses)
- **Unit - 6:** Karnataka Tax on Entertainments.

Books Recommended for Reference

01. Singhania Vinod., Direct Tax Planning and Management, Taxmann Publications, New Delhi.
02. Department of Commercial Taxes, Karnataka Value Added Tax Rules.
03. Rao M R V., Value Added Tax, The Law House, Bhubaneshwara.
04. Purohit C Mahesh., Value Added Tax, Gayathri Publications, New Delhi.
05. Puliani Sathpal and Dhariwal M Sanjay., The Karnataka Value Added Tax Act, 2003, Karnataka Law Journal Publications, Bangalore.

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Kuvempu University, Master of Commerce, Semester - III
Soft Core Stream – B: Accounting and Finance
Soft Core Stream – D: Banking and Finance
Course - SC302B/SC302D: Financial Derivatives

- Objective: To enable the students to understand the concepts and use of Derivates in Risk Management.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 3; and Credits: 3
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Introduction to Derivatives:** Concept of Derivative, Derivative Products, Participants and Functions, Types of Derivatives, Development of Exchange Traded Derivatives, Global Derivatives Markets, Exchange Trade Vs OTC Derivatives and Derivatives Market in India.
- **Unit - 2: Options and Trading**: Options, Development of Options Markets, Call Options, Put Options, Organized Options Trading, Listing Requirements, Contract Size, Exercise Prices, Expiration Dates, Position and Exercise Limits, Exchanges on Options Trade and Options Traders.
- **Unit - 3: Hedging Technique:** Concept of Hedging, Role of Hedging, Forward Contracts, Futures Contracts, Structure of Forward and Futures Markets, Development of Futures Markets, Organized Futures Trading, Futures Exchanges and Futures Traders.
- **Unit - 4: Derivatives and Models:** Principles of Option Pricing, Put Call Parity Relationship, Option Pricing Models, Black Schools Model, Binomial Model, Principles of Forward and Future Pricing, Cost of Carry Model, Concept of Stock and Index Future.
- **Unit - 5: Risk Management:** Risk Management, Benefits, Dealers and Other Participants, Managing Market Risk, Delta, Theta, Gamma, Vega Hedging, Value at Risk, Derivatives in the Organization, Accounting and Tax for Derivatives, Avoiding Derivative Losses and Regulations.

Recommended Books for Reference

01. John C. Hull, Options, Futures and other Derivatives, Pearson Education.
02. D. C. Patwari, Options and Futures in an Indian Perspective, Jaico Publishers.
03. Robert W. Kolb, Understanding Futures Markets, Prentice Hall India.
04. Franklin R. Edwards, Futures and Options, Tata McGraw Hill
05. V. K. Bhalla, Financial Derivatives and Risk Management, S. Chand, New Delhi.
06. Chance, Introduction to Derivatives and Risk Management, Thomson Learning.
07. John C Hull, Fundamentals of Futures and Options Markets, Pearson Publisher, New Delhi

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Kuvempu University, Master of Commerce, Semester - III
Soft Core Stream –C: Banking and Insurance
Course – SC302C: Risk Management and Re-Insurance

- Objective: To enable to the Students to learn various aspects pertaining to Risk Management from the viewpoint of Insurance Companies
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussions, Seminars, Assignments, etc.
- Teaching Hours per Week: 3:and Credits: 3
- Examination Duration:3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Risk Management**: Risk and Uncertainty, Classes of Risks, Objectives, Risk Management Process and Administration.
- **Unit - 2: Techniques of Risk Management**, Risk Financing, Risk Retention, Risk Transfer, Captive Insurance, and Partial Insurances.
- Unit, 3: **Corporate Objectives of Risk Management**: Risk Management and Functional Management.

Books Recommended for Reference

01. Mamoria, Mamoria, Gankar, Dynamics of Industrial relations, Himalaya Publishing House.
02. Pylee, MV and Simon, GA. Industrial Relations and Personnel Management. Vikas Publishing House.
03. Manjappa, Industrial Relations. Tata McGraw-Hill.
04. Srivastava, S. C, Industrial Relations and Labour Laws, Vikas Publishing House.
05. Joseph, J, Industrial Relations - Towards A Transformational Process Model, Global Business Press.
06. Srivastava, Industrial Relations and Labour Laws, Vikas.

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Kuvempu University, Master of Commerce, Semester - IV

Course – HC401: Corporate Strategy and Governance

- **Objective:** To expose the students to different perspectives and concepts in the field of Strategic Management and to help them to acquire the requisite skills for applying the same to the business problems.
- **Pedagogy:** A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 3; and Credits: 3
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Introduction** to Strategic Management, Importance of Strategic Management, Schools of Thought in Strategic Management, Strategy Content, Process and Roles, Fit Concept and the Configurational Perspective in Strategic Management, Dimensions and Levels of Strategy.
- **Unit - 2: Competitive Strategy**, Five Forces that shape Strategy, Generic Strategies, Generic Strategies and the Value Chain.
- **Unit - 3: Corporate Strategy**, Motives for Diversification, Related and Unrelated Diversification, Business Portfolio Analysis, Strategy Implementation, Structure, Systems and People, 7 S Framework, Recent Advances, Core Competence as the root of Competitive Advantage, Business Processes and Capabilities-based Approach to Strategy.
- **Unit - 4: Corporate Governance, Introduction**: Concept of Corporate Governance, Its Origin and Need for Registered Companies, Separation of Ownership and Management, Stakeholders, Interest, Ethics and Social Responsibilities, Importance of Corporate Governance, Models of Corporate Governance.
- **Unit - 5: Committees and Authorities on Corporate Governance:** Recommendation of Cadbury Committee, Confederation of India Industries, Code of Corporate Governance, Kumaramangalam Birla Committee Recommendations; Board Committee - Audit Committee, Compensation Committee and Nomination Committee – Constitution and Need, Rights and Duties and Responsibilities.

Books Recommended for Reference

01. Hill and Jones, Strategic Management, All India Publishers, Chennai.
02. Hill and Jones, Strategic Management – Text and Cases, All India Publishers, Chennai.

03. Lawrence R. Jaunch and Willian F. Blaeck, Business Policy and Strategic Management, McGraw Hill, Singapore.
04. Johnson and K. Scholes, Exploring Corporate Strategy, Prentice Hall, New York.
05. Azar Kaxmi, Business Policy, TMH, New Delhi.
06. G. Hamel and C. K. Prahlad, Competing for the Future, Free Press, New York.
07. M. E. Porter, Competitive Advantage, Free Press, New York.
08. P. Ghemawat, Commitment, The Dynamics of Strategy, Harvard Business School Press, Boston.
09. Peers and Robinson, Strategic Management, AITBS, New Delhi.
10. Richard Georga, Business Ethics
11. S. K. Chakraborthy, Management by Values
12. William Evans, Management Ethics
13. Deepak Chopra, Seven Spiritual Laws of Success
14. D. D. Prentice and PRJ Hollang, Contemporary Issues in Governance, Clarendon Press
15. T. Clark and E Monk House, Rethinking the Company, Pitman, London
16. J Charkham, Keeping Good Company, A Study of Corporate Governance in Five Countries, oxford University Press, London
17. G Mills, Controlling Companies, Unwin
18. N Bairs and D Band, Winning Ways through Corporate Governance, Macmillan, London
19. Report of Cadbury Committee on Financial Aspects of Corporate Governance, London Stock Exchange, London
20. Report on Corporate Governance, Confederation of Indian Industries, Bombay

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Kuvempu University, Master of Commerce, Semester - IV

Course – HC402: International Business

- **Objective:** To make the students understand the foundations and role of International Business in the world economy and spread of Global Competition.
- **Pedagogy:** A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Introduction to International Business:** Concept of International Business, Types and Environmental Factors influencing International Business; Strategic Decisions in International Business and Differences between Domestic and International Business.
- **Unit - 2: International Trade Theories**: Theory of Mercantilism, Absolute Advantage, Comparative Advantage, Hecksher–Ohlin Theory, New Product Life Cycle Theory, The New Trade Theory, Porter's Diamond Model, Implications for International Business.
- **Unit - 3: Multinational Corporations:** Definitions, Distinction among International Corporations, Multinational Corporations, Global Corporations and Transnational Corporations, Factors contributing for the growth of Multinational Corporations, Advantages and Disadvantages of Multinational Corporations, Control over Multinational Corporations, Organization Design and Structure of Multinational Corporations, Relationship between Headquarters and Subsidiaries.

- **Unit - 4: Strategies for International Business**: Profiting from Global Expansion, Global Expansion and Business Level Strategy, Pressures for Cost Reduction and Local Responsiveness; Strategic Choice – International, Multi, Domestic, Global and Transnational Strategies; Choice of Entry Mode, Global Strategic Alliances, – Advantages and Disadvantages of Strategic Alliances.
- **Unit - 5: Foreign Collaborations and Joint Ventures**: Industrial Policy and Foreign Direct Investment, Kinds of Collaboration and Joint Ventures, UN Code of Conduct of Transfer Of Technology, Indian Joint Ventures Abroad.
- **Unit - 6: World Trade Organization:** GATT, WTO and Its Objectives, Functions of WTO, India and WTO, Fundamental Principles of WTO Trading System, WTO and its Impact on Developing Countries, WTO and International Business.
- **Unit – 7: Intellectual Property and International Business**: Nature of Intellectual Property, Trade-related Intellectual Property Rights, Problems and Fears of Developing Nations regarding TRIPs, and International Characteristics of Intellectual Property.

Books Recommended for Reference

01. Donald Ball, International Business, TMH, New Delhi.
02. Charles W.L. Hill, Global Business Today, TMH, New Delhi.
03. Stephen H. Robock, International Business and Multinational Enterprises, TMH, New Delhi.
04. Alan M. Rugman, International Business, EMH, New Delhi.
05. Paul Beamish, International Management, TMH, New Delhi.
06. Therese Flaherty, Global Operations Management, TMH, New Delhi.
07. Richard M. Hodgetts, International Management, TMH, New Delhi.
08. Sundaram and Black, International Business Management, PHI, New Delhi.
09. Srivastava R.M., International Strategic Management, Himalaya, Bombay.
10. Cherunilam, Francis, International Trade and Export Management, Himalaya, Bombay.

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Kuvempu University, Master of Commerce, Semester - III

Course – HC403: Production and Operations Management

- Objective: To equip the students with the basic skills of Production and Operations Management.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 4: and Credits: 4
- Examination Duration: 3 hours and Maximum Marks: 100

Course Contents

- **Unit - 1: Introduction:** Nature of Production, Production as a System, Evolution of Production Function, Production as an Organizational Function, Decision Making in Production, Importance of Production Function, Production Management and Operation Management, Characteristics of Modern Production and Operation Function.
- **Unit - 2: Industrial Location:** Introduction, Location Theories, Freedom of Location, Errors in Selection, Steps in Location Selection, Relative Importance of Location Factors, Location Models.

- **Unit - 3: Facility Layout:** Introduction, Meaning, Definition and Scope, Factors influencing Layout, Principles of Layout, Types of Layout, Revision of Layout, Layout Planning, Layout Tools and Techniques, Criteria for Selection and Design of Layouts.
- **Unit - 4: Production Planning and Control:** Introduction, Objectives, Classification, Importance, Production Planning System, Phases in Production Planning and Control, Functions, Production Planning and Control in different Production System.
- **Unit - 5: Scheduling and Work Study:** Scheduling – Introduction, Operation Planning and Scheduling, Scheduling Techniques for Job Shop, and Scheduling Methodology; Work Study – Introduction, Definition, Objectives-Benefits, Relationship of Time and Motion Study, Work Study Procedure, Method Study; Work Measurement – Introduction, Definition, Objectives, Benefits of Work Measurement and Techniques of Work Measurement
- **Unit - 6: Purchase and Stores Management:** Introduction, Vendor Relations, Selection of Vendor, Vendor Rating, Vendor Development, Value Engineering and Value Analysis Step; Material Handling – Meaning, Importance, Principles of Material Handling and Costs; and Material Requirement Planning.
- **Unit - 7: Quality Management:** Meaning, Dimensions of Quality, Cost of Quality, Measuring and Reporting Quality Cost, Effect of Quality Management on Productivity; Totsl Quality Management – Principles, Total Quality Management and Business Partners, Customers, Information Technology, Role of Employees in the improvement of Quality, Quality Circle, Six Sigma, and ISO 9000 Standards Certification.

Books Recommended for Reference

01. Ashwathappa, K., Production and Operations Management, Himalaya Publishing House.
02. Patel Chunawala, S. A and Patel, D. R., Production and Operations Management, Himalaya Publishing House.
03. Russell and Taylor, Operation Management, Pearson Education Publications.
04. Matrinich S Joseph., Production and Operations Management, An Applied Modern Approach, W S E Wiley Publications.
05. Kachru Upendra., Production and Operations Management, Excel Book Publications.
06. Ashwathappa, K and Shridhara Bhat K., Production and Operations Management, Himalaya Publishing House.
07. Mahadevan., Operations Management, Theory and Practice, Pearson Education
08. Buffa S Elwood and Sarin K Rakesh., Modern Production and Operations Management, WSE Wiley Publications.

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Kuvempu University, Master of Commerce, Semester - IV

Course – HC404: Entrepreneurship Development

- Objective: To enable the students to understand the different aspects pertaining to the Entrepreneurship Development.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 3; and Credits: 3
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Entrepreneurship:** Concept, Introduction, Definition, Concept of Entrepreneurship, Types of Entrepreneur, Characteristics of Entrepreneurs. Reasons for Growth of Entrepreneurship Firms, Role of Entrepreneurship in Economic Development, Problems in Entrepreneurship Development, Intrapreneur Vs Entrepreneur, Manager Vs Entrepreneur.
- **Unit - 2: Rural and Woman Entrepreneurship:** Definition, Risks faced by Rural Entrepreneurs, and Strategies for Development of Rural Entrepreneurship; Women Entrepreneurship - Concept, Problems of Woman-entrepreneurs, Government Programmes and Schemes, and Role of Woman-entrepreneurs Associations.
- **Unit** – 3: Business Opportunity Guidance: Importance and relevance of Business Opportunity, Process of identifying and assessing Business Opportunities, Business Opportunities and needs of potential Entrepreneurs, Selection of Business Opportunity, New Trends in Service Sector and Scope for Entrepreneurship in Service Sector.
- **Unit - 4: Entrepreneurial Motivation and Mobility:** Meaning, Motivation Theories, Mc Clelland's Acquired Needs Theory, Maslow's Need Hierarchy Theory, Integrated-contextual Model, Motivating Factors, Achievement Motivation, Factors influencing Mobility.
- **Unit - 5: Models and Programmes for Entrepreneurial Development:** Models of John Kao, Udai Parek and Nadakarni, NISIET, Need for training and Development, Phases of EDPs, Role of Government in Entrepreneurship Development.
- **Unit - 6: Entrepreneurial Ventures:** Organized and Management- Venture Capital Funds, Stages of Venture Capital Assistance, Financing Small Business, Working Capital Management, Purchasing and Inventory Management.
- **Unit - 7: Institutional Support System for Entrepreneurship:** District Industries Centers, SISIs, SIDCOs, NISIET, EDII, NIESBU, TCOs, and a Broad Overview of Central and State Level Financing Institutions.

Books Recommended for Reference

01. Gupta and Srinivasan, Entrepreneurship Development in India, Sultan Chand and Sons.
02. Dr. S. S Khanaka, Entrepreneurial Development, Sultan Chand and Sons.
03. Donald L Sexton and Raymond W Smilor, The Art and Science of Entrepreneurship.
04. SIET, Hyderabad, Developing Entrepreneurship – Issues and Problems.
05. Jain and Varshney, Entrepreneurship Development – An Indian Perspective.
06. Peter Kiby, Entrepreneurships and Economic Development, The Free Press.
07. Jules Backman, Entrepreneurship and the Outlook for American.
08. McClelland, D.C, The Achieving Society, D. Van Nostrand.
09. Venkateswar Rao and Udai Pareek, Developing Entrepreneurship – Hand Book, Learning System.
10. Vasanth Desai, Dynamics of Entrepreneurial Development and Management

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Kuvempu University, Master of Commerce, Semester - IV

Course – HC405: Inplant Training and Project Report

- **Objective:** The primary objective of making the students to involve in the project work is to expose them to the practical field. The study is a plethora of Principles, Canons, Rules and Regulations, Theories and Tenets in the class-room set-up. In order to understand the versatility of the same in application, they are enthused to take up project work. The industry-related, farm-related, field-related and business-related problems may be chosen for the study. Thus the findings of the study would help the problem encounters to solve them.
- **Procedure**: After the examination of M.Com – II Semester, the students have to finalize the topics for their Project Reports, select the industrial unit for their inplant training and work there for a minimum of 1½ months, observe how different Departments are functioning and collect the necessary data and report. This is to be completed before the commencement of the classes of M.Com – III Semester. During the III – Semester, the students have to collect the data from different sources including the books, journals, reports, websites, etc. Based on this, the students shall prepare the Project Report under the guidance of a teacher (allotted by the Department) and submit one copy to the Department before the close of M.Com – IV Semester classes.
- **Project Report**: The size of the report shall be between 80 to 90 pages – 1½ line space, Times New Roman, 13 font, both sides aligned, and 1.25" margins all the sides, and it should be hard bounded. The student shall submit one copy to the Department atleast one week prior to the close of M.Com Semester – IV classes.
- **Credits**: 3

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Kuvempu University, Master of Commerce, Semester - IV

Soft Core Stream – A: Accounting and Taxation

Soft Core Stream – B: Accounting and Finance

Course - SC 401A/401B: International Financial Reporting Standards

- Objectives: This course aims at making the students familiar with International Financial Reporting Standards and their implications.
- Pedagogy: Instructional Strategy: A Combination of Lectures, Case Analysis, Group Discussions, Project Assignments and seminars.
- Teaching Hours per week: 4; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks: 100

Course Inputs

- **Unit - 1: Introduction:** Meaning and Scope of International Financial Reporting Standards, Need for International Financial Reporting Standards, Generally Accepted Accounting Principles Vs International Accounting Standards, International Accounting Standards Vs International Financial Reporting Standards, Preparation and Presentation of Financial Statements as per International Financial Reporting Standards, Institutional Developments, and Case Studies.
- **Unit - 2: Group Statements**: Business Combinations (International Financial Reporting Standard 3) and Separate Financial Statement (International Accounting Standard 27), Investment in Associates (International Accounting

Standard 28), Interests in Joint Ventures (International Accounting Standard 31) and Case Studies.

- **Unit - 3: General Purpose Balance Sheet and Income Statement**: Inventories (International Accounting Standard 2), Property, Plant and Equipment (International Accounting Standard 36), Provisions, Contingent Liabilities and Contingent Assets (International Accounting Standard 37), Intangible Assets (International Accounting Standard 38), Financial Instruments, Recognition and Measurement (International Accounting Standard 39), Investment Property (International Accounting Standard 40), and Case Studies.
- **Unit - 4: Foreign Currency Translation**: Accounting for Foreign Currency Translation, International Accounting Standard 21 on Foreign Currency Translation, A Brief Introduction to International Accounting Standard 12 on Income Taxes and Case Studies.
- **Unit - 5: Disclosure:** Meaning of Disclosure, Importance of Disclosure, Types of Disclosure, Dimensions of Disclosure, Events after the Balance Sheet Date (International Accounting Standard 10), Related Party Disclosure (International Accounting Standard 14), Earnings per Share (International Accounting Standard 33) and Interim Financial Reporting (International Accounting Standard 34) and Case Studies.

Books Recommended for Reference

01. Greuning Van Hennie.,'International Financial Reporting Standards - A Practical Guide
02. International Financial Reporting Standards (IFRSs), Taxman.
03. Haskins E Mark and Ferris R Kenneth and Selling J Thomas, International Financial Reporting and Analysis: A Contextual Emphasis –.
04. Nobes Christopher and Parker Robert, Comparative International Accounting.
05. Mohapatra A.K. Das., International Accounting.

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Kuvempu University, Master of Commerce, Semester - IV
Soft Core Stream, C: Banking and Insurance
Soft Core Stream, D: Banking and Finance

Course –SC401C/401D: International Banking

- Objective: To acquaint the Students with different aspects of International Banking.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussions, Seminars, Assignments, etc.
- Teaching Hours per Week: 4:and Credits: 4
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit - 1: Introduction**: Brief History of International Banking, Reasons for the Growth of International Banking, Characteristics and Dimensions of International Banking, Recent Trends in International Banking, and Organizational Features of International Banking.
- **Unit - 2: Regulatory Framework**: Regulations of International Banking, Regulations, Deregulation, Re-Regulation (IMF); Regulatory Arbitrage, Birth of Offshore Banking, Basel Concordant, Assessment of Country/Sovereign Risk, and Country Risk Management.

Setting, International Accounting Standard Setting Process, and An Overview of International Accounting Standards.

Recommended Books for Reading

01. Radebaugh L. H. and S.J. Gray, International Accounting, and Multinational Enterprises, John Wiley & Sons.
02. Sandagaran S.M., International Accounting, Thomson, South Western.
03. Gray, S.J., International Accounting and Transnational Decisions, Butterworth, London, U.K.
04. Holzer H. Peter, International Accounting, Horper and Row Publishers, New York.
05. Frederick D.S. Choi and Gary K. Meek, International Accounting, Pearson Education.
06. Shirin Rathore, International Accounting, Prentice Hall of India.

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Kuvempu University, Master of Commerce, Semester - IV
Soft Core Stream – B: Accounting and Finance
Soft Core Stream – D: Banking and Finance

Course - SC402B/402D: Global Business Finance

- Objectives: The objective of this course is to make the students to acquaint with the International Financial Management in order to assist the MNCs in respect of international financial matters.
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussion, Seminars, Assignments, etc.
- Teaching Hours per Week: 4 hours; and Credits: 4
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit – 1: Introduction:** Concept of International Financial Management, Features of International Financial Management, Objectives of International Financial Management, Significance of International Financial Management Point of MNCs, Functions of International Financial Management, Factors Responsible for increases the Role of International Financial Management, Global Financial Manger, Role of Global Financial Manger in MNCs, Differences between International Financial Management and Domestic Financial Management.
- **Unit – 2: Foreign Exchange Market:** Concept of Foreign Exchange Market, Features of Foreign Exchange Market, Participants of Foreign Exchange Market, Role of Foreign Exchange Market, Exchange Rate, Determination of Exchange Rate, Spot Rate, Forward Rate, Outright Rate, Bid Price, Ask Price, Quotation, Types of Quotation, Forward Contracts and Future Contracts, Arbitraging, Hedging and Speculation and Covered Interest Rate Arbitrage and Exchange Rate Theories, Foreign Exchange Exposure, Types of Exposure, Managing Exposure.
- **Unit – 3: International Financing and International Financial Markets:** Corporate Sources and Uses of Funds, National Capital Markets and International Financial Centers, Development Banks, Multilateral Development Banks, Euro-Currency Markets, Euro Banking, Market for International Securities, International Bonds, Euro Notes and Euro Notes and

Euro Commercial Papers, Medium Term Euro Notes and Other Sources and Uses of Funds.

- **Unit – 4: International Capital Budgeting:** Concept of International Capital Budgeting, Basics of International Capital Budgeting, Issues In Foreign Investment Analysis Estimation of Cash Flows, The Cost of Capital, Portfolio Consideration of a Multinational Corporation Approaches For Evaluation of Foreign Project Etc.
- **Unit – 5: International Working Capital Management:** Meaning of International Working Capital Management: Significance of International Working Capital Management, International Cash Management and Management of Account Receivables and Inventory etc.
- **Unit – 6: Cost of Capital for Foreign Investment:** Concept of Cost of Capital Cost of Equity Capital, Equity Cost of Capital for Foreign Project, Discount Rate for Foreign Investments, and Weighted Average Cost of Capital For Foreign Project.

Books Recommended for Reference

01. Apte P.G., International Financial Management, TMH
02. Buckley, Adrian., Multinational Finance, PHI
03. Pilbeam Keith., International Finance, MacMillan Press, Hong Kong
04. Shaprio, Alan C., Multinational Financial Management.
05. Eiteman, David K., Arthur Stonehill and Michael H. Moffett: Multinational Business Finance, Pearson Publication, New Delhi.
06. Seth A. K, International Financial Management, New Delhi, Galgotia Publishing Company.
07. Vij, Madhu: International Financial Management, Excel Publications.

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Kuvempu University, Master of Commerce, Semester - IV
Soft Core Stream – C: Banking and Insurance

Course – SC 402C: Actuarial Science

- Objective: To enable the Students to understand the procedural aspects of calculating the Premium considering the risks
- Pedagogy: A combination of Lectures, Case Analysis, Group Discussions, Seminars, Assignments, etc.
- Teaching Hours per Week: 4: and Credits: 4
- Examination Duration: 3 hours and Maximum Marks:100

Course Inputs

- **Unit- 1: Introduction to Actuarial Science:** Definition of an Actuary, Role, Responsibilities and Powers of an Actuary, Regulation for appointment of an Actuary.
- **Unit - 2: Annuities**: Compound Interest and Problems, Accumulated Value, Present Value, Annuities, Accumulated Value, Present Value; Annuities, Immediate and Due – Perpetuity; Annuities, Variable Annuities, Fixed Annuity.
- **Unit - 3: Sinking Fund**, Mortgage Redemption, Effective Yield on Life Funds, and Problems on Annuities.
- **Unit - 4: Probability**: General Principles, Theories, Events, Dependent, Independent, Mutually Exclusive, Contingent; Probabilities, Probabilities of Death and Survival, Joint, Probabilities of Death and Survival.

406 Elective-II Entrepreneurial Development Small Business Management

"COURSE CONTENTS"

Module. I

Unit.1. Basic concepts on SSI units-Tiny, Ancillary, cottage-importance of SSIs-Women Entrepreneurs.

Unit:II Registration of SSIs-Registration of factory-electronic control code to assesses-Exempted units.

Unit:III Management of functional Areas in SSI Units- Production function-finance Function-Marketing function-Human Resource function R and D etc.,

Unit:-IV Policies governing SSIs
Taxation benefits-Export incentives-institutional support from central and state bodies.

Unit:-V Success stories of SMES

Reference Books:

1. "Entrepreneur Development" by C.B.Gupta and N.P. Srinivasan (Sultan Chand & Sons Publication)
2. Entrepreneurship and Ventura Management" by C.M.Bamnback and J.R.Manscusu (Prentice Hall Publication)
3. "Entrepreneurship Reflections and Investigations" By N.S.Bisht (Caugh Publication Allahadad)
4. "Entrepreneurship Management " by C.A.Dailey (Mex Graw Hill Publication)
5. "Entrepreneurship Management " by A.N.Desai (Ashish Publishing Houses, New Dehli)
6. Entrepreneurship Development in India" by Murthy Bevlon (Nittal Publications, New Dehli)
7. "Small Business Management"by Hall B.L., Pickle and Yance. Brahamson (John Wiley & sons, USA)
8. " Entrepreneurship & Small business Management" by Kenneth.R.Van Vloorthis (Boston, Allen and Bacon USA)
9. Entrepreneurship and Small Business Management"
10. "The Role of Small Enterprises in Indian Economic Development" by P.N.Dhar and Lyedall.H.R. (Asia Publishing House, Delhi)
11. "Management of small scale Industry" by Vasanta Desai (Himalayn Publishing House, Bombay)

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e-mail: commerce@kuvempu.ac.in

Minutes of the Meeting of Board of Studies in Commerce (UG) held on Friday, 29 December 2017 at 11 am in the DoS in Commerce, Kuvempu University, Jnana Sahyadri

Members:

(1) Sri Umapathi K G
(2) Sri Poornesh K
(3) Sri B R Dayananda
(4) Smt V Shalini
(5) Sri B Malleshi Naik
(6) J. Madegowda: Chairman

After the formal welcome by the chairman, the Board took up the subjects listed in the Agenda for discussion and after discussion resolved appropriately as presented below.

(1) Review of Question Papers set for April/November 2017 examinations

The Board reviewed the question papers set for April/November 2017 examinations of B.Com (both regular and distance mode) and found them in order.

(2) Preparation and approval of Panels of Examiners for April/November 2018 examinations of B.Com (both regular and DDE)

The Board prepared and approved the Panels of Examiners for B.Com examinations, 2018 (both regular and distance mode), and authorized the Chairman to send the same to the Registrar (Eval) separately (**Appendix – 1**).

(3) Revision and approval of curricula of B.Com (regular) programme

The Board prepared and approved the thoroughly revised and comprehensive course curricula B.Com programme (Regular). Further, the Board resolved to recommend to the Faculty of Commerce for its consideration and approval (**Appendix – 2**).

(4) Any other subject with the permission of the Chairman: Question Papers

Members of the Board discussed the issue of translating the question papers of quantitative courses from English to Kannada from the points of view of its utility to the students, time and cost factors, and resolved to have the question papers of quantitative courses only in English.

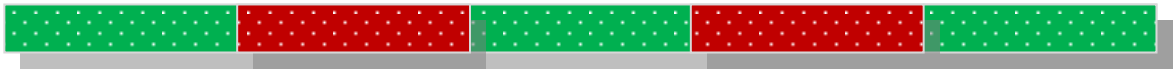
Signature of Members:

(1) Sri Umapathi K G
(2) Sri Poornesh K
(3) Sri B R Dayananda
(4) Sri B Malleshi Naik

(J. Madegowda)

Chairman

Appendix - 2



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B. Com Curricula, 2018-19

[prepared and approved by the Board of Studies in Commerce (UG) in its meeting held on 29 December 2017]

Structure of B.Com Programme

Sl. No.	Academic Programme, Semester and Title of the Course	Weekly Teaching Hours	Examination Duration (hours)	Maximum Marks		
				CAP[1]	SEE[2]	Total
	B.Com, Semester - I					
101	Language – I, Course - I	4	3	20	80	100
102	Language – II, Course – I	4	3	20	80	100
103	Financial Accounting – I	4	3	20	80	100
104	Business Environment and Government Policy	4	3	20	80	100
105	Principles of Business Management	3	3	20	80	100
106	Market Behaviour and Cost Analysis	4	3	20	80	100
	Total, Semester - I			120	480	600
	B.Com, Semester - II					
201	Language – I, Course – II	4	3	20	80	100
202	Language – II, Course – II	4	3	20	80	100
203	Financial Accounting – II	5	3	20	80	100
204	Human Resource Management	4	3	20	80	100
205	Mathematics for Business	4	3	20	80	100
206	Indian Financial System	4	3	20	80	100
	Total, Semester - II			120	480	600
	B.Com, Semester - III					
301	Language – I, Course – III	4	3	20	80	100
302	Language – II, Course – III	4	3	20	80	100
303	Corporate Accounting – I	4	3	20	80	100
304	Marketing Management	4	3	20	80	100
305	Small Business Management	4	3	20	80	100
306	Corporation Administration	4	3	20	80	100
307	Environmental Science	4	3	20	80	100
	Total, Semester - III			140	560	700
	B.Com, Semester - IV					
401	Language – I, Course – IV	4	3	20	80	100
402	Language – II, Course – IV	4	3	20	80	100
403	Corporate Accounting – II	5	3	20	80	100
404	Management of Banking Operations	4	3	20	80	100
405	Computer Applications in Business	4	3	20	80	100
406	Business Regulations	3	3	20	80	100
407	Indian Constitution	4	3	20	80	100
	Total, Semester - IV			140	560	700

[1] Continuous Assessment Programme
[2] Semester-end Examination

	B.Com, Semester - V					
501	Financial Management	4	3	20	80	100
502	Income Tax – I	4	3	20	80	100
503	Business Statistics - I	4	3	20	80	100
504	Cost Accounting	4	3	20	80	100
505	Advanced Accounts	4	3	20	80	100
506	Goods and Services Tax	4	3	20	80	100
507	Specialization Stream, Course – I	4	3	20	80	100
508	Logical and Analytical Reasoning	2	1½	10	40	50
	Total, Semester - V			150	600	750
	B.Com, Semester - VI					
601	International Financial Reporting Standards	4	3	20	80	100
602	Income Tax – II	4	3	20	80	100
603	Business Statistics – II	4	3	20	80	100
604	Cost Accounting – Methods and Techniques	4	3	20	80	100
605	Management Accounting	5	3	20	80	100
606	Principles and Practice of Auditing	3	3	20	80	100
607	Specialization Stream, Course – II	4	3	20	80	100
608	Soft Skills	2	1½	10	40	50
	Total, Semester - VI			150	600	750
	Grand Total			820	3,280	4,100

Specialization Stream – A: Finance Stream

507A Advanced Financial Management

607A Security Analysis and Portfolio Management

Specialization Stream – B: Marketing Stream

507B Product and Sales Management

607B Retail Management

Specialization Stream – C: Banking and Insurance Stream

507C Advanced Bank Management

607C Life and General Insurance

Specialization Stream – D: E-Commerce Stream

507D E-Commerce – 1

607D E-Commerce – 2

Specialization Stream – E: Quantitative Techniques Stream

507E Quantitative Techniques – 1

607E Quantitative Techniques – 2

B.Com, Semester – I

Course – 103: Financial Accounting – I

Course Objective: To acquaint students with the accounting concepts, conventions, accounting process and preparation of Financial Statements

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Financial Accounting** (6 hours): Introduction - Meaning and Definition; Objectives of Accounting; Functions of Accounting; Accounting Concepts and Accounting Conventions.

II. **Final Accounts of Sole Trading Concerns** (12 hours): Financial Statements – Preparation of Manufacturing Accounts; Profit and Loss Account, and Balance Sheet with respect to current market conditions.

III. **Consignment Accounts** (16 hours): Introduction, Meaning – Consignor, Consignee; Goods Invoiced at Cost Price, Goods Invoiced at Selling Price, Normal Loss, Abnormal Loss, Valuation of Stock, Stock Reserve, Journal Entries, Ledger Accounts in the Books of Consignor and Consignee.

IV. **Accounting for Joint Ventures** (15 hours): Introduction, Meaning, Objectives, Distinction between Joint Venture and Consignment; Distinction between Joint Venture and Partnership; Maintenance of Accounts – when separate set of Books are maintained, and when separate set of Books are not maintained with Joint Bank Account and Problems.

V. **Final Accounts of Non-profit Organizations** (15 hours**):** Meaning of Non-profit Organization, Need for maintaining Accounts, Financial Statements of Non-profit Organizations, Receipts and Payments Account, Income and Expenditure Account, and Balance Sheet. Capital and Revenue Items – Treatment of special Items, Preparation of Income and Expenditure Account, and Balance Sheet from Receipts and Payments Account and Problems.

Skill Development Activities:

(1) Draft the specimen of various Subsidiary Books
(2) Collect a Trial Balance from a Sole Trader and prepare Final Accounts
(3) Prepare Proforma Invoice and Account Sales
(4) Prepare Joint Venture Account with imaginary figures when joint bank account is maintained
(5) Collect Receipts and Payment Account of a Non-trading Concern and prepare a note on the contents

Recommended Books for Reference:

(1) J Madegowda and Dr Giridhar, K V, Financial Accounting (Volume – I), Himalaya Publishing House, Mumbai
(2) Dr. B. Mariyappa, Anil Kumar – Advanced Financial Accounting, HPH
(3) Arulanandam & Raman; Advanced Accountancy, HPH
(4) Dr. Alice Mani: Advanced Financial Accounting, SBH.
(5) Dr. S.N. Maheswari, Financial Accounting, Vikas Publication
(6) S P Jain and K. L. Narang, Financial Accounting, Kalyani Publication

B.Com, Semester – I

Course – 104: Business Environment and Government Policy

Course Objective: To acquaint students with the business environment and government policy

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Business Environment** (14 hours): Meaning, Objectives of Business, Features of Business, Business Environment, Internal and External Environment - Economic Environment, Social Environment, Cultural Environment, Demographic Environment, Legal Environment, Technological Environment, and Emerging Scenario and Business Policy.

II. **Business Ethic** (13 hours): Principles of Business Ethics, Unethical Practices and Good Ethics of Business; Social Responsibility of Business, Doctrine of Social Responsibility, Rational of Social Responsibility and Unfair Trade Practices.

III. **Technology in Business** (12 hours): Introduction, Need and Importance, Technological Factors influencing Business, Benefits and Limitations of Modern Technology to Business.

IV. **Business and Government** (12 hours): Introduction, Government Intervention and Economic Growth, Regulatory Growth, Promotional Growth, Inter Personal Growth and Planning Growth.

V. **Business Policy** (13 hours): Importance of Business Policy, Essentials of Business Policy, Classifications of Business Policy, Production Policy, Personal Policy, Financial Policy and Marketing Policy.

Skill Development Activities:

(1) Draw a Business Tree
(2) Prepare a Partnership Deed
(3) Prepare Memorandum and Articles of Association of any company
(4) Discuss the impact of globalization on Indian Business and Industry
(5) State the impact of technology on Indian Business

Recommended Books for Reference:

(1) Dr. Aswathappa Essentials of Business, Himalaya Publishing House
(2) Francis Cherunilam; Economic Environment Business, Prentice Hall of India
(3) P. Subba Rao, International Business, HPH
(4) Amarchand, Business and Government
(5) Vivek Mittall, Business Environment
(6) Raj Agarwal, Business Environment

B.Com, Semester – I

Course – 105: Principles of Business Management

Course Objective: To acquaint students with the principles of managing of business concerns

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Nature and Functions of Management** (14 hours): Meaning and Definition, Functions and Scope of Management, Levels of Management, Management *vs* Administration; Scientific Management, Evolution of Management Thought, Contributions of F W Taylor, Henry Fayol, Elton Mayo, and C.K Prahlad; and

Management as Science, Art and Profession.

II. **Planning and Decision Making** (14 hours): Nature and Importance of Planning, Types, Steps involved in Planning, Planning Premises, Planning Process. Decision Making - Meaning, Role, Steps involved in Decision Making Process, Significance of Decision Making, and Guidelines for effective Decision Making.

III. **Organizing** (16 hours): Nature, Principles, Types, Structure of Organization, Line and Staff Organization, Formal *vs* Informal Organization, Delegation of Authority, Principles of Delegation, Barriers to effective Delegation, Guidelines for Making effective Delegation, Span of Control, Authority and Responsibility, Authority *vs* Power, and Forms of Organization Structure.

IV. **Directing, Motivation and Control** (10 hours): Meaning, Nature, Significance and Techniques of Directing: Motivation - Meaning and Importance; Control - Meaning, Steps in Control, Features of effective Control System, Controlling Tools and Techniques, and Essentials of Effective Control.

V. **Leadership and Modern Management Techniques** (10 hours): Meaning of Leadership, Leadership Styles and Importance of Leadership: Modern Management Techniques - MBO, MBE, TQM, ISO, Stress Management (only meaning of modern management techniques).

Skill Development Activities:

(1) Draft an Organization Chart
(2) Narrate the steps in Selection Process
(3) ist out F W Taylor's Principles of Management
(4) Narrate the steps in effective Control System
(5) Mention the features of Modern Management Techniques

Recommended Books for Reference:

(1) Principles of Management, Koontz and O'Donnell
(2) Business Management, Gupta C B, Sultan Chand
(3) Principles and Practice of Management, Prasad L M, Sultan Chand
(4) Management, Stoner A F and Freeman R.E, Prentice Hall
(5) Professional Management, Theo Haimann
(6) Management Concepts and Practice, B P Singh and T N Chhabbra

B.Com, Semester – I

Course – 106: Market Behaviour and Cost Analysis

Course Objective: To acquaint students with the different dimensions of market behaviour and role of cost analysis in decision making

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Firms and Decisions** (14 hours**)**: Firms - Meaning and Goals, Profit Maximization *vs* Wealth Maximization Dynamics, Decision Making – Features, Process, Strategy, Tactical and Operational Decisions, Game Theory, and Problems.

II. **Market Forces** (12 hours): Demand - Meaning, Law of Demand, Nature of Elasticity of Demand, Determinants of Elasticity of Demand, Derived Demand Relations. Demand Forecasting - Meaning and Methods (Problems on Trend Projection by Method Least Squares); Supply - Law of Supply, and Determinants of Supply.

III. **Production and Cost Analysis** (16 hours): Production Function – Concept and Importance, Cost Analysis - Meaning of Short-run and Long-run Costs, Fixed and

Variable Costs, Explicit and Implicit Costs, Opportunity Cost and Incremental Costs (concepts only). Total Cost, Average Cost and Marginal Cost Behavior in Short-run and Long-run (including problems). CVP Analysis – Assumptions, Uses, P/V Ratio, BEP, BE Chart, Margin of Safety and Problems.

IV. **Pricing Practices and Strategies** (12 hours): Price – Pricing, Pricing Policy, Objectives and Determinants of Pricing Policy, Pricing Methods - Marginal Cost Pricing, Target Rate Pricing, Product Line Pricing, Administered Pricing, Competitive Bidding, Dual Pricing, Transfer Pricing; Price Discrimination - Requirements, Types and Dumping Strategies; Pricing over Product Life Cycle - Skimmed Pricing, Penetration Pricing, Product Line Pricing and Price Leadership; Linear Programming Problems – Problems on Profit Maximization and Cost Minimization using Graphic Method with two Variables.

V. **Location of a Firm** (10 hours): Locating the Firm, Basic Principles, Selecting an Industrial Location, Primary and Secondary Factors; Sources of Capital, Internal and External Sources; Risk and Uncertainty – Concepts, and Investment Decisions under Uncertainty (Models).

Skill Development Activities:

(1) A case study on decision making under market uncertainties
(2) A practical example with graphical presentation of Elasticity of Demand
(3) Construct a table with imaginary figures showing the relationship of Fixed Cost, Variable Cost, Total Cost, Average Fixed Cost, Average Variable Cost, Average Cost and Marginal Cost.
(4) Practical analysis of product life cycle of a product
(5) List out factors to be considered for location of a new firm

Recommended Books for Reference:

(1) Dr. B. Mariyappa: Market Behaviour and Cost Analysis, Himalaya Publishing House, New Delhi
(2) P L Mehta: Managerial Economics, Sultan Chand & Sons, New Delhi
(3) D. M. Mithani: Managerial Economics, Himalaya Publishing House, New Delhi
(4) R. L Varshney and K.L Maheshewari: Managerial Economics, Sultan Chand & Sons, New Delhi
(5) H. L Ahuja: Business Economics, S. Chand & Company Ltd., New Delhi
(6) Reddy and Appananiah: Economics for Business
(7) K. M. Pandey and others: Economics for Managerial Decisions
(8) K P M Sundaram: Micro Economics, Sultan Chand & Sons, New Delhi
(9) M L Jhingan & J K Stephen: Managerial Economics, Vrinda Publishing (P) Ltd, Delhi.
(10) Manoj Kumar Mishra: Managerial Economics, Voyu Education of India, New Delhi

B.Com, Semester – II

Course – 203: Financial Accounting – II

Course Objective: To acquaint students with the different accounting practices in the company

Pedagogy: combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Hire Purchase System** (16 hours): Meaning of Hire Purchase and Installment Purchase System; Differences between Hire Purchase and Installment Purchase, Important Definitions – Hire Purchase Agreement, Hire Purchase Price, Cash Price,

Hire Purchase Charges, Net Hire Purchase Price, Net Cash Price; Calculation of Interest, Calculation of Cash Price; and Journal Entries and Ledger Accounts in the books of Hire Purchaser and Hire vendor (Asset Accrual Method only).

II. **Departmental Accounts** (8 hours): Meaning, Objectives, Basis of Allocation of Expenses, Trading and Profit and Loss Account in Columnar Form and Balance Sheet.

III. **Branch Accounts** (14 hours): Introduction, Meaning, Objectives, Types of Branches - Dependent Branches, Features; Supply of Goods at Cost Price and Invoice Price; Branch Account in the books of Head Office, Debtors System only and Problems.

IV. **Fire Insurance Claims** (10 hours): Introduction, Need, Steps for ascertaining Fire Insurance Claim, Treatment of Salvage, Average Clause, Treatment of Abnormal Items, Computation of Fire Insurance Claims and Problems on Loss of Stock.

V. **Royalty Accounts** (16 hours): Meaning and Definition, Technical Terms – Royalty, Landlord, Tenant, Minimum Rent, Short Workings, Recoupment of Short Working, Recoupment within the life of the Lease, Treatment of Strike and Stoppage of Work, Accounting Treatment in the books of Lessee and Lessor, and Journal Entries and Ledger Accounts including Minimum Rent Account.

Skill Development Activities:

(1) Collect Hire Purchase Agreement – analyze and prepare a note on the same
(2) List out the basis of apportionment of common expenses
(3) Collect transactions relating to any branch and prepare a Branch Account
(4) Prepare a Claim Statement with imaginary figures to submit to insurance company
(5) Collect Royalty Agreement with regard to any suitable situation – analyze and prepare a note on the same

Recommended Books for Reference:

(1) J Madegowda and Dr Giridhar, K V, Advanced Financial Accounting (Volume – II), Himalaya Publishing House, Mumbai
(2) Dr. B. Mariyappa, Advanced Financial Accounting, HPH
(3) Arulanandam and Raman, Financial Accounting – I, HPH
(4) Dr. S. N. Maheswari: Financial Accounting, Vikas Publications
(5) S P Jain and K. L. Narang, Financial Accounting - I, Kalyani Publishers
(6) Radhaswamy and R. L. Gupta, Advanced Accounting , Sultan Chand
(7) Soundarrajan and K. Venkataramana, Financial Accounting, SHBP

B.Com, Semester – II

Course – 204: Human Resource Management

Course Objective: To acquaint students with different dimensions of HRM in the organizations

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Human Resource Management** (12 hours): Meaning and Definition of HRM, Evolution of HRM in India, Scope, Objectives, Concepts, Functions and its Strategic Role, and Recent trends in HRM and HRD.

II. **Employment and Development** (12 hours): Human Resource Planning, Job Analysis and Job Design, and Recruitment and Selection Process including E–Recruitment and Selection.

III. **Executive Development** (14 hours): Meaning of Training, Need for Training, Importance, Steps in Training Programme, Methods of Training. Performance

Appraisal – Terminology Used, Evaluation Process, Methods and Problems.

IV. **Compensation Management** (14 hours): Meaning, Nature and Purpose, Wage Levels and Structures, Wage Determination Process, Theory of Wages, Principles and Factors influencing Wage and Salary Structure and Administration, Rewards and Incentives.

V. **Human Relations** (12 hours): Meaning, Importance, Objectives, Motivation Theories, Employee Morale, Communication, Leadership, Employee Welfare, Health and Safety, Maintenance of HR Data Base, Challenges and Opportunities in Globalized Era, and Outsourcing of HR Functions.

Skill Development Activities:

(1) Draft an advertisement for recruitment of candidates for an organization
(2) Prepare a report for training procedure followed in an organization of your choice
(3) Draft a format of performance appraisal of an employee
(4) List out wage and salary structure of any five companies
(5) Write a model of pay roll accounting of a company of your choice
(6) List out the measures provided under Labour Act for employee welfare, health and safety

Recommended Books for Reference:

(1) Dr. K. Ashwathappa, Human Resource Management – HPH
(2) Dr. Appanaiah, Human Resource Management, HPH
(3) Rao and T.V. Verma, Human Resource Development
(4) Jean Marleen, Performance Oriented Human Resource Development
(5) Lalitha Balakrishna and Others, Human Resource Development

B.Com, Semester – II
Course – 205: Mathematics for Business

Course Objective: To acquaint students with the application of mathematical techniques in modern business

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Theory of Indices** (6 hours): Introduction, Meaning of Index, Basic Laws of Indices (statement only), Definition of Zero Index, Fractional Index and Negative Index and Problems on Simplification.

II. **Progressions** (8 hours): Arithmetic Progression, Finding the n^{th} Term of AP and Sum to n^{th} Term of AP; Insertion of Arithmetic Mean; Geometric Progression – Finding the n^{th} Term of GP and Sum to n^{th} Term GP and Insertion of Geometric Mean.

III. **Mathematics of Finance, Ratios, Proportions and Variations** (14 hours): Simple Interest, Problems on Simple Interest, Compound Interest, Annuities, Present and Future Value of Annuity, Discounting Bills of Exchange (Present Worth, Future Face Value, Trade Discount and Banker Discount, Bankers Gain and Amount Receivable); Equality of Ratios; Proportions – Fourth Proportional – Third Proportional and Mean Proportional – Continued Proportion, Direct and Inverse Proportions, Problems; Variations - Problems on Speed, Time and Work Completion.

IV. **Theory of Sets** (10 hours): Meaning, Elements of a Set, Methods of Describing a Set, Types of Sets and Operations, Demargan's Laws Venn Diagram and their Application to Theory of Sets.

V. **Theory of Equations** (14 hours): Simple Linear Equations, Simultaneous Linear Equation (Elimination, Substitution and Cross Multiplication Methods only),

Quadratic Equation, Pure Quadratic, General Form of Quadratic Equations, Factorization and Sridharacharya's Methods and Problems.

VI. **Matrices and Determinants** (12 hours): Meaning of Matrix, Types of Matrices, Operations of Addition, Subtraction and Multiplication of Matrices, Problems, Transpose of A Matrix, Determinants of a Square Matrix, Minor of an Element, Co–Factor of an Element, Ad Joint of a Square Matrix, Singular and Non–singular of a Square Matrix, Inverse of a Square Matrix. Solutions of System of Linear Equations in two Variables using Cramer's Rule and Problems.

Skill Development Activities:

(1) Collect details from your nearest trading concern regarding normal discount and prepare a note on the same
(2) Collect information from a financial company or firm regarding rate of interest charged on advances and deposits and how the bills are discounted by the business firms and bands - prepare a note on the same
(3) Develop an amortization table for loan amount – EMI Calculation
(4) Secondary Overhead Distribution Summary using Simultaneous Equations Method
(5) Preparation of Bank Statement
(6) Application of Matrix in business problems

Recommended Books for Reference:

(1) Dr. Sancheti & Kapoor: Business Mathematics and Statistics, Sultan Chand
(2) Zamarudeen: Business Mathematics, Vikas
(3) R.S Bhardwaj :Mathematics for Economics & Business
(4) Madappa, Mahadi Hassan, M. Iqbal Taiyab, Business Mathematics
(5) G.R. Veena and Seema, Business Mathematics and Statistics, I. K. Intl Publishers

B.Com, Semester – II
Course – 206: Indian Financial System

Course Objective: To acquaint students with the requisite knowledge about present Indian Financial System

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Financial System** (12 hours): Meaning, Role and Classification of Financial System, Organizational Structure of Indian Financial System, Major Components - Financial Institutions, Intermediaries and Financial Instruments.

II. **Financial Markets in India** (16 hours): Capital Market, Role and Importance, Development Initiatives and Reforms – Narasimham Committee Reports 1991 and 1998; Primary Market - Meaning, Instruments, Players and Problems; Secondary Market – Meaning, Function; Stock Exchange, Listing of Securities and Benefits, Types of Securities, Types of Dealings. Indian Stock Exchange (BSE, NSE, OTCET) Online Trading, and Demat Accounting.

III. **Money Market and Regulatory Institutions** (12 hours): Meaning, Features, Organized and Unorganized Money Market Instruments – Treasury Bills, Certificate of Deposits, Commercial Papers, Call Money, Commercial Bills; Emerging Structure of Indian Money Market; Reserve Bank of India (RBI) - Objectives and Functions; Monitory Policy of RBI, SEBI and IRDI – Role and Functions.

IV. **Co-operative Banking and Non-Banking Financial Institutions** (12 hours): Evaluation of Co-operative as Financial Institutions in India, Structure, Role and

Importance of Co-operative Banks, Agricultural and Non-agricultural Co-operative Banks, NBFIs – Importance, Role and Types of NBFIs In India, IDBI, ICICI, SFCs ,SIDCs, LIC And NABARD.

V. **Financial Services** (12 hours): Meaning, Importance of Financial Services, Insurance, Mutual Funds, Lease Finance, Merchant Banking, Venture Capital Financing, Factorizing, Credit Rating Agencies, Micro Finance and Self Help Groups, Financial Inclusion Programs in India.

Skill Development Activities:

(1) Draft a chart showing the financial services in the Indian Financial System
(2) List the instrument traded in the financial markets
(3) Collect and record the foreign exchange rates of different currencies
(4) Collect the different schemes of mutual funds offered by various financial institutions
(5) Make a list of institutions providing housing and vehicle finance in your area

Recommended Books for Reference:

(1) Principles of Bank Management by Vasantdesai, Himalaya Publishing House
(2) Indian Financial System by Bhartiv, Pathak, Pearson Education
(3) Financial Markets and Services, E. Gordon and K. Natarajan, Himalaya Publishing House
(4) Indian Financial System, K Gupta, N. Garwal, Kalyani Publications.
(5) The Indian Financial System – Markets, Institutions, and Services, Pearson, New Delhi
(6) Financial Institutions and Markets, Growth and Innovation, Bhole L. M: Tata McGraw-Hill, New Delhi

B.Com, Semester – III

Course – 303: Corporate Accounting – I

Course Objective: To acquaint students with the procedure of preparing the accounts of corporate enterprises with the help of principles and regulations

Pedagogy: combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Profit Prior To Incorporation** (10 hours): Meaning, Calculation of Time Ratio, Sales Ratio and Weighted Ratio, Treatment of Capital and Revenue Expenditure, and Ascertainment of Pre-incorporation and Post-incorporation Profit by preparing Profit and Loss Account and Balance Sheet.

II. **Valuation of Shares** (8 hours): Meaning, Need for Valuation of Shares, Factors affecting Valuation of Shares, Methods of Valuation - Intrinsic Value Method, Yield Method & Earning Capacity Method and Calculation of Fair Value of Shares.

III. **Valuation of Goodwill** (8 hours): Meaning, Circumstances of Valuation of Goodwill, Factors influencing the Value of Goodwill, Methods of Valuation of Goodwill - Average Profit Method, Super Profit Method, Capitalization of Average Profit Method, Capitalization of Super Profit Method, and Annuity Method and Problems.

IV. **Company Final Accounts** (20 hours): Statutory Provisions regarding preparation of Company Final Accounts, Treatment of Special Items – Tax Deducted at Source, Advance Payment of Tax, Provision for Tax, Depreciation, Interest on Debentures; Dividends – Rules regarding payment of Dividends, Transfer to Reserves; Preparation of Profit and Loss Account, and Balance Sheet in Vertical Form (as per Companies Act, 2013).

V. **Underwriting of Shares and Debentures** (12 hours): Meaning, Underwriting

Commission; Underwriter – Functions, Advantages of Underwriting, Types of Underwriting – Marked and Unmarked Applications; – Problems on Underwriting including Firm Underwriting.

VI. **Recent Trends in Company Accounts** (6 hours): Buy Back of Shares, Issue of Bonus Shares and Right Issue and Problems

Skill Development Activities:

(1) Collect and fill the share application form of a limited company
(2) Collect Prospectus of a company and identify its salient features, and prepare a note on the same
(3) Collect annual report of a company and List out its assets and Liabilities
(4) Collection of latest final accounts of a company and find out the intrinsic value of shares
(5) Collect the annual reports of company and calculate the value of goodwill under different methods

Recommended Books for Reference:

(1) J Madegowda, Dr Giridhar, K V, and Inchara P M Gowda, Corporate Accounting (Financial Accounting, Volume – III), Himalaya Publishing House, Mumbai
(2) Dr. B. Mariyappa, Corporate Accounting, HPH
(3) Arulanandam & Raman, Corporate Accounting – II
(4) Dr. S. N. Maheswari, Financial Accounting
(5) S. P. Jain and K. L. Narang, Corporate Accounting
(6) S. Bhat- Corporate Accounting
(7) S P Iyengar, Advanced Accountancy, Sultan Chand
(8) R L Gupta, Advanced Accountancy
(9) Shukla and Grewal, Financial Accounting

B.Com, Semester – III
Course – 304: Marketing Management

Course Objective: To acquaint students with different dimensions of present day marketing management

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Marketing** (10 hours): Meaning and Definition, Goals, Concepts of Marketing, Approaches to Marketing and Functions of Marketing.

II. **Marketing Environment** (Macro) (10 hours): Meaning, Demographic, Economic, Natural, Technological, Political, Legal, and Socio-Cultural Environment.

III. **Marketing Mix** (22 hours): Meaning, Elements, Product, Product Mix, Product Line, Product Lifecycle, Product Planning, New Product Development, Failure of new Product; Branding, Packing and Packaging; Pricing – Objectives, Factors influencing Pricing Policy and Methods of Pricing; Physical Distribution – Meaning, Factors affecting Channel Selection, Types of Marketing Channels; Promotion – Meaning and Significance of Promotion, Personal Selling and Advertising.

IV. **Market Segmentation and Consumer Behavior** (10 hours): Meaning and Definition, Bases of Market Segmentation, Requisites of Sound Market Segmentation; Consumer Behaviour – Factors influencing Consumer Behaviour and Buying Decision Process.

V. **Customer Relationship Management and Recent Trends in Marketing** (12 hours): Meaning and Definition, Role of CRM, Advantages and Disadvantages, Consumer

Protection Act 1986 and Recent Trends in Marketing; e-Business –Tele-Marketing, M-Business, Green Marketing, Relationship Marketing; Retailing – Concept Marketing and Virtual Marketing.

Skill Development Activities:

(1) Identify the product of your choice and describe in which stage of the product life cycle it is positioned
(2) Suggest strategies for development of a product
(3) Study of consumer behavior for a product of your choice
(4) Develop an advertisement copy for a product
(5) Prepare a chart for distribution network for different products

Recommended Books for Reference:

(1) Philip Kotler, Marketing Management
(2) Bose Biplab, Marketing Management
(3) Bholanath Datta, Marketing Management
(4) J.C. Gandhi, Marketing Management
(5) Ramesh and Jayanti Prasad: Marketing Management, I.K. International
(6) Stanton W.J. Michael and Walker, Fundamentals of Management.
(7) P N Reddy and Appannaiah, Marketing Management
(8) Sontakki, Marketing Management

B.Com, Semester – III
Course – 305: Small Business Management

Course Objective: To acquaint students with different aspects managing small business units
Pedagogy: combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction** (10 hours): Meaning of Small Business, Small Business Management, Importance, Role, Characteristics and Types of Small Business, Scope and Role of Government in promoting Micro, Small Scale Industries.
II. **Woman Entrepreneurs** (12 hours): Concept, Types of Woman Entrepreneurs, Suitability of Business, Problems faced by Woman Entrepreneurs in India, Measures taken by the Governments for the development of Woman Entrepreneurs.
III. **Rural Entrepreneurs** (10 hours): Definitions, Risk faced by Rural Entrepreneurs, Strategies for development of Rural Entrepreneurship, and Scope of Rural Entrepreneurship.
IV. **Project Identification and Formulation** (12 hours): Meaning of Project, Project Identification and Project Reports, Importance of Project Report, Contents of Project Report, and General Format of Project Report.
V. **Problems of Small Scale Industries** (12 hours): Types of Problems, Causes and Remedies, Sickness in Small Scale Industries, Symptoms, Reasons for Sickness and Remedial Measures.
VI. **Institutions engaged in Financing Small Business** (8 hours): SIDBI, ICICI, DICs, IDBI, KSFC, RRBs, NABARD, Commercial Banks and their Functions.

Skill Development Activities:

(1) Visit five small scale units in your area and collect the details regarding the nature of business, sources of capital, employees and raw materials – prepare a note
(2) Visit DIC and list out the schemes of Government of Karnataka for rural industries
(3) Visit the financial institutions in your area and collect the information about the loan

sanctioned by them
(4) Collect the details about the institutions engaged in providing training for small entrepreneurs
(5) Prepare a simple project report required to start a small unit

Recommended Books for Reference:

(1) Entrepreneur Development, K Natarajan
(2) Small Scale Industries and Entrepreneurship, Vasant Desai
(3) Small Scale Industries and Entrepreneurship, S. V Murthy
(4) Entrepreneurial Development, Arora

B.Com, Semester – III
Course – 306 Corporate Administration

Course Objective: To familiarize students with the essentials of corporate administration
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Indian Companies Act, 1956** (14 hours): Company –Definition and Characteristics, Kinds of Companies - Private, Public Company, Statutory Company, Foreign Company, Holding Company, Subsidiary Company, and Licensed Companies, Government Company, Foreign Company, Global Company, Listed Company, Body Corporate, Corporate Veil and Lifting of Corporate Veil.

II. **Formation of a Company**(14 hours) Promoter - Meaning, Functions, Fiduciary Position and Remuneration, Stages Involved in formation (in brief), Basic Documents of a Company - Memorandum Association, Articles of Association, Prospectus, and Statement in Lieu of Prospectus, and Misleading Prospectus and its Consequences.

III. **Corporate Administration** (8 hours): Company Secretary – Meaning and Definition of Company Secretary, Legal Position, Qualification and Appointment, Duties, Rights and Liabilities of a Company Secretary; Managing Director - Qualification, Powers, Duties and Liabilities.

IV. **Shares and Membership of a Company Equity** (16 hours): Shares, Kinds of Shares - Equity Shares, (including Sweat Equity Shares) and Preferences Shares Issue and Allotment of Shares, Legal Rules for Allotment of Shares, Essentials of Valid Allotment, Shares Certificate – Physical Form and Electronic Form, Buyback of Shares – Legal Provisions Relating to Buy Back of Shares; Transfer and Transmission of Shares – Distinction, Electronic Transfer, Demat Account, Membership - Member and Share Holder – Distinction, Mode of Acquiring Membership, and Register of Members - Contents And Closer.

V. **Corporate Meetings** (8 hours): Meetings and Types – Statutory Meeting, Board Meetings, Annual General Meeting, Extra-Ordinary General Meeting – Statutory Requirements of Valid Meeting - Notice of a Meeting, Agenda, Quorum, Proxy, Resolutions–Ordinary and Special Resolutions, and Distinction Between Ordinary and Special Resolutions; and Meaning of Minutes and its Contents.

VI. **Highlights of Company Act 2013** (4 hours): New Concepts – One-man Company, Women Director, Corporate Social Responsibility and Other Amendments (brief).

Skill Development Activities:

(1) Drafting of Memorandum of Association
(2) Drafting of Articles of Association

(3) Draft the following – Notice of annual general meeting, Extra ordinary general meeting and board meetings
(4) Drafting resolutions of meetings - Annual general meeting, extra ordinary general meeting
(5) Collect and fill Demat account opening form

Recommended Books for Reference:

(1) Company Law and Secretarial Practice – M.C. Kuchal
(2) Company Law and Secretarial Practice- N. D. Kapoor
(3) Elements of Corporate Law, S.N Maheshwari
(4) Corporate administration- K Venkataramana
(5) The companies Act 2013, Taxman
(6) Business Law- B.S Raman
(7) Corporate Administration Dr. B.G Bhaskar, K.R Mahesh Kumar

B.Com, Semester – III
Course – 307: Environment Science

Course Objective: To acquaint students with the ecological structure of environment
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **The Multidisciplinary Nature of Environmental Studies** (2 hours): Meaning, Definition, Scope and Importance, and Need for Public Awareness.
II. **Natural Resources** (8 hours): Renewable and Non-Renewable Resources; Natural Resources and Associated Problems; Forest Resources - Use and Over-exploitation, Deforestation, Case Studies; Timber Extraction, Mining Dams and their effects on Forests and Tribal People; Water Resources - Use and Over-utilization of Surface and Ground Water, Floods, Drought, Conflicts over Water; Dams - Benefits and Problems; Mineral Resources - Use and Exploitation, Environmental effects of Extraction and using Mineral Resources, Case Studies; Food Resources - World Food Problems, Changes caused by Agriculture and Overgrazing, Effects of Modern Agriculture, Fertilizer-Pesticide Problems, Water Logging, Salinity, Case Studies; Energy Resources - Growing Energy Needs, Renewable and Non-Renewable Energy Sources, Use of Alternate Energy Sources, Case Studies; Land Resources - Land as a Resource, Land Degradation, Man-induced Landslides, Soil Erosion and Desertification, Role of an individual in Conservation of Natural Resources; and Equitable Use of Resources for Sustainable Lifestyles.
III. **Ecosystems** (6 hours): Concept of an Ecosystem, Structure and Function of an Ecosystem, Producers, Consumers and Decomposers, Energy Flow in the Ecosystem, Ecological Succession, Food Chains, Food Webs and Ecological Pyramids, Introduction, Types, Characteristic Features, Structures and Functions of the Following Ecosystem - Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem, Aquatic Ecosystem (Ponds, Streams, Lakes, Rivers, Oceans, Sanctuaries).
IV. **Biodiversity and its Conservation** (8 hours): Introduction, Definition, Genetic, Species and Ecosystem Diversity, Biogeographically Classification of India, Value of Biodiversity, Consumptive Use, Productive Use, Social Ethical Aesthetic and Option Values; Biodiversity at Global, National and Local Levels; India as a Mega–Diversity Nation; Hot–Spots of Biodiversity; Threats to Biodiversity; Habital Loss, Poaching of Wildlife, Man-Wildlife Conflicts, Endangered and Endemic Species of India,

Conservation of Biodiversity, in-Situ and Ex-Situ Conservation of Biodiversity.

V. **Environmental Pollution** (8 hours): Meaning, Definition, Causes, Effects and Control Measures of Air Pollution, Water Pollution, Soil Pollution, Marine Pollution, Noise Pollution, Thermal Pollution, and Nuclear Pollution; Solid Waste Management - Causes, Effects and Control Measures of Urban and Industrial Wastes; Role of an individual in prevention of Pollution, Pollution Case Studies; Disaster Management - Floods, Earthquake, Cyclone and Landslides.

VI. **Social Issues and the Environment** (12 hours): From Unsustainable to Sustainable Development, Urban Problems related to Energy. Water Conservation, Rain Water Harvesting, Water Shed Management, Resettlement and Rehabilitation of People - Its Problems and Concern, Case Studies; Environmental Ethics - Issues and Possible Solutions, Climate Change, Global Warming, Acid Rain Ozone Layer Depletion, Wasteland Reclamation Consumerism and Waste Products, Environment Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and Control of Pollution) Act, Wild Life Protection Act, Forest Conservation Act, Issues involved in Enforcement of Environmental Legislation, and Public Awareness.

VII **Human Population and the Environment** (6 hours): Population Growth, Variation among Nations, Population Explosion – Family Welfare Programme, Environment and Human Health, Human Rights, Value Education, HIV/AIDS, Women and Child Welfare, Role of Information Technology in Environment and Human Health, and Case Studies

Skill Development Activities:

(1) Visit to a local polluted site -urban/rural/industrial/agriculture
(2) Visit to local area to document environmental assets – rivers/forests/grassland/hill/ mountain
(3) Study of common plants, insects, birds
(4) Study of simple ecosystems - pond, river, hill, slopes etc (field work equal to 5 lecture hours)
(5) Each student has to submit a field report on any one of the above topics which forms the basis for evaluation of field work

Recommended Books for Reference:

(1) Aggarwal K.C, Environmental Biology, Nidhi Publications Ltd, Bikaner
(2) Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd
(3) Brunnet R.C, Hazardous Waste incineration, McGraw Hill Inc
(4) Clark R.S. marine Pollution, Canderson Press, Oxford (TB)
(5) De A.K. Environmental Chemistry, Wiley Eastern ltd.
(6) Down to Earth, Centre for Science and Environment
(7) Gleick H.P, Water in Crisis, Pacific Institute for Studies in Dev. Environment and Security, Stockholm Env. Instt, Oxford Univ. Press
(8) Hawkins R.E. Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay
(9) Heywood VII and Watson, R.T. 1995, Global Biodiversity Assessment, Cambridge Univ. Press
(10) Jadhav II and Bhosale V.M. 1995, Environmental Protection Laws, Himalaya Publishing House, Delhi
(11) Sharma B.K. 2001, Environmental Chemistry, Goel Pub. House, Meerut
(12) Trivedi. R.K, Handbook of Environmental Laws Rules, Guidelines, Compliances and Standards Vol I and II Enviro Media

(13) Wagner K.D, Environmental Management, W.B. Saunders Co Philandering, USA

B.Com, Semester – IV
Course – 403: Corporate Accounting – II

Course Objective: To enable the students to understand principles and procedure of preparing accounts of specialized corporate sectors

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 5 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Liquidation of Companies** (8 hours): Meaning, Types of Liquidation, Order of Payment, Calculation of Liquidator's Remuneration, and Preparation of Liquidators Final Statement of Account.

II. **Banking Company Final Accounts** (16 hours): Business of Banking Companies, Some Important Provisions of Banking Regulation Act of 1949 – Minimum Capital and Reserves, Restriction on Commission, Brokerage, Discounts, Statutory Reserves – Cash Reserves, Books of Accounts, Special features of Bank Accounting, Final Accounts - Balance Sheet and Profit and Loss Account – Interest on Doubtful Debts – Rebate on Bill Discounted, Acceptance, Endorsement and other Obligations and Problems as per New Provisions

III. **Life Insurance Company Final Accounts** (20 hours): Meaning of Life Insurance, Accounting Concepts relating to Insurance Companies, Preparation of Final Accounts of Life Insurance Companies – Revenue Account and Balance Sheet, and Calculation of Profit by preparing Valuation Balance Sheet.

IV. **General Insurance Company Final Accounts** (14 hours): Meaning of General Insurance, Differences between Life Insurance and General Insurance – Fire Insurance, Marine Insurance and Accident Insurance; and Preparation of Revenue Account, Profit and Loss Account and Balance Sheet (vertical format).

V. **Social Responsibility Accounting** (6 hours): Meaning and Definition, Features and Objectives of Social Responsibility Accounting (theory only).

Skill Development Activities:

(1) Collect and fill the share application form of a limited company
(2) Collect Prospectus of a company and identify its salient features
(3) Collect annual report of a company and list out its assets and liabilities
(4) Collection of latest final accounts of a company and find out the intrinsic value of shares
(5) Collect the annual reports of a company and calculate the value of goodwill under different methods

Recommended Books for Reference:

(1) J Madegowda, Dr Giridhar, K V, and Inchara P M Gowda, Advanced Financial Accounting (Volume – IV), Himalaya Publishing House, Mumbai
(2) Arulanandam and Raman, Corporate Accounting –II
(3) Anil Kumar, Dr B. Mariyappa, Financial Accounting, HPH
(4) Dr. S.N. Maheswari, Financial Accounting
(5) Soundarajan. A and K. Venkataramana, Corporate Accounting, VBH
(6) S. P. Jain and K. L. Narang, Corporate Accounting
(7) S. Bhat Corporate Accounting.
(8) S P Iyengar, Advanced Accountancy, Sultan Chand
(9) R L Gupta, Advanced Accountancy.

(10) Shukla and Grewal, Financial Accounting

B.Com, Semester – IV

Course – 404: Management of Banking Operations

Course Objective: To acquaint students with the different banking operations

Pedagogy: combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Banker and Customer** (16 hours): Introduction, Meaning and Definition of Banker and Customer, General and Special relationship between Banker and Customer, Special types of Customers – Minor, Joint Account, Partnership, Joint Stock Company, Trustee, Clubs and Associations.

II. **Types of Accounts and Lending of Fund** (14 hours): Savings Bank Account, Current Account and Fixed Deposit Account – Features, Procedure for opening these Accounts; Lending of Funds – Different types of Loans, Overdrafts, Discounting of Bills, Cash Credit and Principles of Bank Lending.

III. **Negotiable Instruments** (14 hours): Introduction, Meaning and Definition, Features, Kinds of Negotiable Instruments - Meaning, Definition and Features of Promissory Notes, Bills of Exchange and Cheques; Crossing of Cheques, Types of Crossing, Material Alteration, Endorsements - Meaning, Essentials and Kinds of Endorsement.

IV. **Banking Operations** (12 hours): Collecting Banker – Meaning, Duties and Responsibilities of Collecting Banker, Holder for Value, Holder in Due Course, Statutory Protection to Collecting Banker; Paying Banker – Meaning, Precautions, Statutory protection to the Paying Banker, Dishonor of Cheques, Grounds for Dishonor, and Consequences of wrongful Dishonor of Cheques.

V. **Banking** (8 hours): New Technology in Banking, e-Services, Debit and Credit Cards, Internet Banking, ATM, Electronic Fund Transfer, MICR, RTGS, NEFT, DEMAT. e–Banking, Core Banking and Mobile Banking.

Skill Development Activities:

(1) Collect and fill account opening form of SB Account or Current Account
(2) Collect and fill pay in slip of SB Account or Current Account
(3) Draw specimen of Demand Draft
(4) Draw different types of endorsement of cheques
(5) Draw specimen of Travellers Cheques/Gift cheques/Credit cheques
(6) List various customer services offered by atleast two banks of your choice

Recommended Books for Reference:

(1) Gordon and Natarajan, Banking Theory Law and Practice, HPH
(2) S. P Srivastava, Banking Theory and Practice, Anmol Publications
(3) Tandan M.L, Banking Law and Practice in India, Indian Law House
(4) Sheldon H.P, Practice and Law of Banking
(5) K. Venkataramana, Banking Operations, SHBP
(6) Kothari N. M, Law and Practice of Banking
(7) Neelam C Gulati, Principles of Banking Management
(8) Maheshwari. S.N, Banking Law and Practice, Vikas Publication
(9) Shekar. K.C, Banking Theory Law and Practice, Vikas Publication
(10) Dr. Alice Mani, Banking Law and Operation, SBH

B.Com, Semester – IV
Course – 405: Computer Applications in Business

Course Objective: To enable the students to learn the Accounting Package Tally and SQL Programs.

Pedagogy: combination of lectures, assignments, practical and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction** (10 hours): Meaning and Definition, Characteristics of Computers, Types of Computers, Application of Computers in Business Operating System – Meaning and Functions of Operating System; Introduction to Windows OS, Computer Memory – Primary and Secondary, RAM and ROM.

II. **Tally ERP 9.0** (14 hours):Introduction, Features, Advantages, Basic Rules - Real, Personal and Nominal Accounts, Assets and Liabilities, Debtors and Creditors, Menus in Tally, Company Creation, Company Info Menu, Creating Inventory of Products, Company Features (F11) and Configuration of Tally (F12), Gateway of Tally Menu, Master, Transaction, Import and Report.

III. **Software Support for GST** (8 hours): Introduction, Features, Concept, Supporting Software, GST Working Principles in Tally, Power and Functions, GST Group Creation in Tally, GST adapting in Goods or Stock Creation Section, Creating CGST, SGST, IGST, Ledgers, and GST Entry System in Tally.

IV. **Accounting Ledger and Vouchers** (12 hours): Predefined Accounting Groups, Primary Groups and Sub Groups, Steps for Creating - Alter and Delete Ledgers and Groups, Types of Ledgers, Types of Vouchers, Rules of Vouchers Entry, Balance Sheet, Profit and Loss Account, Trial Balance, Stock Summary, Computation of GST and TDS, and Exercises for making Voucher Entries.

V. **Introduction to ORACLE** (14 hours): SQL Meaning, Concepts, Commands, Data Definition Commands, Data Manipulation Commands, SQL*Plus Editing Commands, Create Table, Insert Integrity Constraints, Primary Key, Secondary Key, Aggregate Functions, Select, Delete Form, and Update Order Commands.

VI. **SQL *Plus Reports** (6 hours): Additional Operators: Like Between, in, Referential Integrity, on Delete Cascade, Join Operation - Inner Join, Outer Join, Alter Table, SQL Clauses - Where Clause, Order By, Group by Clause, Having Clause, Sub Queries, Introduction to PL/SQL, and Simple Programs.

Skill Development Activities:

(1) Write steps for creating a new company in Tally
(2) Solve the two exercise problems with GST
(3) Simple Programs - Mathematical Calculation, Simple and Compound Interest, Area of Circle, Triangle, Biggest and Smallest number
(4) Write down the student data base table in SQL Query
(5) Steps for creating GST in Tally with example

Recommended Books for Reference:

(1) Ashok K Nandani, Advanced Tally 9.0 ERP, 2017 Edition.
(2) Niranjan Shrivastava, Computer Application In Management (Dreamtech Press)
(3) P. Mohan, Computer Application Business (Himalaya Publication)
(4) Sanjay Saxena, A First Course in Computers (Vikas Publishing House)
(5) Ivan Bayross: Oracle – 7 (BPB Publications)

B.Com, Semester – IV

Course – 406: Business Regulations

Course Objective: To acquaint students with e different business laws and their interruptions
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 3 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Business Laws** (8 hours): Introduction, Nature of Law, Meaning and Definition of Business Laws, Scope and Sources of Business Laws.

II. **Contract Laws** (18 hours): Indian Contract Act, 1872 - Definition of Contract, Essentials of a Valid Contract, Classification of Contracts, Discharge of Contracts, Remedies for Breach of Contract; Indian Sale of Goods Act, 1930 - Definition of Contract of Sale, Essentials of Contract of Sale, Conditions and Warrantees, Rights and Duties of Buyer, and Rights of an Unpaid Seller.

III. **Competition and Consumer Laws** (14 hours): The Competition Act, 2002 - Objectives of Competition Act, Features of Competition Act, CAT, Offences and Penalties under the Act, Competition Commission of India; Consumer Protection Act, 1986 - Definition of the Terms Consumer, Consumer Dispute, Defect, Deficiency, Unfair Trade Practices and Services; Rights of the Consumer under the Act, Consumer Redressal Agencies – District Forum, State Commission, and National Commission.

IV. **Economic Laws** (12 hours): Indian Patent Laws and WTO Patent Rules - Meaning of IPR, Invention and Non-Invention, Procedure to get Patent, Restoration and Surrender of Lapsed Patent, Infringement of Patent; FEMA 1999 - Objects of FEMA, Salient Features of FEMA, Definition of Important Terms - Authorized Person, Currency, Foreign Currency, Foreign Exchange, Foreign Security, Offences and Penalties.

V. **Environmental Law** (8 hours): Environment Protection Act, 1986 - Objects of the Act, Definitions of Important Terms - Environment, Environment Pollutant, Environment Pollution, Hazardous Substance and Occupier, Types of Pollution, and Rules and Powers of Central Government to Protect Environment in India.

Skill Development Activities:

(1) Prepare a chart showing sources of business laws and Indian Constitution Articles having economic significance
(2) Draft an agreement on behalf of a MNC to purchase raw materials indicating therein terms and conditions and all the essentials of a valid contract
(3) Draft an application to the Chief Information Officer of any government office seeking information about government spending
(4) Draft digital signature certificate
(5) Draft a complaint to District Consumer Forum on the deficiency of service in a reputed corporate hospital for medical negligence
(6) Collect leading cyber-crime cases and form groups in the class room and conduct group discussion
(7) Draft a constructive and innovative suggestions note on global warming reduction

Recommended Books for Reference:

(1) K. Aswathappa, Business Laws, HPH
(2) Bulchandni, Business Laws, HPH
(3) K. Venkataramana, Business Regulations, SHBP
(4) Kamakshi P and Srikumari P, Business Regulations, VBH
(5) N.D. Kapoor, Business Laws, Sultan Chand publications

(6) S.S Gulshan, Business Law
(7) S.C. Sharma, Business Law, I.K International Publishers
(8) Tulsion Business Law, TMH

B.Com, Semester – IV
Course – 407: Indian Constitution

Course Objective: To acquaint students with essential knowledge about Indian Constitution
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Framing of the Constitution and Major Features** (14 hours): Constituent Assembly at Work, Preamble and Salient Features, Citizenship, Fundamental Rights, Directive Principles of State Policy, and Fundamental Duties.
II. **Union and State Legislatures** (16 hours): Composition, Powers and Functions; Presiding Officers, Law Making Process, Committees of Parliament, Decline of Legislatures, and Reforms.
III. **Union and State Executive** (16 hours): President and Vice-President – Elections, Powers and Functions; Prime Minister and Council of Ministers – Powers and Functions; Governor, Chief Minister and Council of Ministers – Powers and Functions; and Debate over Parliamentary and Presidential Forms of Government.
IV. **Judiciary** (14 hours): Supreme Court and High Courts – Composition, Jurisdiction and Functions; and Judicial Activism.

Skill Development Activities:
(1) List out the powers and functions of different levels of government
(2) Understand the Union-State relations in India

Recommended Books for Reference:
(1) D.D. Basu, Introduction to the Indian Constitution
(2) A.S. Narang, Indian Constitution, Government and Politics
(3) Nani Palkhivala, We, the People, UBS Publishers, New Delhi
(4) A.G. Noorani, Indian Government and Politics
(5) J.C. Johari, Indian Government and Politics Vol. I and II, Vishal, New Delhi
(6) Gran Ville Austin, The Indian Constitution – Corner Stone of a Nation, Oxford, New Delhi
(7) M.U. Pylee, Constitutional Government in India
(8) K.K. Ghai, Indian Constitution

B.Com, Semester – V
Course – 501: Financial Management

Course Objective: To acquaint students with the principles of mobilizing and utilizing financial resources by the industrial enterprises
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Financial Management** (10 hours): Introduction – Meaning of Finance, Business Finance, Finance Function, Aims of Finance Function; Organization Structure of Finance Department, Financial Management, Goals of Financial Management, Financial Decisions, Role of Financial Manager, Financial Planning - Steps in Financial Planning, Principles of sound Financial Planning, and Factors influencing sound Financial Plans.

II. **Time Value of Money** (12 hours): Introduction – Meaning and Definition, Need, Future Value (Single Flow – Uneven Flow and Annuity), Present Value (Single Flow – Uneven Flow and Annuity), Doubling Period, Concept of Valuation - Valuation of Bonds, Debentures and Shares and Simple Problems.

III. **Capital Structure** (12 hours): Introduction – Meaning of Capital Structure, Factors influencing Capital Structure, Optimum Capital Structure, Computation and Analysis of EBIT, EBT, EPS, Leverages and Simple Problems.

IV. **Capital Budgeting** (16 hours): Introduction – Meaning and Definition of Capital Budgeting, Features, Significance, Process, Techniques - Payback Period, Accounting Rate of Return, Net Present Value, Internal Rate of Return and Profitability Index, and Simple Problems.

V. **Dividend Policy** (8 hours): Introduction – Meaning and Definition, Determinants of Dividend Policy, Types of Dividends, Bonus Share, Dividend Theories - M.M Model, Walter's Model and Gordon's Model and Problems.

VI. **Working Capital Management** (6 hours): Introduction, Concept of Working Capital, Significance of adequate Working Capital, Evils of excess or inadequate Working Capital, Determinants of Working Capital, Sources of Working Capital and Problems on determination of Working Capital.

Skill Development Activities:

(1) Draw the organization chart of finance function of a company
(2) Evaluate the NPV of an investment made in any one of the capital projects with imaginary figures for five years
(3) Capital structure analysis of companies in different industries
(4) Using imaginary figures, prepare an estimate of working capital requirements
(5) Calculate dividend under MM Model with imaginary figures

Recommended Books for Reference:

(1) Dr. B. Mariyappa, Financial Management, HPH
(2) S N Maheshwari, Financial Management, Sultan Chand
(3) Dr. Aswathanarayana T, Financial Management, VBH
(4) K. Venkataramana, Financial Management, SHBP
(5) Roy, Financial Management, HPH
(6) Khan and Jain, Financial Management, TMH
(7) S. Bhat, Financial Management
(8) Sharma and Sashi Gupta, Financial Management, Kalyani Publication
(9) I M Pandey, Financial Management. Vikas Publication
(10) Prasanna Chandra, Financial Management, TMH
(11) P.K Simha, Financial Management
(12) M. Gangadhar Rao and Others, Financial management

B.Com, Semester – V

Course – 502: Income Tax – I

Course Objective: To acquaint students with the application with principles and provisions of IT Act1961 relating to assessment

Pedagogy: Combination of lectures, assignments and group discussions.

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Brief History of Indian Income Tax** (10 hours): Brief History of Income Tax, Definition, Assessment Year, Previous Year (including Exceptions), Assesse, Person,

Income, Casual Income, Gross Total Income, Agricultural Income - Meaning and Classification of Capital and Revenue.

II. **Exempted Income** (12 hours): Introduction, Exempted Incomes U/S 10 - restricted to Individual Assesse.

III. **Residential Status** (12 hours): Residential Status of an Individual, Determination of Residential Status, Incidence of Tax and Problems.

IV. **Income from Salary** (16 hours): Meaning, Definition, Basis of Charge, Advance Salary, Arrears of Salary, Allowances, Perquisites, Provident Fund, Profits in Lieu of Salary, Gratuity, Commutation of Pension, Encashment of Earned Leave, Compensation for Voluntary Retirement; Deductions from Salary U/S 16 and Problems on Income from Salary.

V. **Deduction** (8 hours): Under Sections 80C to 80U--80C, 80CCD, 80D, 80DD, 80E, 80G, 80GG, 80GGA, 80QQB, 80U and Problems on 80 C to 80 G only.

VI. **Income Tax Authorities** (6 hours): Income Tax Authorities - Powers and Functions of CBDT, CIT and A.O.

Skill Development Activities:

(1) Form No. 49A (PAN) and 49B
(2) Filling of Income Tax Returns
(3) List of enclosures to be made along with IT returns (with reference to salary)
(4) Preparation of Form 16
(5) Computation of Income Tax and the Slab Rates
(6) Computation of Gratuity

Recommended Books for Reference:

(1) Dr. B. Mariyappa, Income Tax – I, HPH
(2) Dr. Vinod K. Singhania: Direct Taxes – Law and Practice, Taxman Publication
(3) B.B. Lal: Direct Taxes, Konark Publisher (P) ltd.
(4) Dr. Mehrotra and Dr. Goyal: Direct Taxes – Law and Practice, Sahitya Bhavan Publication
(5) Dinakar Pagare: Law and Practice of Income Tax, Sultan Chand and Sons
(6) Gaur and Narang, Income Tax
(7) Dr. V. Rajesh Kumar and Dr. R. K. Sreekantha, Income Tax – I, Vittam Publications
(8) 7 Lectures, Income Tax – I, VBH

B.Com, Semester – V

Course – 503: Business Statistics – I

Course Objective: To acquaint students with fundamental techniques and tools of business statistics

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Statistics** (10 hours): Meaning, Definitions, Functions, Scope and Limitations of Statistics and Distrust of Statistics.

II. **Data and its Collection** (12 hours): Types of Data – Primary and Secondary Data – Methods for Collection of Primary Data – Sources of Secondary Data – Classification – Meaning and Types; Tabulation – Meaning, Rules for Construction of Tables, Parts of Statistical Table and Problems on Tabulation.

III. **Diagrammatic and Graphic Representation of Statistical Data** (14 hours): Meaning, Types of Diagrams, Simple, Multiple, Subdivided and Percentage,

Histogram – Location of Mode through Histogram and Frequency Polygon; and Ogive Curves – Location of Median and Quartiles through Ogive Curves.

IV. **Measures of Central Tendency** (16 hours): Meaning and Definition, Types of Averages – Arithmetic Mean (Simple and Weighted), Median, Mode (excluding missing Frequency problems).

V. **Measures of Dispersion** (6 hours): Meaning, Absolute and Relative Measures of Dispersion, Types of Dispersion – Range, Quartile Deviation, Standard Deviation, and Co-Efficient of each Method.

VI. **Skewness** (6 hours): Meaning, Types of Skewness, Measures of Skewness, Absolute and Relative Measures of Skewness, Karl Pearson's Coefficient of Skewness and Bowley's Coefficient of Skewness.

Skill Development Activities:

(1) Draw a blank table showing different attributes
(2) Collect marks scored by 50 students in an examination and prepare a frequency distributions table
(3) Collect data relating to prices of shares of two companies for ten days and ascertain which company's share prices is more stable
(4) Collect the run scored by the two batsmen in ten one-day international cricket matches, find who is better run getter and who is more consistent
(5) Select 10 items of daily-consumed products and collect base year quantity, base year price and current year price. Calculate Cost of Living Index

Recommended Books for Reference:

(1) Anand Sharma, Statistics For Management, HPH
(2) S P Gupta: Statistical Methods- Sultan Chand, Delhi
(3) D.P Apte, Statistical Tools for Managers
(4) Dr. B N Gupta, Statistics (Sahityta Bhavan), Agra
(5) S.C Gupta: Business Statistics, HPH
(6) N.V.R Naidu : Operation Research I.K. International Publishers
(7) Ellahance: Statistical Methods, Kitab Mahal
(8) Sanchethi and Kapoor: Business Mathematics, Sultan Chand
(9) Veerachamy: Operation Research I.K. International Publishers
(10) S. Jayashankar: Quantitative Techniques for Management
(11) Chikoddi and Satya Prasad: Quantitative Analysis for Business Decision, HPH
(12) Dr. Alice Mani: Quantitative Analysis for Business Decisions - I, SBH

B.Com, Semester – V

Course – 504: Cost Accounting

Course Objective: To acquaint students with elements of cost and also the reconciliation procedure

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Cost Accounting** (8 hours): Meaning and Definition of Cost, Costing, Cost Accounting and Cost Accountancy, Objectives, Scope, Advantages and Limitations of Cost Accounting, Differences between Financial Accounting and Cost Accounting, Methods and Techniques of Cost Accounting.

II. **Elements of Cost** (12 hours): Cost Unit, Cost Centre, Classification of Costs, Problems on Cost Sheet (including Job and Batch Cost Sheet), Tenders and

Quotations.

III. **Material Cost Control** (12 hours): Materials - Meaning and Types, Material Cost Control - Meaning and Objectives, Purchase of Materials – Centralized and Decentralized Purchasing, Purchase Procedure, Stores Control - Meaning and Techniques, Fixation of Stock Levels, EOQ, ABC Analysis, VED Analysis, Just in Time, Perpetual Inventory System, Bin Card, Stores Ledger, Pricing of Material Issues - FIFO, LIFO, Simple Average and Weighted Average Methods, and Problems thereon.

IV. **Labour Cost Control** (12 hours): Labour - Meaning and Types; Cost Control, Time Keeping and Time Booking, Treatment of Idle Time and Over Time, Labour Turnover, Methods of Wage Payment - Time Rate, Piece Rate and Incentives Plans - Halsey Plan, Rowan Plan, Emerson's Efficiency Plan; Statement of Wage Sheet, and Problems thereon.

V. **Overhead Cost Control** (12 hours): Meaning, Classification of Overheads, Allocation and Apportionment of Overheads, Primary Overhead Distribution Summary, Secondary Overhead Distribution Summary, Re-apportionment of Overheads - Direct Distribution, Step Ladder Method; Absorption of Overheads – Methods of Absorption - Problems on Allocation, Apportionment, Re-apportionment and Absorption of Overhead Expenses including Machine Hour Rate.

VI. **Reconciliation of Cost and Financial Accounts** (8 hours): Meaning of Reconciliation, Need for Reconciliation, Reasons for differences in Profit or Loss shown by Cost Accounts and Financial Accounts, and Problems on Reconciliation Statement including Memorandum Reconciliation Account.

Skill Development Activities:

(1) Identification of elements of cost in services sector by visiting any service provider/ providing unit
(2) Cost estimation for making a proposed product
(3) Draft the specimen of any two documents used in material account
(4) Collection and classification of overheads in an organization on the basis of functions
(5) Prepare a reconciliation statement with imaginary figures

Recommended Books for Reference:

(1) J. Made Gowda, Cost Accounting, Himalaya Publishing House
(2) M V Shukla – Cost and Management Accounting
(3) N.K. Prasad: Cost Accounting, Books Syndicate Pvt. Ltd.
(4) Nigam and Sharma: Cost Accounting, HPH
(5) Khanna Pandey and Ahuja – Practical Costing, S Chand
(6) Soundarajan A and K. Venkataramana, Cost Accounting, SHBP

B.Com, Semester – V

Course – 505: Advanced Accounts

Course Objective: To acquaint students with accounting for corporate restructuring
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Mergers and Acquisitions** (22 hours): Meaning of Amalgamation and Acquisition, Types of Amalgamation – Amalgamation in the nature of Merger – Amalgamation in the nature of Purchase - Methods of Purchase Consideration – Calculation of Purchase Consideration (Ind AS 103) (Old AS14), Net Asset Method - Net Payment Method,

Accounting for Amalgamation - Entries and Ledger Accounts in the Books of Transferor Company and Transferee Company and Preparation of New Balance Sheet (Vertical Format).

II. **Internal Reconstruction** (10 hours): Meaning – Objective – Procedure – Form of Reduction – Passing of Journal Entries – Preparation of Reconstruction Accounts – Preparation of Balance Sheet after Reconstruction (Vertical Format) and Problems.

III. **Holding Company Accounts** (16 hours): Meaning of Holding Company and Subsidiary Companies – Concepts of Minority Interest – Majority Interest – Capital Profit – Revenue Profit – Cost of Control – Unrealized Profit included in Stock and Problems on Holding Company Accounts (excluding Cross and Chain Holding).

IV. **Investment Accounting** (12 hours): Introduction – Classification of Investment – Cost of Investment – Cum-Interest and Ex-Interest – Securities – Bonus Shares - Right Shares – Disposal of Investment – Valuation of Investments – Procedures of Recording Shares and Problems.

V. **Human Resources Accounting** (4 hours): Meaning, Objectives, Methods, Advantages and Limitations and problems thereon.

Skill Development Activities:

(1) Calculation of purchase consideration with imaginary figures
(2) List any five cases of amalgamation in the nature of merger or acquisition of Joint Stock Companies
(3) List out legal Provisions in respect of internal reconstruction
(4) Narrate the steps for preparation of consolidated balance sheet

Recommended Books for Reference:

(1) Dr. B. Mariyappa – Advanced Corporate Accounting, HPH
(2) Arulanandam and Raman; Corporate Accounting-II, HPH
(3) Roadmap to IFRS and Indian Accounting Standards by CA Shibarama Tripathy
(4) S.N. Maheswari , Financial Accounting, Vikas
(5) Soundarajan A and K. Venkataramana, Advanced Corporate Accounting, SHBP
(6) RL Gupta, Advanced Accountancy, Sultan Chand
(7) K.K Verma – Corporate Accounting
(8) Jain and Narang, Corporate Accounting
(9) Tulsian, Advanced Accounting,
(10) Shukla and Grewal – Advanced Accountancy, Sultan Chand

B.Com, Semester – V

Course – 506: Goods and Services Tax

Course Objective: To equip students with the principles and provisions of Goods and Services Tax (GST) - implemented from 2017 under the notion of One Nation, One Tax and One Market. And also to provide an insight into practical aspects and apply the provisions of GST laws to various situations.

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Goods and Services Tax (GST)** (8 hours): Introduction to GST, Meaning and Definition, Objectives and basic scheme of GST, Salient features of GST – Subsuming of taxes – Benefits of implementing GST – Constitutional amendments - Structure of GST (Dual Model) – Central GST – State/Union Territory GST – Integrated GST; GST Council - Structure, Powers and Functions, and

Provisions for amendments.

II. **Goods and Services Act, 2017** (8 hours): CGST Act, SGST Act (Karnataka State), and IGST Act - Salient features of CGST Act, SGST Act (Karnataka State), IGST Act. Meaning and Definition: Aggregate turnover, Adjudicating authority, Agent, Business, Capital goods, Casual Taxable Person, Composite supply, Mixed supply, Exempt supply, Outward supply, Principal Supply, Place of Supply, Supplier, Goods, Input Service Distributor, Job work, Manufacture, Input tax, Input tax credit, Person, Place of business, Reverse charge, Works contract, Casual taxable person, Non-resident person; Export of goods or services, Import of goods or services, Intermediary, Location of supplier of service, Location of recipient of service and simple problems on Composite Supply and Mixed Supply

III. **Procedure and Levy under GST** (32 hours): Registration under GST, Procedure for registration, Persons liable for registration, Persons not liable for registration, Compulsory registration, Deemed registration, Special provisions for Casual taxable persons and Non-resident taxable persons; Exempted goods and services, Rates of GST.

Procedure relating to Levy (CGST and SGST): Scope of supply, Tax liability on Mixed and supply, Time of supply of goods and services Value of taxable supply, Computation of taxable value and tax liability on Goods and Services.

Procedure relating to Levy: (IGST): Inter-state supply, intra-state supply, Zero rates supply, Value of taxable supply – Computation of taxable value and tax liability; Input tax Credit - Eligibility, Apportionment, Inputs on capital goods, Distribution of credit by Input Service Distributor (ISD) – Transfer of Input tax credit and simple problems on utilization of input tax credit.

IV. **Assessment and Returns** (10 hours): Meaning, types of assessment - First return, Claim of input tax credit, Matching reversal and reclaim of input tax credit, Annual return and Final return and Problems on Assessment of tax and tax liability.

V. **GST and Technology** (6 hours): GST Network: Structure, Vision and Mission, Powers and Functions; Goods and Service Tax Suvidha Providers (GSP): Concept, Framework and Guidelines and architecture to integrate with GST system; and GSP Eco System. (theory only).

Skill Development Activities:

(1) Collect GST Returns form and fill with imaginary figures
GSTR-3B (Monthly Returns)
GSTR-1 (Details of Outward supplies of Goods or Services)
GSTR-2 (Inward Supplies received by tax payer)
(2) Visit your locality shops and collect information relating to tax rate applicable to them
(3) Collect information about different tax rates for goods and services and write five examples for each tax rate
(4) Visit Bank and Insurance Company, collect information relating to GST applicable to them for different services
(5) Collect information relating to RCM (Reverse Charge Mechanism) for different expenditures

Recommended Books for Reference:

(1) GST Act 2017, Karnataka Law and Journal Publications
(2) GST, Taxman Publications
(3) Introduction to GST, Department of GST New Delhi
(4) Introduction to GST, Dr B G Bhaskar

(5) Introduction to GST, Dr M Mariyappa

B.Com, Semester – V

Course – 508: Logical and Analytical Reasoning

Course Objective: To acquaint students with reasoning and analytical ability
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 2 Maximum Marks: 50 Examination Duration: 1½ hours

Unit **Course Inputs**

I. **Logical Reasoning** (6 hours): Venn Diagram, Logical Sufficiency and Seating Arrangement.
II. **Intellectual Reasoning** (7 hours): Blood Relations, D Calendar, Series, Coding and Decoding.
III. **Verbal and Non–verbal Reasoning** (4 hours): Verbal Alphabetical Analogy, Puzzles and Abstract Reasoning.
IV. **Analytical Reasoning** (5 hours): Cause and Effective Conclusions, Statement and Arguments and Statement and Assumptions.
V. **Mathematical Reasoning** (6 hours): Problems related to Wages, Speed – Distance, Percentage and Average, Ratio and Proportion.
VI. **Data Interpretation** (4 hours): Problems on Tables and Graph.

Skill Development Activities:

(1) Draw Venn Diagram with imaginary Figures
(2) Draw Coding and Decoding programs with imaginary figures
(3) Calculate speed of a train with imaginary figures
(4) Draw Tables and Chart with Imaginary figures

Recommended Books for Reference:

(1) Agarwal, Quantitative Reasoning.
(2) Dr. Giridhar K.V. Logical and Analytical Reasoning, 5th Edition, College Book House
(3) M. N. Tyra, Speed Mathematics

B.Com, Semester – VI

Course – 601: International Financial Reporting Standards

Course Objective: To acquaint students with recent accounting standards
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to IFRS** (8 hours): Meaning and Scope of IFRS, Need for IFRS, GAAP *Vs* IAS, IAS *Vs* IFRS, Nature and Operations of IASB and IFRIC, Status and use of IFRS around the World.
II. **Profit Presentation** (8 hours): Presentation of Financial Statements (IAS - 1) Revenue (IAS - 18) and Accounting Policies, Changes in Accounting Estimates and Errors (IAS - 8)
III. **Group Accounting** (12 hours): Consolidated Financial Statements and Accounting for Investment in Subsidiaries (IAS - 27), Accounting for Investments in Associates (IAS - 28), Joint Ventures (IAS - 31), and Business Combinations (IFRS - 3)
IV. **Disclosure** (14 hours): Related Party Disclosures (IAS - 24), Earning per Share (IAS - 33) and Interim Financial Reporting (IAS - 34), and First Time Adoption of IFRS (IFRS - 1)
V. **Asset Recognition and Measurement** (14 hours): Property, Plant and Equipment

(IAS - 16), Intangible Assets (IAS - 38), Investment Property (IAS - 40), Inventories (IAS - 2), and Leases (IAS - 17).

VI. **Accounting for Liabilities** (8 hours): Share Based Payment (IFRS - 2), Provisions, Contingent Assets and Contingent Liabilities (IAS - 37), and Events after the Reporting Period (IAS - 10).

Skill Development Activities:

(1) Prepare a note on convergence of Indian Accounting Standards with IFRS
(2) Analysis of published financial statements for at-least two types of stakeholders
(3) Comment on recent developments/exposure draft in IFRS
(4) Preparation of notes to accounts for non-current assets
(5) Assignment on social reporting
(6) Preparation of Consolidated Financial Statement of any two existing companies
(7) Disclosure of change in equity in the annual reports of any two select companies

Recommended Books for Reference:

(1) IFRSs, Taxman Publications (Blue book)
(2) IFRS, Barry Larking, Taxman Publications
(3) IFRS, T.P. Ghosh, Taxman Publications
(4) IFRS and Ind AS, Kamal Garg, Bharat publishers
(5) International Accounting, Mohapatra A.K. Das

B.Com, Semester - VI
Course – 602: Income Tax – II

Course Objective: To acquaint students about the computation of different sources of income
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Income from House Property** (14 hours): Basis of Charge – Deemed Owners – Exempted Incomes from House Property – Annual Value – Determination of Annual Value – Treatment of Unrealized Rent – Loss Due to Vacancy – Deductions from Annual Value and Problems on Income from House Property.

II. **Profits and Gains of Business and Profession** (Individual Assesse) (16 hours): Meaning and Definition of Business, Profession – Vocation - Expenses expressly Allowed – Allowable Losses – Expenses expressly Disallowed – Expenses Allowed on Payment Basis - Problems on Business relating to Sole Trader and Problems on Profession relating to Chartered Accountant, Advocate and Medical Practitioner.

III. **Capital Gains** (12 hours): Basis of Charge – Capital Assets – Transfer of Capital Assets – Computation of Capital Gains –Exemptions U/S 54, 54B, 54D, 54EC, 54F and Problems on Capital Gains.

IV. **Income from other Sources** (10 hours): Incomes – Taxable under the head 'Other Sources' – Securities – Kinds of Securities – Rules for Grossing Up – Ex-Interest Securities – Cum-Interest Securities – Bond Washing Transactions and Problems on Income from Other Sources.

V. **Set-off and Carry Forward of Losses, Computation of Total Income and Tax Liability** (8 hours): Meaning – Provision for Set-off and Carry Forward of Losses (theory only); Computation of Total Income and Tax Liability of an Individual Assessee (excluding Salary Income).

VI. **Filing of Returns and Assessment Procedure** (4 hours): PAN, TAN, E–Filing and IT Challan.

Skill Development Activities:

(1) Table of rates of Tax deducted at source
(2) Filing of IT returns of individuals
(3) List of enclosures for IT returns
(4) Due date for filing of returns
(5) Income tax proposal as per the recent union budget

Recommended Books for Reference:

(1) Dr. B. Mariyappa, Income Tax- II, HPH
(2) Dr. Vinod K. Singhania: Direct Taxes – Law and Practice, Taxman publication
(3) B.B. Lal: Direct Taxes, Konark Publisher (P) ltd
(4) Dr. Mehrotra and Dr. Goyal: Direct Taxes – Law and Practice, Sahitya Bhavan Publication
(5) Dinakar Pagare: Law and Practice of Income Tax, Sultan Chand and sons
(6) Gaur and Narang: Income Tax
(7) Lectures on Income Tax – I, VBH
(8) Dr. V. Rajesh Kumar and Dr. R. K. Sreekantha: Income Tax – I, Vittam Publications.

B.Com, Semester – VI
Course – 603: Business Statistics – II

Course Objective: To acquaint students about practical application of statistical tools
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Correlation Analysis** (14 hours): Meaning – Methods of Studying Correlation, Karl Pearson's Co–efficient of Correlation (Simple Correlation and Table Correlation) and Probable Error.
II. **Regression Analysis** (18 hours): Meaning - Correlation *Vs* Regression, Determination of Regression Co-efficient, Framing Regression Equations, Simple Regression and Regression for Grouped Data.
III. **Index Numbers** (12 hours): Meaning and Definition – Uses – Classification – Construction of Index Numbers – Methods of constructing Index Numbers – Simple Aggregative Method – Simple Average of Price Relative Method – Weighted Index Method – Fisher's Ideal Method (including TRT and FRT) – Consumer Price Index and Problems.
IV. **Interpolation and Extrapolation** (12 hours): Meaning – Utility – Algebraic Methods – Binomial and Newton's Methods only.
V. **Association of Attributes** (4 hours): Meaning – Correlation *Vs* Association of Attributes, Methods of Studying Association – Yule's Method only
VI. **Statistical Quality Control** (4 hours): Meaning – Objectives – Control Charts and their Uses, Types of Control Charts, Construction Charts, Construction of Mean and Range Charts only.

Skill Development Activities:

(1) Collect age statistics of 10 newly married couples and compute correlation coefficient
(2) Collect age statistics of 10 newly married couples and compute regression equations; estimate the age of bride when age of bridegroom is given
(3) Select 10 items of daily consumed products and collect base year quantity, base year price and current year price. Calculate Cost of Living Index
(4) Collect the sales or production statistics of a company for five years and extrapolate

the production or sales for the 6th year

(5) Draw a mean chart of any company to ascertain the quality of the product

Recommended Books for Reference:

(1) Anand Sharma : Statistics for Management, HPH
(2) S P Gupta: Statistical Methods- Sultan Chand, Delhi
(3) D.P Apte, Statistical Tools for Managers
(4) Dr. B N Gupta: Statistics, Sahityta Bhavan, Agra.
(5) S.C Gupta: Business Statistics, HPH
(6) N.V.R Naidu: Operation Research I.K. International Publishers
(7) Ellahance: Statistical Methods, Kitab Mahal
(8) Sanchethi and Kapoor: Business Mathematics, Sultan Chand
(9) Veerachamy: Operation Research I.K. International Publishers
(10) S. Jayashankar: Quantitative Techniques for Management
(11) Chikoddi and Satya Prasad: Quantitative Analysis for Business Decision, HPH
(12) Dr. Alice Mani: Quantitative Analysis for Business Decisions - I, SBH

B.Com, Semester - VI

Course – 604: Cost Accounting - Methods and Techniques

Course Objective: To acquaint students about methods and techniques of cost accounting

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Contract Costing** (10 hours): Meaning, Nature and Types of Contract, Difference between Contract Costing and Job Costing, Concepts of Escalation Clause, Retention Money, Profit on Incomplete Contracts and Problems.

II. **Process Costing** (12 hours): Meaning, Nature and Applicability, By-Products and Joint Products and Problems on Process Costing including Joint Products and By-Products.

III. **Operating Costing** (10 hours): Meaning and Applicability of Operating Costing, Operating Cost and its Classification, Problems on Preparation of Operating Cost Sheet (only Transport Undertakings).

IV. **Marginal Costing** (14 hours): Meaning, Basic Concepts, Assumptions, Marginal Cost Statements, Contribution, BE Analysis, P/V Ratio, BEP, Margin Of Safety and Problems.

V. **Standard Costing** (10 hours): Meaning, Definitions, Differences between Standard Costing and Budgetary Control, Analysis of Variances, Problems on Material Cost Variance - Material Price Variance, Material Usage Variance; Labour Cost Variance, Labour Rate Variance, and Labour Efficiency Variance.

VI. **Activity Based Costing and Learning Curve Theory** (8 hours): Concept of Activity Based Costing, Cost Drivers and Cost Pools, Allocation of Overheads under ABC – Characteristics, Implementation and Benefits of ABC; Concept and Phases of Learning Curve, Graphical Representation, Learning Curve Applications and Factors affecting Learning Curve (theory only)

Skill Development Activities:

(1) Listing of industries located in your area and methods of costing adopted by them
(2) List out materials used in any two organizations
(3) Preparation with imaginary figures composite job cost statement
(4) Preparation of activity based cost statement

(5) Prepare a chart showing the apportionment of overheads under ABC

Recommended Books for Reference:

(1) J. Madegowda, Cost Accounting, Himalaya Publishing House
(2) J. Madegowda, Marginal Costing for Managerial Decisions, Prateeksha Publications
(3) J. Madegowda, Cost Management, Himalaya Publishing House
(4) S P Iyengar, Cost Accounting
(5) Nigam and Sharma, Advanced Costing
(6) B.S. Raman, Cost Accounting
(7) Dr. B. Mariyappa, Cost Accounting Methods - HPH
(8) M.N. Arora, Cost Accounting
(9) Ashish K Bhattacharyya: cost accounting for business managers
(10) N. Prasad, Costing
(11) Palaniappan and Hariharan: Cost Accounting, I.K. International Publishers
(12) Jain and Narang, Cost Accounting
(13) Ravi M. Kishore – Cost Management
(14) Charles T Horngren, George Foster, Srikant M. Data, Cost Accounting: A Managerial Emphasis
(15) Rathnam: Cost Accounting

B.Com, Semester - VI

Course – 605: Management Accounting

Course Objective: To acquaint students with necessary knowledge of practical aspects of Management Accounting

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 5 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Management Accounting** (10 hours): Meaning and Definition of Management Accounting, Scope and Objectives of Management Accounting – Differences between Management Accounting and Financial Accounting – Management Accounting and Cost Accounting and Limitations of Management Accounting.

II. **Analysis of Financial Statements** (10 hours): Meaning and Definition of Financial Statements – Financial Analysis – Types of Financial Analysis, Techniques of Financial Analysis - Common Size Statements, Comparative Statements and Trend Analysis and Problems.

III. **Ratio Analysis** (14 hours): Meaning and Objectives – Types of Ratios – Re-arrangement of Income Statements and Balance Sheet – (A) Profitability Ratios – GP Ratio, NP Ratio, Operating Ratio – Operating Profit Ratio - Return on Capital Employed Ratio – EPS; (B) Turnover Ratios – Debtors Turnover Ratio – Creditors Turnover Ratio; (C) Financial Ratios, Current Ratio - Liquidity Ratio, Debt-Equity Ratio, Capital Generating Ratio and Advantages and Limitations of Ratios.

IV. **Fund Flow Analysis** (10 hours): Meaning, Concepts of Funds – Meaning and Definition of Fund Flow Statements – Uses and Limitations – Procedure for Preparation of Funds Flow Statement – Statement of Changes in Working Capital, Statement of Funds from Operations, and Statements of Sources and Application of Funds.

V. **Cash Flow Statements** (10 hours): Meaning, Definition, Uses and Limitations-Differences between Fund Flow Statement and Cash Flow Statement – Preparation of Cash Flow Statements (Ind AS - 7): Direct Method and Indirect Method.

VI. **Budgetary Control** (10 hours): Meaning of Budget, Budgeting and Budgetary Control, Types of Budgets, Limitations of Budgetary Control, Problems on Sales Budget and Flexible Budget.

Skill Development Activities:

(1) Preparation of common size financial statements, trend percentages and comparative financial statements of an organization at least for two years
(2) Calculation of ratios based on the above financial statements – gross profit ratio, net profit ratio, operation profit ratio, current ratio and operations
(3) Identify current assets, current liabilities, and non-current liabilities from the above financial statements
(4) Preparation of fund flow statement and determination fund from operations with imaginary figures
(5) Preparation of flexible budget with imaginary figures
(6) Visit an organization, collect information regarding budgets prepared by them, and prepare budget based on the given information

Recommended Books for Reference:

(1) Advanced Management Accounting: J. Madegowda, 2nded, Himalaya Publishing House
(2) Management Accounting: J. Madegowda, Himalaya Publishing House
(3) Management Accounting: Dr. S.P. Gupta
(4) Management Accounting :M.Y. Khan And P.K. Jain
(5) Management Accounting: Dr. S.N. Maheshwari
(6) Management Accounting: B.S. Raman
(7) Management Accounting; Howard And Brown
(8) Management Accounting : S.M. Goyal And Dr. Manmohan
(9) Management Accounting-Dr, B. Mariyappa

B.Com, Semester – VI

Course – 606: Principles and Practice of Auditing

Course Objective: To acquaint students with auditing principles and different dimensions of Auditing

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 3 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Auditing** (12 hours): Meaning, Definition, Objectives, Types of Audit, Advantages and Disadvantages of Audit, Preparation before Commencement of New Audit, Audit Note, Audit Working Paper, Audit Programme, Recent Trends in Auditing, Nature and Significance of Tax Audit, Cost Audit and Management Audit.

II. **Internal Check** (10 hours): Meaning, Objectives, Fundamental Principles, Internal Check as Regards Wage Payment, Cash Book, Purchases, Cash Sales; Merits of Internal Check, Differences between Internal Check and Internal Audit.

III. **Vouching** (14 hours): Definition, Importance, Objectives, Routine Checking and Vouching - Types of Vouchers, Vouching Receipts, Cash Sales, Receipts from Debtors, Proceeds of Sales, Sale of Investment, Vouching of Payments, Cash Purchase and Payment to Creditors.

IV. **Verification and Valuation of Assets and Liabilities** (14 hours): Meaning and Objectives of Verification and Valuation - Position of an Auditor as regards the Valuation of Assets - Verification and Valuation of different Items - Land and

Building, Plant and Machinery, Goodwill – Investments - Stock in Trade, Bills Payable and Sundry Creditors.

V. **Company Audit and Others** (10 hours): Company Auditor – Appointment – Qualifications - Powers – Duties and Liabilities; Types of Audit Report - Clean and Qualified Report, Audit of Educational Institutions, Audit of Insurance Company and Audit of Cooperative Societies.

VI. **Audit Standards** (4 hours): Audit of Computerized Accounts - Audits in an EDP - General EDP Controls, EDP Application Controls and Computer Assist Auditing Techniques

Skill Development Activities:

(1) Draft an audit programme
(2) Draft an investigation report on behalf of a public limited company
(3) Visit an audit firm, write about the procedure followed by them in auditing the books of account of a firm
(4) Formulate internal check system for cash sales
(5) Prepare qualified/clean audit report

Recommended Books for Reference:

(1) Auditing - T.R Sharma
(2) Principles of Auditing - Dr. Nanjegowda
(3) Principles and Practice of Auditing - M.S Ramaswamy
(4) Principles and Practice of Auditing –R.G Sexena
(5) Auditing – B.S Raman
(6) Practical auditing – B.N Tandon
(7) Auditing – Kamal Gupta

B.Com, Semester - VI
Course – 608: Soft Skills

Course Objective: To acquaint students with the essential of communication

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 2 Maximum Marks: 50 Examination Duration: 1½ hours

Unit **Course Inputs**

I. **Elements of Communication** (4 hours): Meaning, Importance, Objectives and Principles of Communication, Types and Forms of Communication, Process, Impediments of Effective Communication, and Strategies for Effective Communication.

II. **Non-verbal Communication**(8 hours): Body Language, Gestures, Postures, Facial Expressions, Dress Codes, Cross Cultural Dimensions of Business Communication, Listening and Speaking, Techniques of Eliciting Response, Probing Questions, Observation, Business and Social Etiquettes.

III. **Public Speaking** (8 hours): Principles of Effective Speech and Presentations, Technical Speeches and Non-Technical Presentations, Speech of Introduction of a Speaker - Speech of Vote of Thanks - Occasional Speech - Theme Speech; Moderating Programs and Use of Technology

IV. **Interview Techniques** (6 hours): Importance of Interviews, Art of Conducting and Giving Interviews, Placement Interviews - Discipline Interviews - Appraisal Interviews and Exit Interviews.

V. **Meetings** (6 Hours): Importance, Meetings Opening and Closing Meetings Participating and Conducting Group Discussions, Brain Storming, and E- Meetings,

Career Counseling, and Resume Preparation.

Skill Development Activities:

(1) Conduct a mock meeting and draft minutes of the meeting
(2) Draft a letter of enquiry to purchase a laptop
(3) Draft your bio-data

Recommended Books for Reference:

(1) Soft Skills of Personality Development: C.G.G Krishnamacharyulu and Lalitha
(2) Lesikar, R.V. and Flatley, M.E. Basic Business Communication Skills for Empowering the Internet Generation, TMH, New Delhi.
(3) Rai and Rai: Business Communication Himalaya Publishing House
(4) Ludlow, R. and Panton, F. (1998). The Essence of Effective Communications, Prentice Hall of India Pvt. Ltd
(5) M.S. Rao : Soft Skills – Enhancing Employability I.K. International
(6) Rao and Das: Communication Skills
(7) Adair, J. (2003). Effective Communication. Pan McMillan.
(8) Thill, J.V. and Bovee, G. L, Excellence in Business Communication, TMH, New York.
(9) Bowman, J.P. and Branchaw, P.P, Business Communications: From Process to Product. Dryden Press, Chicago.
(10) Sharma S.P and Others, Business Communication
(11) Rajkumar, Basic of Business Communication
(12) Banerjee: Soft Skills Business and Professional Communication, I.K. International

Specialization Stream – A: Finance Stream
B.Com, Semester – V
Course – 507A: Advanced Financial Management

Course Objective: To acquaint students with the ways of mobilizing and using of financial resources by industrial enterprises

Pedagogy: Combination of lectures, assignments and group discussions.

Weekly Teaching Hours:4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Investment Decisions and Risk Analysis** (14 hours): Risk Analysis – Types of Risks – Risk and Uncertainty – Techniques of Measuring Risks – Risk Adjusted Discount Rate Approach – Certainty Equivalent Approach – Sensitivity Analysis - Probability Approach - Standard Deviation and Co-efficient of Variation – Decision Tree Analysis and Problems,

II. **Sources of Capital** (12 hours): Long Term Sources – Meaning – Equity Shares – Preference Shares – Debentures – Differences between Shares and Debentures – Retained Earnings – Long Term Loans and Loans From Financial Institutions.

III. **Capital Structure Theories** (10 hours): Introduction – Capital Structure – Capital Structure Theories - Net Income Approach - Net Operating Income Approach - Traditional Approach – MM Approach and Problems.

IV. **Dividend Theories** (12 hours): Introduction – Irrelevance Theory – MM Model; Relevance Theories - Walter Model - Gordon Model and Problems on Dividend Theories.

V. **Planning and Forecasting of Working Capital** (14 hours): Concept of Working Capital – Determinants of Working Capital – Estimating Working Capital Needs – Operating Cycle – Cash Management – Motives of Holding Cash – Cash Management

Techniques – Preparation of Cash Budget, Receivables Management – Preparation of Ageing Schedule and Debtors Turnover Ratio; Inventory Management Techniques and Problems on EOQ.

Skill Development Activities:

(1) Preparation of a small project report of a small business concern covering all components - Finance, Marketing, Production, Human Resources, General administration (any one component can be selected as the title of the report)
(2) Designing a capital structure for a trading concern
(3) Preparing a blue print on working capital of a small concern
(4) Prepare a chart on modes of cash budget
(5) List out different modes of Dividend Policy
(6) List out the companies which have declared dividends recently along with the rate of dividend

Recommended Books for Reference:

(1) Narendra Singh, Advanced Financial Management
(2) K. Venkataramana, Advanced Financial Management, SHBP.
(3) Ghousia Khatoon, Mahanada B. C., Advanced Financial Management, VBH
(4) S N Maheshwari, Financial Management Principles and Practice, Sultan Chand
(5) Khan and Jain, Financial Management, Tata McGraw Hill
(6) Sudhindra Bhat, Financial Management, Prentice Hall of India
(7) Sharma and Sashi Gupta, Financial Management, Kalyani Publication
(8) I M Pandey, Financial Management, Vikas Publication
(9) Prasanna Chandra, Financial Management, Tata McGraw Hill
(10) R.M Srivastava, Financial Management & Policy, Sterling publishers

Specialization Stream – A: Finance Stream
B.Com, Semester - VI
Course – 607A: Security Analysis and Portfolio Management

Course Objective: To acquaint students with investment decisions and portfolio management
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Investment Management** (15 hours): Meaning of Investment – Selection of Investment – Classification of Securities – Risk and Uncertainty – Types of Risks – Risk and Expected Return – Measurement of Portfolio Risk – Benefits of Diversification – Investment Strategies – Types of Companies and Stocks – Matrix Approach in Investment Decision and Investment Avenues

II. **Security Analysis** (15 hours): Introduction – Fundamental Analysis – Economic Analysis – Industry Analysis – Company Analysis; Technical Analysis – Dow Theory – Advanced Declined Theory and Chartism Assumptions of Technical Analysis.

III. **Modern Portfolio Theory** (14 hours): Introduction – Mean – Variance Model – Capital Market Line – Market Portfolio – Capital Asset Pricing Model – Security Market Line – Beta Factor – Alpha and Beta Coefficient and Arbitrage Pricing Model.

IV. **Portfolio Management** (10 hours): Markowitz Model – Sharpe Model – Jensen and Treynor Model.

V. **Global Markets** (10 hours): Global Investment Benefits - Introduction to ADRs, GDRs, FCCBs, Foreign Bonds, Global Mutual Funds – Relationship between Trends

in Global Markets and Domestic Markets.

Skill Development Activities:

(1) Prepare an imaginary investment portfolio for salaried man whose income as ` 10 lakhs per annum and estimate savings is ` 2 lakhs per annum

(2) Make a list of 30 companies which have gone for IPO very recently

(3) Prepare a statement showing the ups and downs in the BSE index for the last one year

Recommended Books for Reference:

(1) Avadhani, Investment Analysis and Portfolio Management, HPH
(2) Preeti Singh - Security Analysis and Portfolio Management, HPH
(3) K. Venkataramana, Security Analysis and Portfolio Management, SBHP
(4) Kevin, Investment and Portfolio Management
(5) Prasanna Chandra, Investment Analysis and Portfolio Management, McGraw-Hill
(6) Sudhindra Bhat, Security Analysis and Portfolio Management - Fischer and Jordan, Security Analysis and Portfolio Management, Prentice Hall
(7) A.P. Dash, Security Analysis and Portfolio Management, I.K. Intl
(8) Rohini Singh, Security Analysis and Portfolio Management
(9) Punithvathy Pandian, Security analysis & portfolio Management

Specialization Stream – B: Marketing Stream
B.Com, Semester – V
Course – 507B: Product and Sales Management

Course Objective: To acquaint students with adequate knowledge of product and sales management

Pedagogy: Combination of lectures, assignments and group discussions.

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Product Management** (12 hours): Meaning, Definition of Product, Market - Market focused Organization; Functionally focused Organization; Product Management – Facts *Vs* Fiction; Changes affecting Product Management; and Product Strategy.

II. **Product Planning and Management** (12 hours): Meaning, Definition and Objectives of Product Planning; Frequent mistakes in Planning; Planning Process; Components of a good Plan; Product Life Cycle; Market Growth; Product Attractiveness - Factors influencing a Product; Threat of New Entrants, Product Differentiation; Bargaining Power of Buyers and Suppliers; Pressure from Substitutes; Environment Analysis; and Product Line Management.

III. **New Product Development** (12 hours): Meaning, Definition and Organization for New Product Development; Idea Generation and Screening; Concept of Development and Evaluation; New Product Development and Evaluation; Product Modification; Product Variants; Brand Extension; Test Marketing, Evaluation for Market Acceptance; Commercialization and Product Failure.

IV. **Salesman** (14 hours): Meaning, Definition and Qualities of a good Salesman, Recruitment of Salesmen in the Organization, Product, Knowledge, Planned Selling, Approach - Pre-Approach-Meeting, Objectives, Closing the Sale-Scales Call; Customer Psychology - Buying Motives of our Customer, Effective Speaking, Consumer Products *Vs* Industrial Products Selling - Trade Relations –S ales Personnel Recruitment, Selection, Training, and Remuneration.

V. **Sales and Marketing System** (14 hours): Meaning, Definition, Objectives of Sales, Promotion Schemes and Situations in which they Launched. 42 Direct Premiums (Branded Packs, Price Rebates, Quantity Deals, Sampling, *etc*), Criteria for Judging the Success or Failure of Sales Promotion Schemes, What Sales Promotion can achieve and its Limitations; Consumer Contests, Interim Action Premiums (Coupon, Offers, *etc*), Self-Liquidating Premium; Survey of Gift Scheme Window Display, Types of Dealer Promotion Schemes, Wholesale and Retail Trade (Discount and Bonus Incentives for the Trade Sales Promotion and Industrial Products - Merchandising and Display - Sales Aids and Dealers Aids.
Marketing System - Marketing Channels Behavioral Process in Marketing Channels, Designing Channels, Channels of Distribution and Promotion, Physical Distribution; and Factors affecting Channel Choice.

Skill Development Activities:

(1) Select any product and examine the features of channels selected for distribution
(2) Visit any organization and understand about remuneration and incentives to salesman
(3) Chart out product planning process
(4) Chart Sales Promotion schemes of two consumer durable products and two non–consumer durable products
(5) Identify a product and position it in the market – chart it out

Recommended Books for Reference:

(1) Lehmann R. Donald &Winer. S. Russell; Product Management; Tata McGraw-Hill Edition; 3rd Edition
(2) Still R. Richard, Cundiff W. Edward and Govoni A P Norman, Sales Management Decisions, Strategies and Cases; Prentice Hall of India (P) Ltd; New Delhi
(3) Ramanujam and Majumdar, Product management
(4) Chunawalla S.A, Product management.
(5) Aswathappa, Product management
(6) Verma and Agarwal, Sales management

Specialization Stream – B: Marketing Stream
B.Com, Semester – VI
Course – 607B: Retail Management

Course Objective: To acquaint students about the consumer behavior in retail management
Pedagogy: Combination of lectures, assignments and group discussions.
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Retail Business** (12 hours): Definition – Functions of Retailing - Types of Retailing – Forms of Retail Business Ownership; Retail Theories – Wheel of Retailing – Retail Life Cycle; Retail Business in India: Influencing Factors – Present Indian Retail Scenario and International Perspective in Retail Business.

II. **Consumer Behavior in Retail Business** (14 hours): Buying Decision Process and its Implications on Retailing – Influence of Group and Individual Factors, Customer Shopping Behaviour, Customer Service and Customer Satisfaction; Retail Planning Process: Factors to consider in preparing a Business Plan – Implementation and Risk Analysis.

III. **Retail Operations** (12 hours): Factors influencing Location of Store - Market Area Analysis – Trade Area Analysis – Rating Plan Method - Site Evaluation; Retail Operations: Stores Layout and Visual Merchandising, Stores Designing, Space

Planning, Inventory Management, Merchandise Management, and Category Management.

IV. **Retail Marketing Mix** (16 hours): Introduction; Product: Decisions related to selection of Goods (Merchandise Management Revisited) – Decisions related to Delivery of Service; Pricing: Influencing Factors – Approaches to Pricing – Price Sensitivity - Value Pricing – Markdown Pricing; Place: Supply Channel – SCM Principles – Retail Logistics – Computerized Replenishment System – Corporate Replenishment Policies; Promotion: Setting Objectives – Communication Effects - Promotional Mix; Human Resource Management in Retailing – Manpower Planning – Recruitment and Training – Compensation and Performance Appraisal Methods.

V. **Impact of Information Technology in Retailing** (10 hours): Non Store Retailing (E-Retailing) - Impact of Information Technology in Retailing - Integrated Systems and Networking – EDI – Bar Coding – Electronic Article Surveillance – Electronic Shelf Labels – Customer Database Management System; Legal aspects in Retailing, Social Issues in Retailing, and Ethical Issues in Retailing.

Skill Development Activities:

(1) Draw a retail life cycle chart and list the stages
(2) Draw a chart showing a store operations
(3) List out the major functions of a store manager diagrammatically
(4) List out the current trends in e-retailing
(5) List out the factors influencing in the location of a New Retail outlet

Recommended Books for Reference:

(1) Suja Nair; Retail Management, HPH
(2) Karthic – Retail Management, HPH
(3) S.K. Poddar & others – Retail Management, VBH
(4) R.S Tiwari ; Retail Management, HPH
(5) Barry Bermans and Joel Evans: "Retail Management – A Strategic Approach", 8th edition, PHI
(6) A.J. Lamba, The Art of Retailing, 1st edition, Tata McGraw-Hill, New Delhi
(7) Swapna Pradhan, Retailing Management, TMH
(8) K. Venkataramana, Retail Management, SHBP
(9) James R. Ogden and Denise T., Integrated Retail Management
(10) A Sivakumar Retail Marketing , Excel Books

Specialization Stream – C: Banking and Insurance Stream
B.Com, Semester – V
Course – 507C: Advanced Bank Management

Course Objective: To acquaint students about the advanced aspects of banking system
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Branch Operation and Core Banking** (14 hours): Introduction and Evolution of Bank Management – Technological Impact on Banking Operation – Total Branch Computerization – Concept of Opportunities – Centralized Banking – Concept, Opportunities, Challenges and Implementation.

II. **Delivery Channels** (14 hours): Delivery Channels – Automated Teller Machine (ATM) – Phone Banking – Call Centers – Internet Banking – Mobile Banking – Payment Gateways – Card Technologies and MICR Electronic Clearing.

III. **Back Office Operations** (12 hours): Bank Back Office Management – Inter Branch Reconciliation – Treasury Management – Forex Operations – Risk Management – Data Center Management – Network Management – Knowledge Management (MIS/DSS/EIS) and Customer Relationship Management (CRM).

IV. **Inter Bank Payment System** (12 hours): Interface with Payment System Network – Structured Financial Messaging System – Electronic Fund Transfer – RTGSS – Negotiated Dealing Systems and Securities Settlement Systems – Electronic Money and E- Cheques.

V. **Contemporary Issues in Banking Techniques** (12 hours): Analysis of Rangarajan Committee Reports – E Banking Budgeting and Banking Software.

Skill Development Activities:

(1) Filling of application for opening a Bank Account
(2) Preparations of Bank Reconciliation Statement
(3) Identify and compare the banking delivery channels of nationalized banks and private banks
(4) List out the boons and the banes of computerization of banks operations
(5) Current issues in banking technology to be discussed in class

Recommended Books for Reference:

(1) Kaptan S S and Choubey N S, E-Indian Banking in Electronic Era, Sarup & Sons, New Delhi
(2) Vasudeva, E-Banking, Common Wealth Publishers, New Delhi
(3) Chandramohan: Fundamental of Computer Network I.K. International Publishers
(4) Effraim Turban, Rainer R. Kelly, Richard E. Potter, Information Technology, John Wiley & Sons Inc
(5) Andrew S. Tanenbaum, Computer Networks, Tata McGraw Hill,
(6) Padwal & Godse : Transformation of Indian Banks with Information Technology

Specialization Stream – C: Banking and Insurance Stream
B.Com, Semester – VI
Course – 607C: Life and General Insurance

Course Objective: To acquaint students about the principles of managing and administration of insurance business

Pedagogy: Combination of lectures, assignments and group discussions.

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Life Insurance** (14 hours): Introduction to Life Insurance - Principles of Life Insurance - Life Insurance Products, Pensions and Annuities - Life Insurance Underwriting - Need for Selection - Factors affecting Rate of Mortality - Sources of Data - Concept of Extra Mortality - Numerical Methods of Undertaking and Occupational Hazards.

II. **Legal Aspects of Life Insurance** (14 hours): Legal Aspects of Insurance - Indian Contract Act, Special Features of Insurance Contract; Insurance Laws, Insurance Act, LIC Act, and IRDA Act.

III. **Claim Management and Re-Insurance** (12 hours): Claim Management - Claim Settlement - Legal Framework - Third Party Administration, Insurance Ombudsman - Consumer Protection Act - Re-Insurance in Life Insurance - Retention Limits - Methods of Re-Insurance.

IV. **Introduction to General Insurance** (12 hours): Introduction to General Insurance;

Principles of General Insurance, Types of General Insurance - Personal General Insurance Products (Fire, Personal Liability, Motors, Miscellaneous Insurance); Terminology, Clauses and Covers, Risk Assessment, Underwriting and Ratemaking, Product Design, Development and Evaluation and Loss of Provincial Control.

V. **Insurance Industry** (12 hours): Insurance Industry - Brief History - Pre Nationalization and Post Nationalization - Current Scenario, and Re-Insurance – Functions.

Skill Development Activities:

(1) Calculation of policy premium with imaginary figures
(2) Calculation of fair claims with imaginary figures
(3) Preparation of list occupational hazards under life insurance
(4) List out top 10 private life insurance companies
(5) Write a note on the current developments under IRDA Act

Recommended Books for Reference:

(1) Annie Stephen L, HPH
(2) P. Perya Swamy, Principles and Practice of Life Insurance
(3) Raman B, Your Life Insurance, Hand Book
(4) William C. Arthur, Risk Management and Insurance
(5) G. Krishna Swamy, A Text book on Principles and Practices of Life Insurance
(6) Gopal Krishnan, Liability Insurance
(7) Aramvalarthan, Risk Management I.K. Intl
(8) Mishra M.N, Insurance Principles and Practice
(9) Bose A.K, Engineering Insurance
(10) Fire Insurance Claim, Insurance institute of India
(11) P. K Gupta, Insurance and Risk Management

Specialization Stream – D: E-commerce Stream
B.Com, Semester – V
Course – 507D: E-Commerce – I

Course Objective: To acquaint students about programming language 'C'
Pedagogy: Combination of lectures, assignments and group discussions
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **E-Commerce** (8 hours): E-Commerce *Vs* E-Business, Advantages of E-Commerce, Internet Banking - Advantages of Online Banking, Facilities, Internet Banking in India, ATM, Credit Card/Debit Card, Smart Card; Advantages of Internet Marketing, and Advertising over Internet.

II. **Introduction to HTML** (10 hours): HTML Documentation, Structure and Tags, Defining Web Page Appearance, Text Formatting, Writing simple HTML Documents, Front Page, Advantages and Options.

III. **Introduction To 'C'** (3 hours): History of 'C', Features and Merits of 'C', Basic Structure of a 'C' Program, Character Set, Key Words, Identifiers, Data Types, Constants and Variables, Data Type Declaration Statement, Assigning Values to a Variable, Operators, Expressions, Loading, Editing, Saving and Executing C Programs, and Turbo 'C' Hot Keys

IV. **Input/Output Statements** (15 hours): Input/Output Statements - Unformatted (Getchar; Putchar; Gets; Puts; Getch; Gerche) and Formatted I/O Functions (Scanf; Printf); Program Flow Control Statements, Branching Statements, Looping Statements,

Jumping Statements, If Statement, If-else Statement, Switch Statement, While Statement, Do-While Statement, For Statement, and Nested for Loop Statement.

V. **Arrays** (8 hours): One Dimensional Array, Two Dimensional Array, and Library Functions (Abs, Sqrt, Pow).

VI. **Writing Simple Programmes Using 'C'** (20 hours): Language involving Arithmetical Operations on Numbers, Number Generations of Various Types - Natural Numbers, Even and Odd Numbers, Multiplication Table, Fibonacci Series, Factorial of A Number, Array Addition, Inverse of Matrix, Use of Formulas - Simple Interest, Compound Interest, Area Calculations, etc.

Skill Development Activities:

(1) Write a C Program to find the area and circumference of the circle
(2) Write a C Program to show the use of Char and String used
(3) Write a C Program to the use of Do and While statement
(4) Write a C Program to show the use of mul and pow functions
(5) Write a Program to display the growth of a fixed deposit in a bank
(5) Write a C Program for finding Biggest and Smallest among many numbers using array
(5) Write a C Program to show the use of Switch Case
(5) Write a C Program for calculation of salesman's commission
(5) Write a C Program for preparation of marks statement
(5) Write a C Program to show arithmetical operations on numbers
(5) Write a C Program to calculate simple interest and compound interest
(5) Write a C program to find whether the number is a perfect square or not
(5) Write a HTML document for display of an Advertisement message with suitable tags
(5) Write a HTML document to show a moving message on the screen

Recommended Books for Reference:

(1) Rajaraman, Computer Programming in 'C' (Prentice Hall of India).
(2) Yashwanth, P. Kanetkar, Let Us C (BPB Publications).
(3) Byron S Gottrifried, Programming with C (Tata McGraw Hill Publishing Co. Ltd)

Specialization Stream – D: E-commerce Stream
B.Com, Semester – VI
Course – 607D: E-Commerce – II

Course Objective: To acquaint students with knowledge about internet and visual basics
Pedagogy: Combination of lectures, assignments and group discussions.
Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Introduction to Internet** (6 hours): Meanings of Internet and Intranet, Modem, LAN, WAN, MAN, WWW; Advantages and Disadvantages of Internet.

II. **Email** (6 hours): Meaning, Advantages, Steps in Creating E-Mail ID, Internet Browsing, Information through Web-Sites, Search Engines, and Browser (Internet Explorer).

III. **Power Point** (16 hours): Start, End, Open, Format, Edit, Print and Save a Presentation; Insert, Format and Modify Text, Select a Design Template, Create a Title Slide, Create a Multi-Level Bulleted List Slide, Display and Print in Black and White, Describe Speech Recognition Capabilities of Power Point, Add Slides to and Delete Slides from a Presentation; Create a Presentation from an Outline and Use Outline Features, Change the Slide Layout, Insert and Edit Clip Art, Add a Header and Footer, Add

Animation and Slide Transition Effect, Create Presentation using Embedded Visuals, Create a Slide Background using a Picture, Customize Graphical Bullets, Create and Embed an Organizational Chart, Insert and Format a Table into a Slide, Add an Animation Scheme to selected Slides, Print Handouts, and Rearrange Slides.

IV. **Introduction to Visual Basic Programming** (12 hours): Introduction to Visual Basic, Terminologies, Creating an Application, Modular Environment; Building an Application, Setting Properties of Objects, Forms; Introduction to Controls; Event-Driven Programming.

V. **B Coding: Examining Code** (12 hours): Using Object Browser, Statements and Functions, Conditional Statements and Looping Statements in Visual Basic; Native Code Compiler; Debugging, Overview of Debugging, Forms, Using Forms, Multiple Forms, Events; Start Up and End of Application Variables, Data Types, Scope and Life Time of Variables, Constants, Arrays and User-Defined Types.

VI. **Procedure** (12 hours): Introduction to Procedure, Arguments and Parameters; Named Arguments and Optional Arguments; Controls – Using Controls, and Standard Controls (Custom Controls).

Skill Development Activities:

(1) Write the steps for addition of any two numbers in Visual Basic
(2) Write the steps for Swapping two numbers in Visual Basic
(3) Write the steps for finding Simple Interest/Compound Interest in Visual Basic
(4) Write the steps for creating Presentation having atleast five slides related to a new product launching
(5) Write the steps for creating Presentation having atleast four or five slides related to motivating the salesmen

Recommended Books for Reference:

(1) U. S. Pandey, Rahul Srivastava and Others, E-Commerce and Its Applications (S. Chand & Co)
(2) Kamlesh N. Agarwal and Deeksha Agarwal, Business on the Net (McMillan India Ltd)
(3) Jerke, Visual Basic
(4) White, Visual Basic Programming

Specialization Stream – E: Quantitative Techniques Stream
B.Com, Semester – V
Course – 507E: Quantitative Techniques – I

Course Objective: To acquaint students about the application of mathematical and statistical techniques to practical business problems

Pedagogy: Combination of lectures, assignments and group discussions.

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Arithmetic and Geometric Progression** (8 hours): Arithmetic Progression, Geometric Progression, Some of n^{th} Term of Arithmetic Progression and Geometric Progression, Arithmetic Mean and Geometric Mean.

II. **Matrices and Determinants Matrices** (13 hours): Matrices, Types of Matrices; Operation of Addition, Subtraction and Multiplication of Matrix with Special Application to Business; Transpose of Matrix, Determinants of Square Matrix, Cramer's Rule with Two and Three Unknown Properties, Adjoint of a Square Matrix, and Inverse of a Square Matrix (excluding Matrix Method).

III. **Differential Calculus** (13 hours): Variables and Constant, Function, Real/Valued

Function, Limits of Function, Methods of Evaluating Limits, Differentiation of Linear Function, Finding Maxima and Minima of a Function, Application of Differential to Commerce, (excluding Derivations).

IV. **Linear Programming** (14 hours): Linear Inequalities, Liner Programming, Formation of Linear Programming Problems, Mode/Solutions to Linear Programming Problems by Graphic and Simplex Method (problems to be restricted to two variables).

V. **Theory of Probability** (10 hours): Introduction, Random Experiments, Sample Space and Probability, Theory of Expectations, Random Variables, Problems related to Probability based on Combination, Law of Probability, Events, and Compound Events.

VI **Theoretical Distribution** (6 hours): Introduction, Binomial Distribution, Poisson Distribution, Normal Distribution, and Problems

Skill Development Activities:

(1) Apply Arithmetic Progression and Geometric Progression methods to find the growth rate of food grains and population

(2) Use Matrix Principles to implement food requirement and protein for two families. Show the way in which price and demand situations will help to purchase goods and services by the use of matrices

(3) Select different ways to go to Bengaluru from your native place through permutation techniques

(4) Use different techniques to show price, supply and demand position for a particular product, and also show maximum and minima

(5) Visit a nearest Industry or Computer Centre and draw Linear Programming Problem model regarding different problems. Find a solution to the problem

Recommended Books for Reference:

(1) Business Mathematics, Sanchethi Kapoor
(2) Business Mathematics, S. P. Gupta
(3) Mathematics for Cost Accountants, R. Gupta
(4) Business Mathematics: Madappa and Sridhara Rao
(5) Business Mathematics: Dorairaj, S. N
(6) Business Mathematics: B. H. Suresh
(7) Business Mathematics: Sanchethi Aggarwal
(8) Business Mathematics: Aggarwal
(9) Business Mathematics: Oak and other (Himalaya Publishing House)

Specialization Stream – E: Quantitative Techniques Stream
B.Com, Semester – VI
Course – 607E: Quantitative Techniques – II

Course Objective: To acquaint students with the application of mathematical techniques to business situations

Pedagogy: Combination of lectures, assignments and group discussions

Weekly Teaching Hours: 4 Maximum Marks: 100 Examination Duration: 3 hours

Unit **Course Inputs**

I. **Games and Strategies** (10 hours): Introduction to Games, Two-Person Zero-Sum Games, Some Basic Terms, the Maxi-min– Mini-max Principle, Games without Saddle Points - Mixed.

II. **Assignment Problems** (10 hours): Introduction, Mathematical Function of the Problems, Assignment Cases in Assignment Problems, Typical Assignment Problem, and Travelling Salesman Problem.

III. **Transportation Problems** (12 hours): Introduction, General Transportation Problem, Transportation Table, Duality in Transportation Problem, Loops in Transportation Problem, LP Formulation of the Transportation Problem, Solution of a Transportation Problem, Finding an Initial Basic Feasible Solution, and Test for Optimality

IV. **Decision Analysis** (10 hours): Introduction, Decision Making Problem, Decision Making Process, Decision Making Environment, Decision under Uncertainty, Decisions under Risk, and Decision Tree Analysis.

V. **Simulation** (12 hours): Introduction, Why Simulation, Methodology of Simulation, Simulation Models, Event-Type Simulation; Generation of Random Numbers; Monte-Carlo Simulation, Simulation of Inventory Problems, Simulation of Queuing System, Simulation of Maintenance Problems, Simulation of Investment and Budgeting, Simulation of Job Sequencing, Advantages and Limitations of Simulation.

VI. **Project Management** (10 hours): Introduction, Basic Concepts of Network Analysis, Time Estimates in Vertical Path Analysis, PERT and CPM, Simple Problems on PERT and CPM.

Skill Development Activities:

(1) Play game for competing with the rival trader, find Games Strategies to withstand in the game
(2) Give an assignment to a particular person who is capable to find suitable measures to particular assigned task
(3) Find the least root to go to the places when a travelling agent is supposed to visit more than two places simultaneously
(4) Find strategies for assigning a particular task to various persons
(5) How simulation can be derived and give suitable examples
(6) Experiment different events for finding solution for probable events

Recommended Books for Reference:

(1) Business Mathematics, Sanchethi Kapoor
(2) Business Mathematics, S. P. Gupta
(3) Mathematics for Cost Accountants, R. Gupta
(4) Business Mathematics: Madappa Sridhara Rao
(5) Business Mathematics: Dorairaj, S. N
(6) Business Mathematics: B. H. Suresh
(7) Business Mathematics: Sanchethi Aggarwal
(8) Business Mathematics: Aggarwal
(9) Business Mathematics: Oak and other (Himalaya Publishing House)
(10) Kanti Swarup, P. K Gupta Man Mohan, Operations Research
(11) V. K. Kapoor, Quantitative Techniques

Question Paper Pattern for Semester-end Examinations

[Each Question Paper shall be divided into three Sections *viz.,* Section – A (Conceptual), Section – B (Analytical) and Section – C (Application)]

Section – A:

Maximum Marks: 15,
Three Questions shall be answered out five Questions (including three Problems in the case of Quantitative Courses),
Each question carries five marks, and
Answer to each theory question shall be in not more than two pages.

Section – B:

Maximum Marks: 20,
Two Questions shall be answered out four Questions (including three Problems in the case of Quantitative Courses),
Each Question carries ten marks, and
Answer to each theory Question shall be in not more than five pages.

Section – C:

Maximum Marks: 45,
Three Questions shall be answered out five Questions (including four Problems in the case of Quantitative Courses),
Each Question carries 15 marks, and
Answer to each theory Question shall be in not more than eight pages.

Note: Calculators, Mathematical Tables and Present Value Tables are allowed.

Question Paper Pattern for Course – 508: Logical and Analytical Reasoning (B.Com, Semester – V)

Duration: 90 minutes,
Maximum Marks: 40,
40 multiple answer questions and all are compulsory, and
Each question carries 1 mark.

Question Paper Pattern for Course – 608: Soft Skills (B.Com, Semester – VI)

Duration: 90 minutes,
Maximum Marks: 40,
Students shall answer 8 questions out of 10 questions, and
Each question carries 5 marks.

Question Paper Pattern

for

Course – 307: Environmental Science (B.Com, Semester - III) and **Course – 407: Indian Constitution (B.Com, Semester - IV)**

Duration: 3 hours,
Maximum Marks: 80,

80 multiple answer questions and all are compulsory, and
Each question carries 1 mark.

B.Com, Semester - I

Course – 103:Fundamentals of Financial Accounting

- Course Objectives: To acquaint the students with the basic principles of Financial Accounting
- Pedagogy: Combination of lectures, assignments and group discussion
- Teaching Hours per Week: 4
- Maximum Marks:100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Introduction** (10 hours): Meaning and Definition of Accounting, Importance of Accounting, Types and Rules of Accounts, Accounting concepts – Business Entity Concept, Going Concern Concept, Accounting Period Concept, Money Measurement Concept, Dual Aspect Concept and Matching Concept; Accounting Conventions – Consistency, Conservatism, Materiality and Disclosure; Accounting Standards – Meaning and Importance.
- **Unit -2: Final Accounts of Sole Trading Concerns** (16 hours): Preparation of Manufacturing Account, Trading, and Profit and Loss Account and Balance Sheet.
- **Unit -3: Accounting for Consignment Transactions** (16 hours): Meaning, Consignment vs Sales, Proforma Invoice, Account Sales, Types of Commission, Goods sent at Cost and at Invoice Price, Valuation of Stock, Normal and Abnormal Loss; Journal Entries, Ledger Accounts in the books of Consignor and Consignee (excluding Memorandum Methods).
- **Unit -4:Joint Venture** (14 hours): Meaning and Objectives, Joint Venture vs Consignment, Methods of maintaining Accounts – (a) separate set of Accounts (Joint Bank System) and (b) recording of all Joint Venture Transactions in the books of each of the Ventures.
- **Unit -5**: **Bank Reconciliation Statement** (8 hours)**:** Meaning of Bank Reconciliation Statement, Reasons for the differences in the two balances viz., balances as per Cash Book and Pass Book, Preparation of Bank Reconciliation Statement (excluding Overdraft).

Skill Development Activities

01. Accounting Concept – Illustration of Dual Aspect Concept
02. Final Accounts of a Sole Trader – Correcting a wrong Trial Balance
03. Consignment Accounts – Valuation of closing stock with imaginary figures
04. Joint Venture – Preparation of Joint Bank Account with imaginary figures
05. Preparation of Proforma Invoice and Account Sales

Recommended Books for Reference

01. Financial Accountings: S. N. Maheshwari (Sultan Chand)
02. Financial Accounting: B. S. Raman (United Publishers)
03. Advanced Accounting: Shukla and Grewal (S Chand and Co)
04. Advanced Accounting : R.L. Gupta and Radhaswamy (Sultan Chand)
05. Advanced Financial Accounting: Anil Kumar and Others (HPH)
06. Accounting for Managers: J.Madegowda (HPH)
07. Accounting Theory: L.S.Porwal (TMH)
08. Accounting : Jawaharlal (S Chand and Co)
09. Accounting Principles: Robert Anthony and James Reece

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B.Com, Semester - I

Course – 104:Market Behaviour and Cost Analysis

- Course Objectives: To acquaint the students with different dimensions of market behaviour and the role of cost analysis in decision making process
- Pedagogy: Combination of lectures, assignments and group discussion
- Teaching Hours per Week: 4
- Maximum Marks:100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Firms and Decisions** (10 hours): Firm -Meaning and Objectives, Profit vs Value (Wealth) Maximization Dynamics; Decision Making, Decisions under Market Uncertainties, Tactical vs Strategic Decisions;and Game Theory.
- **Unit -2: Market Forces** (10 hours): Demand -Meaning, Law of Demand, Nature of Elasticity of Demand, Determinants of Elasticity of Demand, Cost of Advertisement and Derived Demand Relations, Measurement of Elasticity under Graphic Method (Concepts only); Demand Forecasting – Meaning and Methods (Problems on Trend Projection by Least Squares Method); Supply - Law of Supply, Determinants of Supply.
- **Unit -3: Cost and Profit Planning** (14 hours): Cost, Meaning of Short-run and Long-run Costs, Fixed and Variable Costs, Explicit and Implicit Costs, Opportunity Cost and Incremental Cost (Concepts only); Total Cost, Average Cost and Marginal Cost behavior in Short-run And Long-run (including problems); CVP Analysis –Break-even Point, Break-even Chart and calculation of Margin of Safety, P/V.Ratio; Profit Planning (including problems on alternative cost and sales values).
- **Unit -4: Pricing Practices and Strategies** (18 hours): Determinants of Pricing Policy, Pricing Methods - Marginal Cost Pricing, Target Rate Pricing, Product Line Pricing, Administered Pricing, Competitive Bidding, Dual Pricing, Transfer Pricing; Price Discrimination – Requirements; Types of Dumping Strategies; Pricing over Product Life Cycle; Skimmed Pricing, Penetration Pricing, Product Line Pricing and Price Leadership; Linear Programming - Problems on Profit Maximization and Cost Minimization in Graphic Method with two variables only.
- **Unit -5: Cost of Capital and Capital Budgeting**(12 hours): Meaning and Types of Capital, Specific Cost of Capital - Debt, Preference Shares and Equity Shares;and Weighted Average Cost of Capital (Concepts only); Capital Budgeting - Meaning and Significance, Present Value of Money and its calculation, Methods of Investment Appraisal (simple problems on Pay-back Period and Net Present Value Methods only).

Skill Development Activities

01. An illustration on calculation of Incremental Cost and Incremental Revenue
02. Determination of Fixed and Variable Cost
03. Determination of Average Cost, Marginal Cost and Total Cost
04. Construction of Average Fixed Cost, Average Variable Cost and Average Total Cost Curves
05. Diagrammatic presentation of Price and Output Determination in different Market situations

06. Construction of Average Revenue and Marginal Revenue under Imperfect Market
07. Fixation of Price under Target Pricing based on Rate of Return Method

Recommended Books for Reference

01. P.L.Mehta; Managerial Economics, Sultan Chand & Sons, New Delhi
02. R.L.Varshney and K.L.Maheshwari; Managerial Economics, Sultan Chand & Sons, New Delhi
03. H.L.Ahuja; Business Economics, S. Chand & Company Ltd, New Delhi
04. Sanchethi and Kapoor; Business Mathematics, Sultan Chand & Sons, New Delhi
05. K.P.M. Sundaram; Micro Economics, Sultan Chand & Sons, New Delhi
06. M.L.Agarwal: Business Mathematics, Sultan Chand & Sons, New Delhi
07. D.M.Mithani: Managerial Economics, Himalaya Publishing House, New Delhi
08. M.L.Jhingan and J.K.Stephen: Managerial Economics, Vrinda Publishing Ltd, Delhi
09. Manoj Kumar Mishra: Managerial Economics, Voyu Education of India, New Delhi
10. Khan and Jain: Financial Management, TMH, New Delhi
11. R.K.Sharma and S.K.Gupta; Financial Management, Kalyani Publications, Ludhiana

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B.Com, Semester– I

Course – 105:Fundamentals of Business Management

- Course Objectives:To acquaint the students with the fundamental principles of managing business concerns.
- Pedagogy: Combination of lectures, assignments and group discussion
- Teaching Hours per Week: 4
- Maximum Marks:100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Management** (12 hours): Management - Meaning, Nature, Scope and Importance, Role of Manager, Managerial Skills, Management and Administration, Management as a Science and anArt, Management as Profession.
- **Unit -2: Evolution of Management** (12 hours): Taylor's Scientific Management, Fayol's Theory, Elton Mayo and Hawthrone Experiments, Different approaches to Management.
- **Unit -3: Planning** (12 hours): Planning - Meaning, Objectives and Importance, Types of Plans, Different approaches to Planning, Strategies -Objectives and Policies.
- **Unit -4: Organizing** (10 hours): Organizing – Meaning; Principles of Organization, Types of Organization, Formal and Informal Organization Structure; Authority and Responsibility, Delegation of Authority;and Span of Control.
- **Unit – 5: Directing and Controlling** (12 hours): Directing – Meaning, Importance and Principles, Controlling – Need for Control, Features of effective Controlling System, Controlling Techniques – Management by Objectives, Management by Exception and Total Quality Management.
- **Unit -6:Emerging Trends in Management** (6 hours): Meaning and Objectives of Strategic Management, Knowledge Management and Stress Management.

Skill Development Activities

01. Collect the photograph and bio-data of any three contributors to management thoughts.
02. Collection of short term and long term plans of any organization.
03. Draft organizational chart and discuss the authority relationship of any organization.
04. Description of skills of a good manager.
05. Collect 10 names of BPO Centres in the country.
06. Visit a factory and collect details from employees about stress and the causes for the same.

Recommended Books for Reference

01. Principles of Management – C.B.Gupta
02. Principles of Management- L.M.Prasad
03. Principles of Management – Sherlekar
04. Management Concepts and Practice – C.B.Gupta
05. Principles of Management – H.Koontz and C.O.Donnell

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B.Com, Semester– I

Course – 106:Business Environment and Government Policy

- Course Objective:Objectiveof this paper is to acquaint the students with the government policies relating to business and different environmental factors
- Pedagogy: Combination of class room lectures, case study analysis and group discussion
- Teaching Hours per Week: 4
- Maximum Marks:100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Introduction** (12 hours): Objectives of Business, Internal and External Environmental Factors; Business, Society and Government Interface;and International Business Environment.
- **Unit – 2: Business Environment** (13 hours): Dimensions of Business Environment, Internal Environment, External Environment; Micro and Macro Environment, Economic Environment, Political and Government Environment, Socio-cultural Environment, Demographic Environment, Legal Environment, Competitive Analysis, Technological Environment, Emerging Scenario, and Business Policy.
- **Unit -3: Globalisation** (12 hours): Introduction, Process, Impact of Globalization, World Trade Organization (WTO) – Objectives, Structure and Functions.
- **Unit -4: Multi-national Corporations (MNCs)** (9 hours): MNCs – Meaning, Benefits and Drawbacks; Foreign Collaborations, Joint Ventures, Franchising and Strategic Alliance.
- **Unit -5**: **Technology in Business** (6 hours): Introduction, Need and Importance; Technological Factors influencing Business.
- **Unit -6: Business and Government** (12 hours): Introduction, Government Intervention - Economic Role, Regulatory Role, Promotional Role, Entrepreneurial Role and Planning Role.

Skill Development Activities

01. Make a list of 10 Indian firms and their operations which are engaged in international business.
02. Conduct a survey of five farmers and obtain their opinion about impact of LPG on the farming community.
03. Draw the organizational structure of WTO.
04. Study the impact of MNCs on Indian Industries.
05. Draw the organization structure of two MNCs operating in India.

Recommended Books for Reference

01. Cherunilam Francis, Economic Environment of Business
02. Ashwathappa, Essentials of Business Environment (Himalaya Publishing House)
03. Amarchand, Business and Government
04. J.Madegowda (ed), Business Environment and Policy (Deep and Deep)
05. C.Ronald Christensen, etal, Business Policy - Text and Cases, Richard.D.Irwin Inc
06. Sodersten, B.O, International Economics (Macmillan, London)

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B.Com, Semester– II

Course – 203:Advanced Financial Accounting

- Course Objectives:To enable the students to understand the Accounting Principles and Procedure pertaining to the preparation of relevant Accounts for different kinds of business establishments.
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks:100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Hire Purchase Accounting** (14 hours): Meaning of Hire Purchase, Hire Purchase vs Sales, Entries and Ledger Accounts in the books of Hire Purchaser and Hire Vendor.
- **Unit -2: Departmental Accounts** (12hours): Meaning and Objectives of Departmental Accounts, Difference between Departmental Accounts and Branch Accounts, Apportionment of common expenses among different Departments, Preparation of Departmental Trading,and Profit and Loss Account in Columnar Form and Preparation of Balance Sheet.
- **Unit -3: Branch Accounts** (14hours): Preparation of Accounts in the books of Head Office only including the preparation of Trading,and Profit and Loss Accountfor Verification – (a) Branch which deals in Cash and Credit Sales, and (b) Branch which receives Goods at Invoice Price (excluding Stock and Debtor System, Incorporation Entries and Foreign Branches).
- **Unit -4: Fire Insurance Claims** (10 hours): Fire Insurance Claims with Average Clause excluding Abnormal Loss of goods (problems only on Loss of Stock).
- **Unit -5: Royalty Accounts excluding Sub-lease** (14 hours): Meaning of Royalty, Minimum Rent, Short Workings, Recoupment of Short Workings, Lessor, Lessee, Preparation of Journal Entries and Ledger Accounts in the books of Lessor and Lessee.

Skill Development Activities

01. Drafting the hire purchase agreement with the imaginary names and figures
02. Draft imaginary layout structure of departmental stores and list out the basis of allocation of common expenses
03. Drafting a proforma invoice sent by head office to branch
04. Collection of fire claims forms and filling the same
05. Drafting a royalty agreement with imaginary names and figures

Recommended Books for Reference

01. Financial Accounting, Volumes 1 and 2, B.S.Raman (United Publishers)
02. Advanced Accounting, M.C.Shukla and T.S.Grewal
03. Advanced Accounting, S.P.Iyengar
04. Advanced Financial Accounting: Anil Kumar
05. Financial Accounting: Manmohan and Goyal

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B.Com, Semester– II

Course – 204:Indian Financial System

- Course Objectives: This course aims at enabling the students to acquaint the requisite knowledge about the working of Indian Financial System
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks:100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Introduction** (10 hours): Nature and Role of Financial System in India;Regulatory Bodies – Reserve Bank of India, Securities and Exchange Board of India, Financial Services, Financial Markets, and Financial Institutions (an overview of the structure).
- **Unit -2: Capital Market in India**: (12 hours): New Issue Market, Secondary Market –Functions, Listing Procedure; Bombay Stock Exchange, National Stock Exchange, Securities and Exchange Board of India – Functions; Stock Trading Corporation.
- **Unit -3:Commercial Banks** (12 hours): Commercial Banks - Functions, RBI Functions and Importance.
- **Unit -4:Money Market** (10 hours): Indian Money Market - Composition and Structure, Call Money Market, Treasury Bill Market, Commercial Papers and Certificates of Deposit, Marketing for Government Securities.
- **Unit** -5**: Non-banking Financial Institutions** (10 hours): NBFIs - Meaning, Importance and their Role; Types of Finance - IDBI, ICICI, LIC, NABARD, etc.
- **Unit - 6:Factoring**(10 hours): Meaning and Types; Venture Capital – Meaning, Types, Process of obtaining Venture Capital; Securitization of Debts – Meaning and Scope.

Skill Development Activities

01. Make a list of institutions providing housing and leasing finance in your area
02. Collect the copies of share application, share transfer and share certificate
03. Narrate different schemes of mutual funds offered by different financial institutions

04. Collect the copies of treasury bills and commercial papers
05. Collect details about opening D-mat Account
06. Draft a report of your visit to a non-banking financial institution

Recommended Books for Reference

01. Financial Institutions and Market by Vasant Desai
02. Indian Financial System by Varshney.P.N
03. Financial Markets and Institutions by Bhole.I.M
04. Financial Market and Service by Gordon and Natarajan

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B.Com, Semester– II

Course – 205:Human Resource Management

- Course Objectives: To expose the students to differentdimensions of human resource management in organizations
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Human Resource Management** (14 hours): HRM - Meaning, Definition, Nature, Scope, Significance and Objectives; Evolution and Development of HRM;Role, Duties and Responsibilities of Human Resource Manager.
- **Unit -2: Human Resource Planning** (12 hours): Human Resource Planning – Meaning, Importance and Need for Human Resource Planning; Benefits andLimitations of Human Resource Planning; Steps in the process of Human Resource Planning.
- **Unit - 3: Job Analysis and Job Design**(12 hours)**:** Job Analysis – Concept, Objectives, Significance, Process of Job Analysis; Techniques of Job Analysis; Job Description, Job Specification, Job Design and Methods of Job Design.
- **Unit -4**: **Recruitment and Selection** (14 hours): Recruitment – Meaning, Need, Recruitment Techniques, Sources – Internal And External Sources, Process of Recruitment, Recruitment Policy, Selection, Steps in Selection Process – Test, Interviews, Types, Group Discussion, Placement and Induction.
- **Unit -5: Employee Training** (12 hours): Training – Need, Importance,Objectives, Types and Methods of Training, Benefits of Training, Identification of Training Needs, Designing Training Programmes, Executive Development Programme – Need and Techniques.

Skill Development Activities

01. Collection of information about new recruitment sources
02. Collect an advertisement copy of a job vacancy and fill it
03. Critically evaluate the role played by the HR Manager of any one organization
04. List the different non-monetary incentives given to employees of an organization known to you
05. Conduct an IQ test and analyze

Recommended Books for Reference

01. Human Resource Management: P.Subba Rao (Himalaya Publishing House)

02. Human Resource Management: C.B.Gupta (Sultan Chand & Sons)
03. Principles of Personnel Management: Edwin Flippo (TMH)
04. Human Resource Management: L. M. Prasad (Sultan Chand & Sons)
05. Human Resource Management: Shashi.K.Gupta and Rasy Gupta (Kalyani Publishers)
06. Human Resource Management: Kanka (S.Chand& Sons)
07. Human Resource Management: Lam Beasdwell and Len Holden (Mc Milan)
08. Human Resource Management – Krishnaveni (S.Chand & Sons)

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B.Com, Semester– II

Course – 206:Methods for Business Decisions

- Course Objectives: To enable the students to understand and apply the mathematical techniques to practical business problems
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours.

Course Inputs

- **Unit -1: Number System** (5 hours): Different Base Number Binary System, Base Five System only.
- **Unit -2: Indices** (10 hours): Indices - Meaning, Laws and Application for Simplification, Logarithm – Definition and its Application for Simplification (using Log Table), Permutations and Combination, Simple Problems.
- **Unit -3: Commercial Arithmetic** (10 hours): Problems on Simple Interest and Compound Interest, Annuities, Present and Future Value of Annuity, Discounting of Bill of Exchange (Present Worth, Future Face Value, Trade Discount and Banker Discount, Bankers Gain and Amount Receivables).
- **Unit -4: Ratio, Proportion and Variations** (14 hours): Problems on Speed, Time and Work Completion, Percentages, Problems on finding Rate, Percentage and Quantity relating to Trade Activities (Cost Price, Selling Price and Profit Percentage).
- **Unit -5: Theory of Sets** (13 hours): Elements of a Set, Methods of Describing a Set, Types of Sets and Operations, Demargans Law, Venn Diagram and their application to Theory of Sets.
- **Unit -6: Theory of Equations** (12 hours): Simple Linear Equations, Simultaneous Linear Equation (Elimination and Cross Multiplication Methods only), Quadratic Equation, Pure Quadratic, Affected Quadratic Equations, Factorization and Sridharacharya's Method.

Skill Development Activities

01. Collect details from your nearest trading concern regarding normal discount, special discount and commission on buying and selling, and prepare a brief report
02. Conduct an interview of different persons regarding coffee and tea drinking habits, paper reading habits and make a comparison using Venn diagram
03. Collect information from LIC regarding LIC policies
04. Collect information from a financial company or firm regarding rate of interest charged on advances and deposits, and how the bills are discounted by business firms and banks

Recommended Books for Reference

01. Business Mathematics, Iyer, Bari (Sultan Chand & Sons)
02. Business Mathematics, Dr.B.H.Suresh
03. Business Mathematics, Dorairaj.S. N (Vikas Publishing House)
04. Business Mathematics, S.P. Gupta
05. Business Mathematics, Sanchethi Aggarwal
06. Business Mathematics, S.M.Shukla

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B.Com, Semester– III

Course – 303:Corporate Accounting

- Course Objectives: To enable the students to understand the procedure of preparing the accounts of corporate enterprises with the help of the principles and regulations governing the same
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Valuation of Shares** (12 hours): Valuation of Shares - Meaning and Need for Valuation, Methods of Valuation of Shares - Net Assets Method, Yield Method and Fair Value Method.
- **Unit -2: Company Accounts** (16 hours): Final Accounts of Joint Stock Companies (Vertical Format Method) including Publishing Companies and Hotels.
- **Unit -3: Underwriting of Shares and Debentures** (15 hours): Meaning, Definition and Types of Underwriting – (a) Open, (b) Pure, and (c) Firm Underwriting; Problems on Underwriting of Shares and Debentures.
- **Unit -4: Company Accounts - Other Issues** (9 hours): Buyback of Shares, Issue of Bonus Shares and Right Issue.
- **Unit -5: Company Accounts** (12 hours): Profit prior to Incorporation -Meaning and calculation of Profit with the help of Time, Sales and Weighted Ratios.

Skill Development Activities

01. Value equity shares using imaginary figures and collect financial statements of a company.
02. Prepare a brief report on guidelines for bonus issue and redemptions of bonus shares
03. Analyse business growth of any company on the basis of reported financial results
04. Calculation of profit prior to incorporation with imaginary figures
05. Collection and filing of share application form and prospectus of a company and deciding whether to invest or not in the shares of the company mentioning the supporting reasons.
06. Collect information about the procedure for opening de-mat account.

Recommended Books for Reference

01. Corporate Accounting: Jois Naromy
02. Advanced Accounting: Shukla and Gupta

03. Corporate Accounting: B.S.Raman
04. Corporate Accounting: S.P.Iyengar
05. Corporate Accounting: R.L.Gupta and Radhaswamy
06. Corporate Accounting: Maheshwari Doraipandiun

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B.Com, Semester– III

Course – 304:Corporate Administration

- Course Objectives: To familiarize the students with the elements of company law along with the role of company secretaries
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Introduction to Indian Companies Act, 1956** (15 hours): Company – Definition and Characteristics, Kinds of Companies - Private, Public Company, Statutory Company, Foreign Company, Holding Company, Subsidiary Company, and Licensed Companies; Company Secretary – Meaning and Definition of Company Secretary, Legal Position, Qualification and Appointment, Duties, Rights and Liabilities of a Company Secretary.
- **Unit -2: Formation of a Company** (12 hours): Stages involved in formation (in brief), Conversion of Public Company into a Private Company and vice-versa, Basic Documents of a Company - Memorandum Association, Articles of Association, Prospectus, Statement in lieu of Prospectus, Misleading Prospectus and its Consequences.
- **Unit -3: Share Capital and Membership of a Company** (14 hours): Equity Shares and Preferences Shares including Distinction, Issue of Shares, Book Building, Allotment of Shares, Essentials of Valid Allotment, Lettersof Allotment and Regret, Demat Accounts, Right Shares and Bonus Shares, Lien on Shares, Differences between Debentures and Shares, Methods of becoming a Member, Termination of Membership, Rights and Duties of Members, Register of Members, Book Closure.
- **Unit -4: Borrowing Powers of a Company, Dividend and Interest** (8 hours): Ultravire Borrowings, Fixed vs Floating Charge, Brief note on Mode of Charges, Registration of Charges, Dividend – Legal Provisions relating to Declaration and Payment of Dividend, Dividend Warrant, Unclaimed Dividend, Ex-Dividendand cum-Dividend, Interim Dividend, Payment of Interest; Differences between Interest and Dividend.
- **Unit -5: Company Management and Meetings** (15 hours): Directors – Legal Position, Number of Directors, Qualification and Disqualification of Directors, Appointment of Directors, Number of Directorship, Vacation of Office, Removal of Directors; Powers, Liabilities and Remuneration of Directors, Meetings and Types – Board Meetings, General Meetings, Special Meetings, Annual General Meeting, Extra-ordinary General Meeting – Statutory Requirements, Notice of a Meeting, Agenda, Quorum, Proxy, Chairperson, Methods of Voting; Resolutions – Ordinary and Special Resolutions,and distinction between Ordinary and Special Resolutions; Meaning of Minutesand its Contents.

Skill Development Activities

01. Collect and fill the following forms – (a) Demat account opening form, and (b) Prospectus-cum-share application form
02. Draft the following – (a) Notice of annual general meeting, and (b) Resolutions relating to the declaration of dividend, appointment of auditor and issue of bonus shares
03. Prepare letter of allotment/regret on the basis of allotment
04. Draft a Memorandum of Association and mention the different clauses
05. Draft an Article of Association with its important contents

Recommended Books for Reference

01. Company Law and Secretarial Practice – M.C. Kuchal
02. Company Law and Secretarial Practice – Sherlekar
03. Business and Corporate Laws – P.S.Gogana
04. Guide to Companies Act – Ramaiah
05. Elements of Company Law – N.D.Kapoor
06. Indian Company Law – Avtar Singh

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B.Com, Semester– III

Course – 305:Fundamentals of Computer Technology

- Course Objectives: To enable the students to learn the efforts behind developing modern computer and its fundamentals along with its application areas. Student will also learn two application packages of MS Office
- Pedagogy: Combination of class room lectures, practice in the computer laboratory and exercises
- Teaching Hours per Week: 4 (3 hours of theory and 2 hours of practicals)
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Computer Concepts** (6 hours): Evolution of Computers, History, Generation, Classification of Computers, Digital, Analog, Hybrid, Mini, Micro, Mainframe/Super Computers, Personal Computer - Tablet PC, Note Book PC, Laptop, Desk Top PC; Application of Computers in Business and Office Environment and other areas.
- **Unit -2: Computer Hardware and Software** (6 hours): Definitions of Computer System, Hardware and Software, Types of Software, System Software and Application Software, Operating System - Meaning and Functions; Programming Languages - Low Level Languages and High Level Language - Meaning, Advantages and Disadvantages, Language Processors - Assembler, Interpreter and Compiler. Windows Explorer Menus, File, Edit, View and Tools.
- **Unit -3: Peripheral Devices** (8 hours): Block Diagram of a Digital Computer System and Functions of each block; Input and Output Devices - Keyboard, Mouse, Scanner, Joystick, OMR, OCR, Barcode Reader, Modem; Printer – Types of Printers, Web-Camera, Visual Display Units – CRT, LCD and LED; Computer Memory - Main Memory/Primary Memory – RAM and ROM; Types of ROM, Cache Memory and Secondary Memory; Hard Disk, CD–ROM, DVDRW and Pen Drive.

- **Unit -4: MS-WORD** (20 hours): Features, Advantages, Basic Operations - Word Opening Screen Elements, Creating, Opening and Saving of Word Document; Formatting, Margin, Paper Selection, Undo-Redo, Spell Check, Alignment, Insert Table; Mail Merge; MS-Word Shortcut Keys.
- **Unit -5: MS-EXCEL** (24 hours): Features, Advantages, MS-Excel Program Window Elements; Managing Workbooks-Create, Open, Save and Close; Managing Worksheets - Naming, Inserting, Moving, Copying and Deleting; Navigation in MS-Excel; Standard Toolbar Elements; Types of Cell Data, Entering Data, Inserting and Deleting Cells, Rows and Columns, Formatting Toolbar Elements, Basic Formulas, Types of Cell Referencing, and Practicals in MS-Excel Sheets.

Skill Development Activities

01. Windows Explorer Menus: File, Edit, View and Tools
02. MS-WORD: Letter Writing and Mail-Merge Practical
03. MS-EXCEL: Creating Work Sheet, data entry, use of formulas, graph generations
04. Preparation of Mark Statement, Sales Report, and Salary Statement
05. Prepare the pay roll for employees (10 employees) of an organization and count the number of employees who are getting the salary of more than ` 10,000. Calculate the following components - DA, HRA, CCA, EPF, LIC as a percentage of basic pay and sum the total basic pay, net pay of all employees

Recommended Books for Reference

01. S.Sadalaimuthu and Anthony Raj, Computer Application In Business (Himalaya Publishing House)
02. V.Rajaram, Fundamentals of Computers (S.Chand and Co)
03. R.Rameshwaram, Computer Applications in Business (S.Chand and Co)
04. Sanjay Saxena, A first Course in Computers (Vikas Publishing House)
05. Balaguruswamy, Introduction to Computers
06. Parameshwaran, Computers in Business (Sultan Chand & Sons)

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B.Com, Semester– III

Course – 306:Principles of Marketing

- Course Objectives: The objective of this course is to help the students to understand the different dimensions of marketing and their application
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Introduction** (10 hours): Marketing - Nature, Functions, and Scope; Marketing Concepts– Traditional and Modern; Selling vs Marketing, Marketing Mix.
- **Unit -2: Product** (12 hours): Concept of Product, Consumer and Industrial Goods, Product Life Cycle, Product Planning and Development, Why New Product Fails? Packaging – Role and Functions, Branding – Importance and Types; and Labeling.

- **Unit -3: Price** (10 hours): Concept of Price, Importance, Objective, Factors affecting Pricing Decisions, and Pricing Methods.
- **Unit -4: Physical Distribution** (10 hours): Concept and Role, Types of Distribution Channels, Factors influencing in Channel Selection, Role of Retailers, Wholesalersand Dealers in Distribution.
- **Unit -5: Promotion** (12 hours): Concept and Importance of Promotion, Promotion Mix – (a) Advertising - Concept, Types and Criticism;(b) Personal Selling – Importance and Functions of Sales Personnel; (c) Sales Promotion – Importance and Types.
- **Unit -6: Market Segmentation and Consumer Behavior** (10 hours): Concept and Factors influencing Consumer Behaviour (Physical, Psychological, Socio-Cultural and Personal Factors), Importance and Bases for Market Segmentation.

Skill Development Activities

01. Analyze consumer behavior for an imaginary product by interacting with few selected users of cosmetic products
02. Draw a chart showing product life cycle of a consumer durable product
03. Collect the data relating to pricing methods adopted in the concerns of your locality
04. Develop an advertisement copy for any product of your choice
05. List out the distribution channels available for consumer and industrial goods
06. Collect an advertisement copy from a magazine and analyze its contents, features and layout

Recommended Books for Reference

01. Marketing Management, Philip Kotler
02. Marketing Management, William J.Stanton
03. Marketing Management, Sharlekar.S.A
04. Marketing Management, Sontakki
05. Marketing Management, J.C.Gandhi

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B.Com, Semester– IV

Course – 403:Advanced Corporate Accounting

- Course Objectives: To enable the students to understand the Principles and Procedure of preparing Accounts of specialized corporate entities
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Banking Company Accounts** (16 hours): Preparation of Profit and Loss Account,and Balance Sheet under New Regulations (covering various Schedules) – Impact of Non-performing Assets on Banking Business.
- **Unit -2: Life Insurance Company Accounts** (16 hours): Preparation of Revenue Accounts and Balance Sheet; Calculation of Profit by Preparing Valuation Balance Sheet (Vertical Form).

- **Unit -3: General Insurance Company Accounts** (16 hours): Fire, Accident, and Marine Insurance, Preparation of Revenue Accounts, Profit and Loss Account,and Balance Sheet (Vertical Format).
- **Unit -4: Double Account System** (12 hours): Introduction – Characteristics of Double Accounts, Formats, Limitations of Double Account System,Final Accounts of Electricity Supply Companies – Problems on the preparation of Operating Revenue, Operating Expenses and Capital Account,and General Balance Sheet.
- **Unit -5: Social Responsibility Accounting** (4 hours): Meaning and Definition, Features and Objectivesof Social Responsibility Accounts (theory only).

Skill Development Activities

01. Visit the nearest LIC branch and collect proposal forms, medical report, nomination forms and different kinds of policies in vogue – based on this, prepare a brief report
02. Visit the nearest branch of General Insurance Company and collect different forms – medi-claims, fire, accident, burglary, etc, and prepare a brief note after analyzing the contents and format
03. Visit the nearest bank and collect the scroll, daybook, Friday statement, Profit and Loss Account, and Balance Sheet, and identify secured, unsecured and personal loan components
04. Prepare valuation balance sheet with imaginary figures
05. Calculate rebate on bills discounted with imaginary figures

Recommended Books for Reference

01. Corporate Accounts,Narang and Jain
02. Corporate Accounting, R.L.Gupta and Radhaswamy
03. Corporate Accounting, B.S.Raman
04. Corporate Accounting, Maheshwari and Dovaipandium
05. Corporate Accounting, S.P.Iyengar

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B.Com, Semester– IV

Course – 404:Business Regulations

- Course Objectives: To familiarize the students with different business Laws and their interpretations and applicability
- Pedagogy: Combination of class room lectures, case laws, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1 : Introduction to Law of Contract** (18 hours): Meaning and Scope of Business Laws; Indian Contract Act, 1872-Meaning, Definition and Types of Contract, Essentials – Offer, Acceptance and Consideration, Capacity of Parties, Free Consent, Legality of Object, Remediesfor Breach of Contract, and Quasi Contract.

- **Unit -2: Sale of Goods Act, 1930** (16hours): Definition of Buyer, Seller, Contract of Sale; Goods – Existing, Future and Specific Goods; Documents to the Title of Goods, Essentials of Contract of Sale, Sale and Agreement to Sell, Price and Mode of Fixing of Price, Conditions and Warranties – Essentials of Conditions and Warranties, Caveat Emptor and Exceptionsto the Rule of Caveat Emptor, Transfer of Ownership and Rules regarding Passing of Property, Unpaid Seller and Rights of Unpaid Seller and Rights of a Buyer.
- **Unit -3: Intellectual Property Legislations** (14hours): Meaning and Scope of Intellectual Properties, Forms of Intellectual Properties Patents, Rights and Duties of Patentee, Infringement of Patent – Relief available; Trade Marks - Assignment and Transmission of Trade Marks, Infringement, Action against Infringement; Copy Rights – Meaning, Infringement and Remedies available; Procedure for grant of Process and Product Patents;and WTO Rules as to Patents (in brief).
- **Unit -4: Consumer Protection Act, 1986** (10hours): Objectives; Definitionsof Consumer, Consumer Dispute, Complaint, Complainant, Deficiency, Service, Restrictive/Unfair Trade Practices; Rights of Consumers; Consumer Protection Council, Consumer Grievances Redressal Agencies – District Forum, State Commission, and National Commission.
- **Unit -5: Cyber Law/Information Technology Act, 2000** (6 hours)**:** Objectives, Definition of different Terms, Salient Features, Provisions pertaining to Piracy and related Offences and Penalties, and Cyber Appellate Tribunal.

Skill Development Activities

01. Write down the facts and legal parts involved in each of the following cases – (a) Carlill vs Carbolic Smoke Ball Co Ltd, (b) Lalman Shukla vs Gowri Datt, (c) Mohiri Bibi vs Dharmadas Ghosh, (d) Abdul Aziz vs Marum Ali, and (e) Ranganayakamma vs Alwar Shetty.
02. Collect the following drafts – (a) Affidavit, (b) Power of Attorney, (c) Gift Deed, and (d) Sale Deed.
03. Visit a consumer forum and list out nature of disputes referred to consumer court
04. Visit a court and prepare a report on proceedings of the court
05. Conduct mock court trial and ask the students to play the different roles and prepare a brief report
06. List out different courts situated at the district level and prepare a brief report.

Recommended Books for Reference

01. Business Law: S.S.Gulshan
02. Commercial Law, N.D.Kapoor
03. Business Law – B.S.Raman
04. Mercantile Law, M.C.Shukla
05. Principles of Business Law, Ashwathappa
06. Right to Information Act, P. K. Das

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B.Com, Semester– IV

Course – 405:Computer Applications in Business

- Course Objectives: To enable the students to learn the basics of computer net-works and use of computers in business applications
- Pedagogy: Combination of class room lectures, Practice in computer laboratory, group discussion, and field work

- Teaching Hours per Week: 4 (3 hours of theory and 2 hours of practice in laboratory)
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Introduction to Internet** (8 hours): Meaning of Internet and Intranet, LAN, WAN, MAN, WWW; Advantages of Internet, E-mail -Meaning, Advantages, Steps in creating e-mail ID, Internet Browsing, Information through Web Sites, Search Engines, Browser (Internet Explorer).
- **Unit -2: Power Point Introduction** (8 hours): Start, End, Open, Format, Edit, Print and Save a Presentation; Insert, Format, and Modify Text, Select a Design Template, Create a Title Slide, Create a Multi–Level Bulleted List Slide, Display and Print in Black and White, Describe the Speech Recognition Capabilities of Power Point, Add Slides to,and Delete Slides from a Presentation.
- **Unit -3: Power Point – Advanced** (14 hours): Create a Presentation from an Outline and use Outline Features, Change the Slide Layout, Insert and Edit Clip Art, Add a Header Footer, Add Animation and Slide Transition Effects, Create Presentations using Embedded Visuals, Import and Outline Created in Microsoft Word, Modify a Clip, Create a Slide Background using a Picture, Customize Graphical Bullets, Create an Embed Organizational Chart, Insert and Format a Table into a Slide, Add an Animation Scheme to Selected Slides, Print Handouts, and Rearrange Slides.
- **unit – 4: Tally (9.0)** (14 hours): Features, Advantages, Menus in Tally, Create a Company, Ledger Creation with VAT class and Group Assignment, Group Creation, Creating Inventory of Products, Activate Company Features (F11), and Configuration of Tally (F12).
- **unit – 5: Tally-Vouchers** (20 hours): Voucher Types, Exercises in Making Voucher Entries, Display and Printing of Final Accounts – Balance Sheet, Profit and Loss Account; Trial Balance, Stock Summary, Computation of VAT and TDS.

Skill Development Activities

01. Write the steps for creating presentation having at least fiveslides related to a new product launching
02. Write the steps for creating presentation having at least five slides related to motivating the salesmen
03. Illustrate the steps required in creating a company, creating ledgers and group assignments
04. Illustrate the voucher entries required for various types of business transactions
05. State the steps for creating Inventory Format with VAT rates along with examples

Recommended Books for Reference

01. S.Sadalaimuthu and Anthony Raj, Computer Application in Business (Himalaya Publishing House)
02. V.Rajaram, Fundamentals of Computers, (S.Chand and Co)
03. R.Rameshwaram, Computer Applications in Business, (S.Chand and Co)
04. Sanjay Saxena, A First Course in Computers (Vikas Publishing House)
05. Tally 9.0

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B.Com, Semester– IV

Course – 406:Management of Banking Operations

- Course Objectives: To familiarize the students with the law and practice of banking
- Pedagogy: Combination of class room lectures, case laws, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Banker and Customer** (12 hours): Relationship-Meaning of Banker and Customer, General and Special Relationships; Types of Accounts-Savings Account, Current Account and Fixed Deposit Account; Procedure for Opening the above Accounts.
- **Unit -2: Special Types of Customers** (12hours): Minor/Joint Account, Partnership Account, Joint Stock Companies, Trustees, Clubs and Associations.
- **Unit -3: Negotiable Instruments** (12hours): Meaning and Definition; Kinds of Negotiable Instruments; Meaning, Definition and Features of Promissory Notes, Bill of Exchanges, Cheques – Crossing of Cheques, Types of Crossing, Material Alteration, Endorsement - Meaning, Essentials and Kinds of Endorsement.
- **Unit -4: Banking Operations** (20 hours): Collecting Banker – Meaning, Duties and Pre-cautions to be Taken, Statutory Protection to Collecting Banker; Paying Banker – Meaning, Pre-cautions, Statutory Protection to Paying Banker; Dishonour of Cheques-Grounds for Dishonor, Consequences of wrongful Dishonor of Cheques; Lending Banker - Principles of Bank Lending, Kinds of Lending Loans and Cash Credits, Overdrafts, Bills Discounting, Letter of Credit; NPA- Meaning and Circumstances.
- **Unit -5: Technology in Banks** (6 hours)**:** E-Banking, Debit and Credit Cards, Internet Banking, ATM, Electronic Fund Transfer, MICR, DEMAT, and RTGC.

Skill Development Activities

01. Collect and fill account opening form of SB or Current Account
02. Collect and fill pay-in-slip of SB or Current Account
03. Draw specimen of demand draft and cheque
04. List out different customer services offered by atleast two banks of your choice
05. Case studies – Davidson vs Barclay's Bank, Clayton's Case, Sunderlandvs Barclay's Bank.

Recommended Books for Reference

01. Law and Practice of Banking: Sheldon, H.P
02. Banking Law and Practice: Maheshwari
03. Law and Practice of Banking: Kothari, N.M
04. Banking Law and Practice: Tandon, M.L
05. Law and Practice of Banking: B.S.Raman

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B.Com, Semester – V

Course – 501: Financial Management

- Course Objectives: To acquaint the students with the fundamental aspects of mobilizing and utilizing financial resources in the business.

- Pedagogy: Combination of Class-room Lectures, Cases, Group Discussion, Student Presentations, and Field Work.
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit – 1: Introduction** (10 hours): Meaning of Financial Management, Scope and Functions of Financial Management, Objectives of Financial Management; Time Value of Money – Present Value of Future Money, and Future Value of Present Money – Single Cash Flow and Stream of Cash Flows – even and uneven Cash Flows, and Simple Problems.
- **Unit – 2: Financing Decisions**(15 hours): Sources of Financing – Short term and Long term, Capital Structure – Meaning and Factors influencing Capital Structure; Leverages – Operating Leverage, Financial Leverage, and Combined Leverage; Earnings per Share, and Problems on Leverages and Earnings per Share.
- **Unit – 3: Cost of Capital**(10 hours): Meaning of Cost of Capital; Cost of Debt – Redeemable and Perpetual; Cost of Preference Share Capital – Redeemable and irredeemable Shares; Cost of Equity – Dividend Yield, Earning Yield and Dividend Yield plus Growth Methods; Cost of Retained Earnings; Weighted Average Cost of Capital (WACC) and Problems on all Costs of Capital.
- **Unit – 4: Investment Decisions**(15 hours): Capital Budgeting – Meaning and Importance, Investment Evaluation Techniques – Pay Back Period Method, Accounting Rate of Return Method, Net Present Value Method, Profitability Index Method and Internal Rate of Return (Average Return to Average Investment) Method, Problems on all these Investment Evaluation Techniques.
- **Unit – 5: Working Capital Management**(10 hours): Working Capital – Meaning and Concept of Working Capital, Types of Working Capital, Factors affecting Working Capital, Working Capital Cycle (Operating Cycle), Problems on estimation of Working Capital requirement (Current Assets and Current Liabilities Method only).
- **Unit – 6: Dividend Decisions** (4 hours): Meaning and Forms of Dividend, Types of Dividend Policy, Determinants of Dividend Policy, and Walter's Model (only theory.

Skill Development Activities

01. List out any ten sources from where a firm can mobilize the Long-term Finance and Short-term Finance
02. Collect the Financial Statements of a company and analyse its Capital Structure and determine its WACC,
03. Identify the problems in computing the Cost of Capital
04. Prepare a Capital Budget for a new company
05. Calculate Financial Leverage and Operating Leverage from the Financial Statements of the company which you have collected
06. Visit an organization and collect the information about functions, duties and responsibilities of Finance Manager.
07. Collect the information about the working capital requirements of a business unit which you have visited

Recommended Books for Reference

01. Financial Management, Khan and Jain (Tata McGraw-Hill)
02. Financial Management, I. M. Pandey (Vikas Publications)
03. Financial Management and Corporate Planning and Policy, S. N Maheshwari (Sultan Chand and Company)
04. Financial Management and Policy, R. M. Srivastava (Himalaya Publishing House)
05. Financial Management, Ravi M Kishore (Taxman Publications)
06. Financial Management, V. K. Bhatta (Anmol Publications)
07. Financial Management, B. V. Raghunandan (Sushrutha Publications)
08. Financial Management, Prasanna Chandra (Sultan Chand and Company)
09. Financial Management, Reddy and Appannaiah (Himalaya publishing House)
10. Financial Management, Dr. Alice Mani (Swapna Book House)
11. Financial Management, P. V. Kulakarni

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B.Com, Semester – V

Course – 502:Income Tax -I

- Course Objectives: To provide basic knowledge and equip students with application of principles and Provisions in IT Act, 1961 relating to computation of income-individual assessee
- Pedagogy: Combination of class room lectures, case laws, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Brief History of Income Tax** (12 hours): Basic Concepts - Assessee, Person, Income, Casual Income, Assessment Year, Previous Year, Agricultural Income, Gross Total Income, Total Income, and Exempted Incomes under Section 10.
- **Unit -2: Residential Status** (14 hours): Determination of Residential Status of an Individual and Incidence of Tax on the basis of Residential Status of Individual; Computation of Total Income of an Individual on the basis of Residential Status.
- **Unit -3: Computation of Income under the head 'Salary'**(24 hours)**:** Meaning of Salary, Features, Allowances – Perquisites and their Valuation, Provident Funds and their Income Tax Provisions, Retirement Benefits – Gratuity, Earned Leave and Commutation of Pension.
- **Unit -4: Deductions** (10 hours): Under Sections 80C to 80U - 80C, 80CCD, 80D, 80DD, 80E, 80G and 80U;Problems on 80C and 80 G only, and Computation of Total Income based on Salary Income only.
- **Unit -5: Income Tax Authorities and their Powers** (4 hours)

Skill Development Activities

01. Filling of Form No. 49A and Form No. 49B (PAN and TAN)
02. Filling of Challan Nos.280 and 281
03. Filling of Form Nos.16 and 16A
04. Filling of Return of Income Tax (individual only)
05. Draw a structure of Income Tax Authorities
06. Filling of Form to claim refund of Tax

Recommended Books for Reference

01. Income Tax Law and Accounts: Dr. H.C.Mehrotra (Sahitya Bhavan Publication)
02. Income Tax Law and Practice: Gaur and Narang (Kalyani Publication)
03. Direct Taxes: Dr.Vinod.K.Singhania (Taxman Publication)
04. Direct Taxes: B.B.Lal
05. Income Tax: Dinakara Pagare (Sultan Chand & Co)

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B.Com, Semester– V

Course – 503:Techniques for Business Decisions - I

- Course Objectives: To familiarize the students with the fundamental techniques and tools of business statistics
- Pedagogy: Combination of class room lectures, exercises, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Introduction to Statistics** (6 hours): Meaning, Definitions, Functions, Scope and Limitations of Statistics, and Distrust of Statistics.
- **Unit -2: Collection of Data** (12 hours)**:** Primary and Secondary Data –Methods of Collection; Classification – Meaning and Types; Tabulation – Meaning, Rules for Construction, Parts of Statistical Table, and Problems on Tabulation.
- **Unit -3:Diagrammatic and Graphic Representation of Statistical Data (**14 hours)**:** Meaning, Types of Diagrams, Simple, Multiple, Subdivided and Percentage; Histogram – Location of Mode through Histogram;and Ogive Curves - Location of Median and Quartiles through Ogive Curves.
- **Unit -4:Measures of Central Tendency** (14 hours)**:** Meaning, Requisites of an Ideal Average; Types – Simple Arithmetic Mean, Median, Mode, Geometric Mean (Individual Series only), and Harmonic Mean (Individual Series only).
- **Unit -5: Measures of Dispersion** (10hours): Meaning; Absolute and Relative Measures of Dispersion, Types- Range, Quartile Deviation, Standard Deviation, Co-efficient of each Method.
- **Unit -6: Skewness** (8hours)**:** Meaning, Types of Skewness, Tests of Skewness, Absolute and Relative Measures of Skewness, Methods of Karl Pearson's Coefficient of Skewness and Bowley's Co-efficient of Skewness.

Skill Development Activities

01. Preparation of a questionnaire
02. Collection of secondary data through different sources
03. Preparation of Statistics Tables
04. Preparation of percentage bar diagram
05. Finding out the consistency of two batsmen on the basis of runs scored in the test matches

Recommended Books for Reference

01. Business Statistics, S.P.Gupta (S.Chand and Sons)
02. Business Statistics Chikudi and Satyaprasad (Himalaya Publishing House)
03. Business sStatistics, S.C.Gupta and Indra Gupta (Himalaya Publishing House)
04. Business Statistics, D.L.Jain
05. Statistics for Management, Lenin R and Rubin.D.S (PHI)

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B.Com, Semester– V

Course – 504:Elements of Cost Accounting

- Course Objectives: To enable the students to understand and appreciate the fundamentals of Cost Accounting, and elements of Costs and Reconciliation of Income Statements
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Introduction to Cost Accounting** (8 hours): Meaning and Definition of Cost, Costing, Cost Accounting and Cost Accountancy, Limitations of Financial Accounting, Differences between Financial Accounting and Cost Accounting; Objectives and Scope of Cost Accounting; Advantages and Limitations of Cost Accounting, Methods and Techniques of Costing.
- **Unit -2: Elements of Cost and other Basics** (12 hours): Cost Unit, Cost Centre, Classification of Costs, Problems on Cost Sheet, Tenders, Quotations and Estimations.
- **Unit -3: Material Cost** (12 hours): Material Cost - Meaning, Objectives and Essentials, Purchase of Materials – Centralizedand Decentralized Purchasing, Purchase Procedure, Stores Control - Meaning and Techniques, Fixation of Stock Levels, EOQ, ABC Analysis, VED Analysis, Perpetual Inventory System, Bin Card, Stores Ledger, Pricing of Material Issues - FIFO, LIFO, Simple Average and Weighted Average Methods, and problems thereon.
- **Unit -4: Labour Cost** (12 hours): Labour Cost Control, Time Keeping and Time Booking, Treatment of Idle Time and Over Time, Labour Turnover, Methods of Wage Payment - Time Rate, Piece Rate and Incentives Plans - Halsey Plan, Rowan Plan, Emerson's Efficiency Plan, Statement of Wage Sheet, and problems thereon.
- **Unit -5: Overhead Expenses** (12 hours): Meaning, Classification of Overheads, Allocation and Apportionment of Overheads, Re-apportionment of Overheads - Direct Distribution, Step Ladder Method; Absorption of Overheads - Percentage on Direct Material Cost, Direct Labour Cost, Direct Labour Hour Rate and Machine Hour Rate; Problems on Allocation, Apportionment, Re-apportionment and Absorption of Overhead Expenses including Machine Hour Rate.
- **Unit -6: Reconciliation of Cost and Financial Accounts** (8 hours)**:** Reasons, Reconciliation Methods, and Problems on Reconciliation including Preparation of Cost Sheet,and Profit and Loss Account.

Skill Development Activities

01. Naming the appropriate method of costing with justification for each of the following industries – papermill, printing, sugar factory, Lathe workshop, Ricemill, Hospital, oil refinery, pickles manufacturing, KSRTC, Hotel.
02. Naming the appropriate cost unit with justification for the following Industries- KPC, KPTCL, Hotel, Water supply, Brick making, Rice Mill, Bakery, Sugar Factory, Railways, Passengers and goods transport.

03. List of manufacturing units / service organizations in your town along with (a) Products manufactured by them / services rendered by them and (b) Suitable method of costing and cost unit applicable to them.
04. Visit a factory / industrial undertaking and write a report on any two of the following – (a) Purchase policy / procedure, (b) Material issue procedure, (c) Labour / employee time record method, and Wage payment procedure.
05. Calculate total cost in the following cases – (a) to make 100 pounds of bread, (b) to make a standard size dining table set of rose wood / teak wood, and (c) to laydown a foundation in 20 × 30 site measure for construction of a house with imaginary figures
06. Write a specimen format and a note on the following - Bincard, Stores ledger, Material requisition, payroll, time card, labour cost sheet, idle time card, and purchase requisition
07. Visit a factory/industrial unit and write a report covering costing department, production department, personnel department, and selling department.

Recommended Books for Reference

01. Cost Accounting (Elements of Cost andMethods of Costing): J.Madegowda, 2nd ed, 2013, Himalaya Publishing House
02. Advanced Cost Accounting: J.Madegowda, 2nd ed, 2012, Himalaya Publishing House
03. Cost Accounting: S.P.Jain and K.L.Narang
04. Cost Accounting: Nigam and Sharma
05. Cost Accounting: Pattanashetty and Palekar
06. Cost Accounting: N.K.Prasad
07. Cost Accounting: S.P.Iyengar
08. Cost Accounting: M.N.Arora
09. Cost Accounting: Dyckman Bierman and Murse
10. Cost Accounting: Jawahar
11. Cost Accounting: B.S.Raman
12. Cost Accounting: Pallani and Bhagavathi

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B.Com, Semester– V

Course – 505:Higher Accounts

- Course Objectives: To enable the students to understand advanced Accounting aspects
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Amalgamation** (20 hours): Amalgamation, Absorption and Reconstruction of Joint Stock Companies (both Internal and External Reconstruction).
- **Unit -2: Liquidation of Companies** (14hours): Preparation of Liquidator's Final Statement of Accounts.

- **Unit -3: Holding Company Accounts** (14hours): Preparation of Holding Company Accounts, and Problems on Holding Company Accounts (excluding Gross and Chain Holdings)
- **Unit -4: Investment Accounting** (12 hours): Meaning, Definition, and Features of Investment Accounting,and Preparation of Investment Accounts.
- **Unit -5: Human Resource Accounting** (4 hours): Meaning, Objectives, Methods, Advantages and Limitations (theory only).

Skill Development Activities

01. Calculation of purchase consideration with imaginary figures and developing model entries
02. Preparation of investment accounts in the books of purchaser (Investor)
03. Preparation of liquidator's statement with imaginary figures
04. Calculation of minority interest, capital profit and revenue profit with imaginary figures
05. Preparation of Capital Reduction Account with imaginary figures

Recommended Books for Reference

01. Corporate Accounting – S.N.Maheshwari and K.Dorai Pande
02. Corporate Accounting – R.L.Gupta and M.Radhaswamy
03. Advanced Accounting – Jain and Narang (Kalyani Publications)
04. Corporate Accounting – B.S.Raman (United Publishers)
05. Advanced Accounting – M.C.Shukla and T.S.Grewal
06. Corporate Accounting – J.S.Reddy and A.Murthy
07. Corporate Accounting – S.P.Jain and Narang
08. Financial Accounting (Volume - II) – B. S. Raman

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B.Com, Semester– V

Course – 506:Services Management

- Course Objectives: This course enables the students to acquire the requisite knowledge about the working of financial service institutions in India
- Pedagogy: Combination of class room lectures, case laws, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Nature of Financial Services** (14 hours): Meaning and Definition of Financial Services, Types of Financial Services - Stock Brokerage, Portfolio Management Services, Financial Services, Features and Classification, Scope, Fund and Non-fund based Activities.
- **Unit -2: Mutual Funds** (10 hours)**:** Meaning and Classification of Mutual Funds, Importance and Risks, Venture Capital - Features and Forms of Venture Capital in India.
- **Unit -3: Merchant Banking** (10hours): Meaning and Definition, Services of Merchant Banks, Role and Importance, Factoring - Concepts, Types and Functions of Factors.
- **Unit -4: Stock Exchanges in India** (10 hours):BSE, NSE and OTCEI, Trends in Stock Exchanges, Electronic Trading, Depository Services, and SEBI Regulations.

- **Unit -5: Credit Cards** (12 hours): Meaning, Types of Credit Cards, Credit Rating - Features, Advantages; CRISIL, CARE, and ICRA.
- **Unit - 6:Leasing**(8 hours): Introduction, Meaning and Types of Leasing, Leasing from the point of view of Lessee and Lessor; Hire Purchase Agreements; Consumer Finance – Hire Purchase and Installment.

Skill Development Activities

01. Students to prepare a diagram showing working of a stock exchange
02. Collect the advertising copy of the Mutual Fund Scheme and paste it, and analyze the contents
03. List out different types of credit cards issued by financial service sector
04. Prepare a list of different mutual fund schemes and classifying them under open-ended and close-ended schemes
05. Visit a stock broking office and collect new issue application form and fill it

Recommended Books for Reference

01. Financial Services by M.Y.Khan
02. Financial Services and System by Guruswamy
03. Financial Services and Market Operations by Gordon and Natarajan
04. Financial Services, Institutions and Markets by L.M.Bhole

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B.Com, Semester– V
Specialization Stream – A: Accounting

Course - 507A1: Accounting Standards – I

- Course Objectives: To expose the students to different Accounting Regulations applicable to corporate enterprises
- Pedagogy: Combination of class room lectures, case analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit - 1:Accounting Standards** (8hours):Meaning and Definition of Accounting Standards, Objectives and Benefits of Accounting Standards,and an overview of Standard setting Bodies in India and World.
- **Unit -2: Standard Setting Process** (10hours): Difficulties in setting Standard, Procedure for setting Accounting Standards, Standard Setting Bodies, Types of Accounting Standards, Standard Setting across different Countries - USA, UK, and India.
- **Unit -3: Accounting Standard (India)** (14hours) : Accounting Standard issued by the Accounting Standard Board of The Institute of Chartered Accountants of India till date; Introduction - Explaining Problem Area, Scope and effective Date.

- **Unit -4: Specific Accounting Standards (India)** (16 hours): AS-1: Disclosure of Accounting Policies, AS-2: Valuation of Inventories, AS-3: Cash Flow Statement, AS-4: Contingencies and Events Occurring After the Balance Sheet

Date, AS-5: Net Profit or Loss for the Period, Prior Period Items and Charges in Accounting Policies.

- **Unit -5: AS-6 to AS-10** (16 hours): AS-6: Depreciation Accounting, AS-7: Accounting for Construction Contracts, AS-8: Accounting for Research and Development, AS-9: Revenue Recognition, and AS-10: Accounting For Fixed Assets.

Skill Development Activities

01. Prepare a list of Accounting Standard issued by the Accounting Standards Board of the Institute of Chartered Accountants of India, New Delhi
02. Prepare a list of International Financial ReportingStandards issued by the International Accounting Standard Board
03. Prepare a brief report on the composition of Accounting Standards Board of ICAI
04. Prepare a brief report analyzing the steps/procedure followed by Accounting Standard Board of ICAI for issuing its standard
05. Compare the provisions of AS and IAS on inventory valuation and prepare a brief report

Recommended Books for Reference

01. Taxman's Accounting Standards: D.G.Sharma and Srinivasan Anand
02. Taxman's Guide to Accounting Standard: D.S.Rawat
03. ICFAI's publication on Accounting Standards
04. Accounting Standards and Corporate Practices: T.P.Ghosh
05. Comparison of Statements and Standards on Accounting, ICAI, New Delhi.
06. British Accounting Standards, Ronal Leach and Edword Stamp, Woodhead Faulkner Ltd, Cambridge

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B.Com, Semester– V
Specialization Stream – B: Marketing Management

Course – 507B1: Marketing Management

- Course Objectives: To expose the students to differentaspects of marketing environment and strategies
- Pedagogy: Combination of class room lectures, case analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit –1: Sales Management** (12 hours):Evolution of Sales Concept, Nature of Selling, Role and Objectives of Sales Management, Concept and Importance of Territory Management,Factors influencing the designing ofSales Territory.
- **Unit –2: Retail and Wholesale Management**(12 hours): Concept of Retailing, Wheels of Retailing, Classification of Retailers, Retail Operations, Store Location, Layout, Store Designing and Space Planning; Concept and Importance of Wholesaling, andTypes of wholesalers.
- **Unit – 3: Logistics Management**(4 hours): Concept and Importance of Logistics, Functions in Logistics Management, Inbound and Outbound Logistics.

- **Unit – 4: Advertising and Media Management** (12 hours): Concept, Importance and Functions of Advertising; DAGMAR approach, Media Planning, Factors influencing Media Selection,and Concept and Functions of Ad Agencies.
- **Unit – 5: Brand Management**(12 hours): Brands and their Significance, Role and Categories of Brands, Branding Strategies – Line Extension and Brand Extension; Corporate Branding, and Multi-Branding.
- **Unit – 6:Marketing Research**(12 hours):Nature, Scope, Uses and Limitations of Marketing Research; Types of Research, Steps in Research Process, and Role of Marketing Information System in Marketing Research.

Skill Development Activities

01. Identify and describe the activities of five marketing research companies in India
02. Define the advertising objectives on DAGMAR Approach for Cell phones
03. Visit an organized retail out-let, sketch out the store layout and space planning
04. List-out the brand building activities to be undertaken for a newly established international school
05. Visit any two retailers, wholesalers and dealers each and give any five differences among them in terms of sales activities

Recommended Books for Reference

01. Advertising Management: Rajeev Batra, John G. Myers, and T.David, PHI, New Delhi
02. Advertising: Jefkins and Yadin, Pearson Education, New Delhi
03. Retail Management: Barry Bermans and Joel Evans, PHI, New Delhi
04. Retail Management: Chetan Bajaj, Oxford Publication
05. Art of Retailing: A.J.Lamba, Tata McGraw-Hill, New Delhi
06. Marketing Research: Malhotra
07. Marketing Research: G.C.Beri, Tata McGraw-Hill, New Delhi
08. Marketing Communication: ICFAI University Press, Hyderabad

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B.Com, Semester – V

Specialization Stream – C: Financial Management

Course – 507C1: Advanced Financial Management

- Objective: To acquaint the students with the various factors considered while managing the finance of a business unit and the risks involved in it.
- Pedagogy: Class room lecturers, Seminar, Group discussion.
- Teaching hour per week: 4 hours
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit-1: Capital Structure Theories**(12 hours): Introduction, Net Income Approach, Net Operating Income Approach, Modigliani and Miller Approach, Arbitrage Process, Traditional Approach and Problems on Capital Structure.

- **Unit-2: Capital Budgeting**(16 hours): Project Selection under Capital Rationing; Inflation and Capital Budgeting; Risk in Investment Decisions: Concept of Uncertainty, Risk and Uncertainty, Measurement of Risk, Risk Analysis

Approaches and Problems on Capital Rationing, Decision under Inflation, and Risk Adjusted Discount Rate Approach.

- **Unit -3: Management of Cash** (8 hours): Motives for holding Cash, Cash Planning, Cash Forecasting and Budgeting – Preparation of Cash Budget and Problems.
- **Unit-4: Management of Inventory** (8 hours): Nature of Inventories, Need to hold Inventories, Objectives of Inventory Management, InventoryManagement Techniques, and Problems on EOQ.
- **Unit-5: Management of Accounts Receivables** (8 hours): Goals and Problems of Receivable Management, Formulating suitable Credit Policy, Designing Collection Policy, and Problems on Credit Policy.
- **Unit-6: Dividend Policy** (12 hours): Walter's Model, Gordon's Model and MM's Hypothesis and Problems on all these Models.

Skill Development Activities

01. Prepare a project report of a small business unit
02. Design a capital structure for a Trading concern
03. Prepare a blue print on working capital of a small concern
04. Prepare a cash budget using imaginary figures
05. Formulate credit policy for a business unit
06. List out at least five companies which have declared dividends recently, along with the rates of dividend declared

Recommended Books for Reference

01. Financial Management (Text, Problems and Cases) by Khan and Jain, TMH
02. Financial Management, I.M. Pandey, Vikas Publishing House
03. Financial Management and Corporate Planning and Policy, S.N Maheshwari (Sultan Chand)
04. Financial Management, B.S. Raman, United Publishers
05. Financial Management, R.M Srivastava, Himalaya publishing House
06. Financial Management, Dr. A.K. Mani, Swapna Book House
07. Financial Management, James C Van Horne

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B.Com, Semester– V
Specialization Stream – D: Banking and Insurance

Course – 507D1: Advanced Banking

- Course Objectives: To enable the students to understand different concepts of international banking and foreign exchange rate determination
- Pedagogy: Combination of class room lectures, case analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit - 1: Introduction to International Banking**(12 hours):Introduction, Meaning, Functions, Financing of Exports, Financing of Imports, and International Payment System.
- **Unit - 2: Foreign Exchange Markets**(14 hours):Introduction, Meaning, Elements, Importance, International Monetary System, Types of Exchange Rates, Fluctuations in Foreign Exchange Rates, Causes and Effects, Need for stable Foreign Exchange Rates, Determination of Exchange Rates, and Theories of determination of Exchange Rates.
- **Unit - 3: Management Principles in Banks** (14 hours):Managerial Functions in Bank, Hierarchy, Individual and Group Behaviour, Management of Personnel, Functions of Manager, Inspection, Local Advisory Committee, Recruitment, Selection, Training, Promotion, and Control of Staff.
- **Unit - 4: Treasury Management**(12 hours):Meaning, Structure and Organization of Treasury Management, Role of Chief Financial Officer, Functions of Treasurer and Controller, and Responsibilities of Treasurer.
- **Unit - 5: Managing Bankruptcy**(12 hours):Definition of Bankruptcy, Factors leading to Bankruptcy, Symptoms of Bankruptcy, Bankruptcy Costs, and Bankruptcy Prediction Model.

Skill Development Activities

01. Collect the balance sheet of a bank and analyze the income derived from treasury management
02. Prepare a table showing foreign exchange rates of Indian Rupee and US Dollar for one month
03. Write down the regulations governing recruitment of staff through IPBS
04. List out 15 different foreign currency exchange rates as per current market price
05. Write down 15 names of banks which have got Bankrupt

Recommended Books for Reference

01. Principles of Bank Management – Vasant Desai
02. Innovation in Bank Management – Jessup
03. Commercial Bank Management – Reed.E.W

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B.Com, Semester–V
Specialization Stream – E: Business Taxation
Course – 507E1: Business Taxation-I

- Course Objectives: To familiarize the students with Tax Laws and Procedure relating to Indirect Taxes
- Pedagogy: Combination of class room lectures, case analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit - 1: Karnataka Value Added Tax Act, 2003** (14hours):Meaning, Value Added Tax (VAT), Variants of VAT Registration, Its Procedure and Cancellation, Treatment of Small Dealers under VAT, Treatment of Closing Stock when switch over to VAT.
- **Unit -2: Service Tax** (14 hours) : Service Tax Rates, Items covered under Service Tax Act, Valuation of Taxable Service for charging Service Tax - (a) Banking and other Financial Services, (b) Advertising Agencies, (c) Cable Operators, (d) Courier Services, (e) Consultancy Services of Chartered Accountants, Company Secretariesand Cost Accountants (ICWA), (f) Stock Brokers, (g) Franchise Services, (h) Travel and Tour Operators, and (i) Goods Service Operators; General Insurance, Registration, Persons responsible for collecting Service Tax and furnishing prescribed Returns.
- **Unit -3: Central Excise Duty** (12 hours)**:** Meaning and Characteristics of Excise Duty, Kinds of Excise Duty, Merits and Demerits, Definitions, Broker, Assessee, Excisable Goods, Factory, Manufacturer, Processing, Sale or Purchase, MODVAT, Registration, Central Excise Duty, Authorities and their Powers, and Penalties and Punishment.
- **Unit -4: CENVAT (Central Value Added Tax)** (12 hours): Definitions, CENVAT Credit and Utilization of CENVAT Credits.
- **Unit - 5: Customs Act, 1962** (12 hours)**:** Definitions, Objectives, Merits and Demerits, Customs Duty Authorities and their Powers, and Types of Customs Duty.

Skill Development Activities

01. Filling of prescribed form of registration under VAT
02. Mention different classes of officers who can be appointed under the Customs Act, 1962
03. List out the procedure to be followed for registration under Central Excise Law
04. Outline the procedure to be followed for clearance of imported and exported goods
05. Make out the difference between Baggage and Bonafide Baggage

Recommended Books for Reference

01. L.K.Jain, Central Excise Manual, (Century Publishers Pvt Ltd)
02. Karnataka Value Added Tax Act, 2003, published by Karnataka Law Journal Publications
03. Indirect Tax Law and Practice: V.S.Daty (Taxmann Allied Services Pvt Ltd)
04. Indirect Taxes – Dinakar Pagare
05. Guide to Service Tax – P. Veera Reddy

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B.Com, Semester– V
Specialization Stream – F: E-commerce

Course – 507F1: E-commerce - I

- Course Objectives: To enable the students to learn about the E-commerce and doing business in the E-world and make the students to understand the programming concept
- Pedagogy: Combination of class room lectures, practice in computer laboratory, exercises, group discussion, and field work
- Teaching Hours per Week: 4 (3 hours of theory and 2 hours of practice in laboratory)

- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit - 1: E-commerce** (8hours**) :** Electronic Commerce and Physical Commerce, E-commerce vs E-business, Characteristics of e-Business, e-Business - role and their challenges, e-business requirements, impact of e-business, Advantages of E-commerce, Advantages of Internet Marketing, and Advertisement over Internet.
- **Unit – 2: Internet Banking** (8 hours): Advantages of Online Banking Facilities, Internet Banking in India, ATM, Credit/Debit Card, Smart Card, Internet Payment System, Characteristics of Payment System, SET Protocol for Credit Card Payment.
- **Unit -3: Introduction to 'C'** (8 hours): History of 'C', Features and Merits of 'C', Basic Structure of a 'C' Program, Character Set, Key Words, Identifiers, Data Types, Constants and Variables, Data Type Declaration Statement, Assigning Values of a Variable, Operators, Expressions, Loading, Editing, Saving and Executing 'C' Programs, and Turbo 'C' Hot Keys.
- **Unit -4: Programming in 'C'** (16 hours): Input/Output Statements, Unformatted(Getchar, Putchar, Gets, Puts, Getch, Getche) and Formatted I/O Functions (Scanf, Printf), Program Flow Control Statements, If Statement, If-else Statement, Switch Statement, While Statement, Do-while Statement, For Statement, Nested for Loop Statement; Array - One Dimensional Array and Two Dimensional Array;and Library Functions (abs, sqrt, pow)
- **Unit -5: Writing Simple Programs in 'C'** (24 hours): Language involving Arithmetical Operations on Numbers, Number Generations of Various Types-Natural Numbers, Even and Odd Numbers, Multiplication Table, Fibonacci Series, Factorial of a Number, Array Generation, Array Addition, Using Formulas in 'C' Programs, Simple Interest, Compound Interest, Area and Circumference of a Circle,etc.

Skill Development Activities

01. Write a'C' program to find the area and circumference of a circle
02. Write a 'C' program to show the use of Char and String data types
03. Write a 'C' program to show the use of Do and While statements
04. Write a 'C' program to show the use of mul and pow functions
05. Write a 'C' program to display the growth of a fixed deposit in a bank on yearly basis
06. Write a 'C' program to show the use of Switch Case
07. Write a 'C' program to show the calculation of salesman's commission
08. Write a 'C' program to prepare a marks statement of a student
09. Write a 'C' program to calculate simple interest and compound interest

Recommended Books for Reference

01. V. Rajaraman, Computer Programming in 'C' (Prentice Hal of India)
02. Yashwanth, P. Kanetkar, Let Us C: (BPB Publications)
03. Byron S Gottrifried, Programming with C: (Tata McGraw Hill Publishing)
04. Parameshwaran, Computers in Business (Sultan Chand & Sons)

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B.Com, Semester–V
Specialization Stream – G: Quantitative Techniques

Course – 507G1: Quantitative Techniques - I

- Course Objectives: To enable the students to understand and apply mathematical and statistical techniques to practical business problems
- Pedagogy: Combination of class room lectures, case analysis, exercises, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Input

- **Unit-1**: **Arithmetic and Geometric Progression** (8 hours): Identify of series as AP and GP; Finding the n^{th} term of AP and GP; Finding number of AP and GP upto n^{th} terms; Finding arithmetic mean and geometric mean, Inserting arithmetic means and geometric means in between the given terms, and applications.
- **Unit-2: Matrices and Determinants** (14 hours)**:** Definition of Matrix and Examples, Types of Matrixes, Matrices Addition, Subtraction, Scalar Multiplication and Matrix Multiplication, Transpose of a Matrix and Inverse of the Matrix, Applications, Definition of Determinates - To Find the Determinant of a Square Matrix, Solving the Simultaneous Equations using Cromer's Rule Applications (Matrix Method).
- **Unit -3: Differential Calculus** (12 hours): Variables - Definitions and Examples, Constants – Definitions and Examples, Functions (different Types), Limits of Different Functions, Differentiation of Linear Function, Finding Maxima and Minima (extreme Values), Applications such as Marginal Cost, Marginal Revenue, and Average Cost.
- **Unit -4: Linear Programming** (14 hours): Definition of LPP; Objective Function, Decision Variables, Feasible Solution, Optimal Solution, Formulation of LPP and Solution by Graphic Method and Simplex Method (two variables only).
- **Unit -5: Theory of Probability** (10 hours): Random Experiment, Sample Space (one, two and three coins, One and Two Dice, Pack of Cards), Event, Compliment of an Event, Sub-event, Union of Events, Intersection of Events, Equally Likely Events, Mutually Exclusive Events and Exhaustive Events(only Definition and Examples), Definition of a Probability (Mathematical),and Simple Problems - Problems on Addition Theorem, Multiplication Theorem; To find Mean, Variance and Standard Deviation.
- **Unit -6:** Distribution (PMF) Examples, Normal Curve, Properties, and Simple Problems.

Skill Development Activities

01. Apply Arithmetic Progression and Geometric Progression methods to find the growth rate of food grains and population
02. Use Matrix Principles to implement food requirement and protein for two families. Show the way in which price and demand situations will help to purchase goods and services by the use of matrices
03. Show the ways in which your telephone number can be permutated to get odd numbers
04. Select the different ways to go to Bangalore from your native place through permutation techniques

05. Select a few balls among many balls to choose a number through lottery method
06. Use different techniques to show price, supply and demand position for a particular products, and also show maximum and minima
07. Visit a nearest industry or computer centre and draw Linear Programming Problem model regarding different problems. Find a solution to the problem.

Recommended Books for Reference

01. Commercial Arithmetic: Iyer, Bari (Sultan Chand and Sons)
02. Business Mathematics: D. C. Sancheti and V. K. Kapoor (Sultan Chand and Sons)
03. Business Mathematics: S. M. Shukla (Sahitya Bhavan Publications)
04. Business Mathematics: Dorairaj, S, N (United Publishers)
05. Business Mathematics: S. P. Gupta
06. Business Mathematics: B. H. Suresh
07. Business Mathematics: Sanchethi Agarwal
08. Business Mathematics: R. Gupta

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B.Com, Semester– V

Course – 508:Logical and Analytical Reasoning

- Course Objectives: This course aims at enabling the students to acquire the requisite knowledge about various aspects of logical and analytical reasoning
- Pedagogy: Combination of class room lectures, and group discussion
- Teaching Hours per Week: 2
- Maximum Marks: 50
- Examination Duration: 1½ hours

Course Inputs

- **Unit -1: Logical Reasoning**(5 hours): Basics of Logic, Assumptions and Arguments, Forcefulness of Arguments, Evaluating Inferences and Data Sufficiency.
- **Unit -2:Reasoning based on Rules**(5 hours)**:** Syllogism and Analytical Decision Making.
- **Unit -3: Problem Solving**(5 hours)**:** Categorization, Arrangement, Comparison, Blood Relation and Profession and Conditional Selection.
- **Unit** -4: **Verbal and Non-verbal Reasoning**(6hours)**:** Alphabet Test, Analogy and Classification Series Completion, Venn Diagram and Puzzle Diagrams, Calendar, Direction Sequence Test and Time Sequence Test.
- **Unit** -5: **Puzzle Figures**(5 hours)**:** Non-verbal.
- **Unit** -6: **Mathematical Reasoning**(6hours)**:** Age-related Problems, Work and Time, Work and Wages, Percentage and Average, Ratio and Proportion, Speed-Distance-Time, and Elementary Mensuration.

Recommended Books for Reference

01. M.N.Tyra, Speed Mathematics
02. Agarwal, Quantitative Reasoning

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B.Com, Semester– VI

Course – 601:Management Accounting

- Course Objectives: To enable the students to grasp theoretical and practical aspects of Management Accounting relevant for business undertakings and managerial decisions
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Management Accounting** (4hours): Meaning and Definition, Objectives, Scope and Importance of Management Accounting, Limitations of Management Accounting, Management Accountingvs Financial Accounting, and Management Accountingvs Cost Accounting.
- **Unit -2: Analysis and Interpretation of Financial Statements** (12 hours)**:** Concept and Nature of Financial Statements, Techniques of Financial Analysis, Comparative Financial Statements, Common Size Financial Statements and Trend Analysis, and Problems thereon.
- **Unit - 3: Ratio Analysis** (16 hours): Meaning, Definition, Importance and Limitations of Ratio Analysis, Classification of Ratios - (a) Profitability Ratios - Gross Profit Ratio, Net Profit Ratio, Operating Profit Ratio, Overall Profitability Ratio, Operating Cost Ratio and Earning per Share, (b) Turnover Ratios - Inventory Turnover Ratio, Debtors Turnover Ratio, Debt Collecting Period, Creditors Turnover Ratio, and Debt Payment Period, (c) Liquidity Ratios - Current Ratio, and Liquid Ratio, and (d) Solvency Ratios - Debt Equity Ratio, Proprietary Ratio, and Capital Gearing Ratio, and Problems on these Ratios.
- **Unit -4: Fund Flow Statements** (16 hours): Meaning, Uses and Limitations, Preparation of Fund Flow Statements, Schedule of Changes in Working Capital, Calculation of Fund from Operations, Statement of Sourcesand Application of Funds, and Problems thereon.
- **Unit -5: Cash Flow Statement** (6 hours): Meaning and Advantages of Cash Flow Statements, Fund Flow Analysis vs Cash Flow Analysis (theory only).
- **Unit -6: Budgetary Control** (10hours)**:** Meaning of Budget, Budgeting and Budgetary Control, Typesof Budgets, Limitationsof Budgetary Control, Problemson Sales Budget and Flexible Budget.

Skill Development Activities

01. Preparation of common size financial statements, trend percentages and comparative financial statements of an organization atleast for two years
02. Calculation of ratios based on the above financial statements - Gross profit ratio, net profit ratio, operating profit ratio, current ratio, and Debt-Equity ratio
03. Preparation of fund flow statement and determination of fund from operations with imaginary figures
04. Identify current assets, current liabilities, non-current and non-current liabilities from the above financial statements
05. Preparation of flexible budget with imaginary figures
06. Visit an organization and collect information regarding budgets prepared by them and prepare budget on the basis of the given information

Recommended Books for Reference

01. Advanced Management Accounting: J. Madegowda, 2nd ed, 2012, Himalaya Publishing House
02. Management Accounting: J.Madegowda, Himalaya Publishing House
03. Management Accounting: Dr.S.P.Gupta
04. Management Accounting: M.Y.Khan and P.K.Jain
05. Management Accounting: Dr.S.N.Maheshwari
06. Management Accounting: B.S.Raman
07. Management Accounting: Howard and Brown
08. Management Accounting: S.M.Goyal and Dr.Manmohan

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B.Com, Semester– VI

Course – 602:Income Tax - II

- Course Objectives: To enable the students to understand the practical aspects of Income Tax
- Pedagogy: Combination of class room lectures, exercises, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1:** Computation of Income from House Property (12 hours)
- **Unit - 2**: Computation of Income from Business and Profession of Individual (16 hours)
- **Unit - 3**: Computation of Capital Gains (12 hours): Deductions under Sections 54, 54B, 54C, 54D, 54E and 54F.
- **Unit - 4**: Computation of Income from Other Sources (10 hours): Set-off and Carry Forward of Losses (theory only).
- **Unit - 5**: Computation of Total Income and Tax Liability of Individuals (10 hours) (excluding Computation of Salary Income).
- **Unit - 6**: Filing of Returns and Assessment Procedure (4 hours): PAN, TAN, E-Filing and IT Challan.

Skill Development Activities

01. Draw a structure of computing annual value under the head 'Income from House Property'
02. Identify the transactions not regarded as transfer for capital gains purposes
03. List out the taxable items under the head 'Income from Other Sources'
04. List the due date for filing income-tax returns for different kinds of forms used for filing
05. Prepare a list of changes effected in the current Finance Act and the rates of tax applicable

Recommended Books for Reference

01. Income Tax Law and Practice: H.C. Mehrotra and Goyal (Sahitya Bhavan)
02. Direct Taxes: Dr.V.K.Singhania (Taxmann publications Pvt Ltd)
03. Direct Taxes: B.B.Lal
04. Income Tax Law and Practice: Gour and Narang (Kalyani Publications)
05. Income Tax: Dinakar Pagare (Sultan Chand & Co)

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B.Com, Semester–VI

Course – 603:Techniques for Business Decisions - II

- Course Objectives: To enable the students to understand the practical application of statistical tools in business area
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Correlation Analysis** (12 hours): Meaning, Methods of studying Correlation, Karl Pearson's Co-efficient of Correlation (Simple Correlation and Correlation for Grouped Data), and Probable Error.
- **Unit -2: Regression Analysis** (12 hours): Meaning, Correlation vs Regression, Determination of Regression Co-efficient, Framing Regression Equations, Simple Regression and Regression for Grouped Data.
- **Unit -3: Index Numbers** (16 hours)**:** Meaning, Steps in construction of Index Numbers, Limitations, Types, UnweightedSimple Aggregate Index Number, Simple Price Relative Method, Weighted Index Numbers – Laspeyre's, Paasche's, Bowley's and Fisher's Ideal Index Numbers, Testsof Adequacy – TRT and FRT Cost of Living Index Numbers – Aggregate Expenditure and Family Budget Method.
- **Unit -4: Interpolation and Extrapolation** (10hours): Meaning, Utility, Algebraic Methods - Binomial and Newton's Methods only.
- **Unit -5: Association of Attributes** (6 hours): Meaning, Correlation vs Association of Attributes, Methods of Studying Association – Yule's Method only.
- **Unit -6: Statistical Quality Control** (8hours): Meaning, Objectives, Control Charts and their Uses, Types of Control Charts, Construction of Mean and Range Charts only.

Skill Development Activities

01. Finding out the correlation between any two variables of your choice
02. Finding out the unknown values by the use of Regression Equations
03. Forecasting by the use of Extrapolation Technique
04. Construction of Cost of living index
05. Finding out the quality control process - whether the process is in control or out of control by using control charts

Recommended Books for Reference

01. Statistics – Theory and Practice, Pillai and Bhagavathy
02. Statistical Methods, S.P.Gupta
03. Business Statistics, Dr.Wilson.M
04. Text Book of Business Statistics: Prof.Anand Sharma
05. Statistics Theory and Practice: Shukla M.C. and --- S.S.
06. Business Mathematics and Statistics: Dr.Satyaprasad, B.G and Dr.K.Nirmala
07. Statistics: Elhance and Veena Elhance

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B.Com, Semester– VI

Course – 604:Methods and Techniques of Cost Accounting

- Course Objectives: To enable the students to understand the Methods and Techniques of Cost Accounting
- Pedagogy: Combination of class room lectures, exercises, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Job Costing** (8 hours):Meaning, Features, Procedure of Cost Ascertainment, Advantages and Disadvantages of Job Costing, and Problems on Job Cost Sheet.
- **Unit -2: Operating Costing** (10 hours): Meaning, Classification of Operating Costs, Problems on Preparation of Operating Cost Sheet (only Transport Undertakings).
- **Unit -3: Process Costing** (12 hours)**:** Meaning, Features, Treatment of Waste, Scrap, Normal Loss, Abnormal Loss and Abnormal Gain, Preparation of Process Accounts, and Problems (excluding Joint Products and By-products, Inter-process Profitsand Equivalent Production).
- **Unit -4: Contract Costing** (10 hours)**:** Meaning, Features, Treatment of certain important Costs, Contract Price, Work Certified, Work Uncertified, Retention Money, Profit on Incomplete Contracts, Estimated Contracts, Preparation of Contract Accounts and Balance Sheet, and Problems.
- **Unit -5:Marginal Costing** (14 hours)**:** Meaning, Definitions, Merits and Limitations, Marginal Cost Equations, P/V Ratio, BEP, Margin of Safety and simple Problems thereon.
- **Unit -6: Standard Costing** (10 hours): Meaning, Definitions, Advantages and Limitations of Standard Costing, Analysis of Variances, Problems on Material Cost Variance, Material Price Variance, Material Usage Variance, Labour Cost Variance, Labour Rate Variance, and Labour Efficiency Variance.

Skill Development Activities

01. Writing a note and specimen format on work order and job cost sheet
02. Writing notes on – (a)Contract price, (b) Work certified and work uncertified, (c) Retention money, (d) Escalation clause, and (e) Profit on incomplete contracts
03. Collect the necessary information from a bus owner / transport undertaking and prepare operating cost sheet in detail
04. Visit and collect information from a printing press to supply 500 copies of skill development record book of standard size and specifications
05. Visit any manufacturing unit, collect and record the information regarding stages in accounting for production overheads, accounting treatment of normal and abnormal loss

Recommended Books for Reference

01. Advanced Cost Accounting: J. Madegowda, 2nd ed, 2012, Himalaya Publishing House
02. Cost Accounting (Elements of Costs and Methods of Costing): J.Madegowda, 2nd ed, 2013 (Himalaya Publishing House)
03. Cost Accounting: Nigam and Sharma.
04. Cost Accounting: S.P.Jain and Narang
05. Cost Accounting: M.N.Arora

06. Cost Accounting: Jawahar
07. Cost Accounting: B.S.Raman
08. Cost Accounting:S.P.Iyengar

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B.Com, Semester–VI

Course – 605:Principles and Practice of Auditing

- Course Objectives: To enable the students to understand the different dimensions of Auditing
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Auditing** (12 hours):Meaning, Definition and Objectives of Auditing, Advantages and Limitations of Auditing, Classification of Audit-Statutory, Government, Internal and Continuous, Annual Audit; and Audit Programme – Audit Notebook and Audit Working Papers.
- **Unit -2: Internal Check** (10 hours): Meaning, Definition, Objectives and Merits, Internal Check regarding Cash Books, Purchase and Wages.
- **Unit -3: Vouching and Verification** (16 hours): Meaning, Definition, Objectives of Vouching, Vouching of Cash Transactions, Credit Purchase and Sales, Meaning of Verification and Valuation of Assets, Verification and Valuation of Stock in Trade, Plant and Machinery, Goodwill and Debtors.
- **Unit -4: Company Audit** (14 hours): Appointment, Qualification and Removal of Company Auditor, Powers, Duties and Liabilities, Civil and Criminal Liability along with types of Audit Report – Clean and Qualified.
- **Unit -5: Investigation** (12 hours): Meaning, Definition and Objectives of Investigation, Different Classes of Investigation, Differences between Investigation and Auditing.

Skill Development Activities

01. Collect details about classification of audit conducted in different organizations
02. Prepare audit programme assuming you are an auditor of a firm
03. Prepare qualified / clean audit report
04. Visit a factory and collect its audit report, and prepare a brief note on the same
05. Formulate internal check system for cash sales

Recommended Books for Reference

1. Auditing: T.R.Sharma
2. Auditing: Kamal Gupta
3. Auditing: B.S.Raman
4. Practical Auditing: B.N.Tandon
5. Auditing P. C. Tusian

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B.Com, Semester– VI

Course – 606:Small Business Management

- Course Objectives: To enable the students to understand theoretical and practical aspects of small business management
- Pedagogy: Combination of class room lectures, case study analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit -1: Introduction** (10 hours):Meaning of Small Business, Small Business Management, Importance, Role, Characteristics and Types of Small Business, Scope, Role of Governmentin promoting Small Scale Industries.
- **Unit -2: Women Entrepreneur** (12 hours)**:** Concept, Types of Women Entrepreneurs, Suitability of Business, Problems facedby Women Entrepreneursin India, Measures taken by the Governmentfor thedevelopment of Women Entrepreneurs.
- **Unit -3: Rural Entrepreneurship** (10 hours)**:** Definitions, Risk faced by Rural Entrepreneurs, Strategies for development of Rural Entrepreneurship, and Scope of Rural Entrepreneurship.
- **Unit -4: Project Identifications and Formulation** (12 hours): Meaning of Project, Project Identification and Project Report, Importance of Project Report, Contents of Project Report, and General format of Project Report.
- **Unit -5: Problems of Small Scale Industries (**12 hours): Types of Problems, Causes and Remedies, Sickness in Small Scale Industries, Symptoms, Reasons for Sickness and Remedial Measures.
- **Unit -6: Institutions engaged in financing Small Business** (8 hours)**:** SIDBI, ICICI, DIC, IDBI, KSFC, RRBs, NABARD, Commercial Banks and their functions.

Skill Development Activities

01. Visit five small scale units in your area and collect the details regarding the nature of the business, sources of capital, employees,raw materials
02. Visit a DIC and list out the schemes of Government of Karnataka for rural industries
03. Visit the financial institutions in your area and collect the information about loan granted by them
04. Collect the details about institutions engaged in providing training to small entrepreneurs
05. Prepare a simple project report required to start a small unit

Recommended Books for Reference

01. Entrepreneur Development, K.Natarajan
02. Small Scale Industries and Entrepreneurship, Vasanth Desai
03. Small Scale Industries and Entrepreneurship, S.V.Murthy
04. Entrepreneurial Development, Arora

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B.Com, Semester– VI
Specialization Stream – A: Accounting
Course – 607A2: Accounting Standards – II

- Course Objectives: To expose the students to the Provisions of Accounting Standards with respect to corporate reporting
- Pedagogy: Combination of class room lectures, case analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

- **Unit -1: AS-11 to AS-13** (12 hours): AS-11: Accounting for the Effects of Change in Foreign Exchange Rates, AS–12: Accounting for Government Grants, and AS–13: Accounting for Investments.
- **Unit - 2: AS-14 to AS-16** (13 hours): AS-14: Accounting for Amalgamations, AS-15: Accounting for Retirement Benefits in the Financial Statements of Employers, AS-16: Borrowing Costs.
- **Unit -3: AS-17 to AS-20** (14 hours): AS-17: Segment Reporting, AS-18: Related Party Disclosures, AS-19: Leases, and AS-20: Earning per Share.
- **Unit – 4: AS-21 to AS-23** (12 hours): AS-21: Consolidation of Financial Statements, AS-22: Accounting for Taxes on Income, and AS-23: Accounting for Investments in Associates in Consolidated Financial Statements.
- **Unit – 5: AS-24 to AS-26** (13 hours): AS-24: Discontinuing Operations, AS-25: Interim Financial Reporting, and AS-26: Intangible Assets.

Skill Development Activities

01. Prepare a brief report on the applicability of Accounting Standards
02. Collect the relevant material from different sources about the deviation of companies from the Provisions of Accounting Standards while preparing their Annual Corporate Reports, and make a comment on the same
03. Write an analytical note on the Accounting Error/s or Fraud/s which you have read in the Journal/s or News Paper/s
04. Compare the Provisions AS and IAS on Intangible Assets and prepare a brief report on the same
05. Identify and analyze atleast 5 new Accounting Items which need a separate Accounting Standard each

Recommended Books for Reference

01. Taxman's Accounting Standards, D. G. Sharma and Srinivasan Anand, G, Taxman Publications.
02. Taxman's Students' Guide to Accounting Standards, D. S. Rawat, Taxman Publications.
03. Compendium of Statements and Standards on Accounting, The Institute of Chartered Accountants of India, New Delhi.
04. British Accounting Standards, Ronal Leach and Edward Stamp, Woodhead Faulkner Ltd, Cambridge.
05. T. P. Ghosh, Accounting Standards and Corporate Accounting Practices, Taxman Publications.
06. ICFAI's Publications on Accounting Standards.

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B.Com, Semester–VI
Specialization Stream – B: Marketing Management
Course – 607B2: Consumer Behaviour

- Course Objectives: To expose the students to differentdimensions of consumer behaviour
- Pedagogy: Combination of class room lectures, case analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit - 1: Introduction** (10hours)**:** Introduction to Consumer Behaviour – A managerial and consumer perspective; why study Consumer Behaviour? Applications of Consumer Behavior Knowledge, Current Trends in Consumer Behaviour, Market Segmentation and Consumer Behaviour.
- **Unit - 2: Individual Determinants of Consumer Behaviour** (16hours): Consumer Needs and Motivation, Personality and Self Concept, Consumer Perception, Learning and Memory, Nature of Consumer Attitudes, Consumer Attitude Formation and Change.
- **Unit -3: Environmental Determinants of Consumer Behaviour** (14hours): Family Influences, Influence of Culture, Sub-culture and Cross Cultural Influences, Group Dynamics and Consumer Reference Group, Social Class and Consumer Behaviour.
- **Unit -4: Consumer Decision Making Process** (12hours): Problem Recognition, Search and Evaluation, Purchase Process, Post-purchase Behaviour, Personal Influence and Opinion Leadership Process, Diffusion of Innovation, Models of Consumer Behaviour, Researching Consumer Behaviour, and Consumer Research Process.
- **Unit -5: Consumer Satisfaction and Consumerism** (12hours): Concept of Consumer Satisfaction, Working towards enhancing Consumer Satisfaction, Sources of Consumer Dissatisfaction, Dealing with Consumer Complaints, Concept of Consumerism, Consumerism in India - Indian Consumer, Reasons for growth of Consumerism in India; and Consumer Protection Act, 1986.

Skill Development Activities

01. Conduct an informal interview of a local retail store owner and determine what demographic and socio-economic segments the store appears to satisfy. How did the owner select this segment or segments?
02. Conduct formal interview of managers of three retail clothing stores. Determine the degree to which they believe consumer personality and self-image are important to the marketing activities of the stores
03. Visit three local restaurants and assess how each attracts clientele in different stages of the family life cycle
04. You are the owner of two furniture stores - one catering to upper-middle class consumers and the other to lower-middle class consumers. How do social class differences influence each store– (a)Product lines and styles, (b) Advertising media selection, (c) Copy and communication styles used in the advertisements,and (d)Payment policies.
05. For each of the following products and/or services, indicate who you would go to for information and advice – (a) The latest fashion in clothes, (b) Banking, (c) Air travel**,** (d)Vacation destinations, and (e) A personal computer.

06. For each of the above situations (5 above), indicate the person's relationship to you and your reasons for selecting him/her as the source of information and advice

Books Recommended for Reference

01. Hawkins, Best and Coney, Consumer Behavior, TMH.
02. Raju M S and Xardel Dominique., Consumer Behaviour – Concepts Applications and Cases
03. Schiffman Leon, Kanuk Lazar Leslie., Consumer Behavior, Pearson / PHI.
04. Nair Suja., Consumer Behavior In Indian Perspective, Himalaya Publishers.
05. Mittal Sheth., Customer Behavior – A Managerial Perspective, Thomson,
06. Rugimbana Robert and SonnyNwankwo Cross cultural marketing.
07. Ahamed Peeru and Sagadevan, Customer Relationship Management, Vikas Publishing.
08. Green Paul, Tull Donald, Albaurn Gerald, Research for Marketing Decisions.
09. Aakar, Kumar and Day., Marketing Research
10. Kinnear C Thomas., Marketing Research.
11. Nargundkar, Marketing Research.
12. Tull S Donald and Hawkins I Del., Marketing Research – Measurement and Methods.
13. Beri, Marketing Research.
14. Cooper, Business Research Methods.

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B.Com, Semester–VI

Specialization Stream – C: Finance Management

Course – 607C2: Security Analysis and Portfolio Management

- Course Objectives: To familiarize the students about investment decisions and portfolio management
- Pedagogy: Combination of class room lectures, case analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit - 1: Introduction to Investment Management** (12hours): Meaning of Investment, Selection of Investment, Classification of Securities, Risk and Uncertainty, Types of Risks, Risk and Expected Return, Measurement of Portfolio Risk, Benefits of Diversification, Investment Strategies, Types of Companies and Stocks, Matrix Approach in Investment Decisions, and Investment Avenues.
- **Unit -2: Security Analysis** (14 hours): Introduction, Fundamental Analysis, Economic Analysis, Industry Analysis, Company Analysis, Technical Analysis, Dow Theory, Advanced Declined Theory, Chartism Assumptions of Technical Analysis.

- **Unit -3: Modern Portfolio Theory** (14hours): Introduction, Mean, Variance Model, Capital Market Line, Market Portfolio, Capital Asset Pricing Model, Security Market Line, Beta Factor, Alpha and Beta Co-efficient, and Arbitrage Pricing Model.

- **Unit -4: Portfolio Management** (12hours): Markowitz Model, Sharpe Model, Jensen and Treynor Model.
- **Unit -5: Global Markets** (12 hours): Global Investments Benefits, Introduction to ADRs, GDRs, FCCBs, Foreign Bonds, Global Mutual Funds, and Relationship between Trends in Global Markets and the Domestic Markets.

Skill Development Activities

01. Examine the investment opportunities available to an employee
02. Name the 50 companies whose equities are covered under NIFTY
03. Name 50 and 30 companies' equities which are covered under present NIFTY and Sensex
04. Collect information on NCFM (National Certification in Financial Market) and prepare a brief report on the same
05. List out any 10 leading Indian Companies which have declared 1:1 bonus quite frequently (say once in every two years)

Recommended Books for Reference

01. Security Analysis and Portfolio Management, Puneethavathi and Pundian, P
02. Fundamentals of Investment Management, V. K. Bhalla
03. Investment Management, Fisher and Jordon
04. Security Analysis and Portfolio Management, Donalds E Fisher and Ronald J Jordan, Prentice Hall of India, New Delhi
05. Modern Investment Theory, Haugen Robert, Prentice Hall of India, New Delhi.

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B.Com, Semester–VI

Specialization Stream – D: Banking and Insurance

Course – 607D2: Management of Insurance Business

- Course Objectives: To enable the students to understand the principles of managing and administration of insurance business
- Pedagogy: Combination of class room lectures, case analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit - 1: Functions and Organization of Insurance** (14hours):Types of Insurance Organizations, Functions of Insurers, Organization Structure, Stock and Mutual Companies.
- **Unit -2: Product Design and Development** (12 hours): Product Development Process, Stages in New Product Development, Pricing Strategy, and Product Design in Emerging Scenario.
- **Unit -3: Underwriting and Claims Management** (12 hours): History, Basics and Definition of Underwriting, Underwriting in Life Insurance and Non-life Insurance, Claim Settlement in General Insurance (Fire and Motor), and General Guidelines for Settlement of Claims.
- **Unit -4: Insurance Pricing** (14hours): Fundamentals of Insurance, Pricing and Objectives, Types of Rating, Life vs Non-life Insurance, and Pricing Rate Making Entities.

- **Unit -5: Intermediariesin Insurance Business** (12 hours): Insurance Intermediaries and their Functions, Surveyors and Loss Assessor, Third Party Administrators and Agents, Changes in Insurance Industry Structure and Form,and Multinational Corporations.

Skill Development Activities

01. Visit the nearest branch office and study the organizational structure and report on its performance
02. Visit any of the general insurance branch offices to learn the process of underwriting and collect the format for motor vehicle and medi-claim insurance – prepare a brief report on the same
03. How do you get the insurance claim of your motor bike which is damaged due to accident? Prepare a brief report
04. Make a comparative study of any two existing insurance products
05. Collect the policy documents of the following and write the procedure for filing the policy – marine, fire and life policies

Recommended Books for Reference

01. Insurance Principles and Practice: M.N.Mishra and S.B.Mishra
02. Elements of Insurance: Malhotra, R.P
03. Insurance Principle and Practice: Vinayaka
04. Insurance and Risk Management: Dr.P.K.Gupta
05. Principles of Insurance Law: Dr.M.N.Srinivasan
06. Principles of Insurance: Dr.Periyaswamy

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B.Com, Semester– VI
Specialization Stream – E: Business Taxation

Course – 607E2: Business Taxation - II

- Course Objectives: To familiarize the students with Tax Laws and Procedure relating to Direct Taxes
- Pedagogy: Combination of class room lectures, case analysis, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit - 1: Wealth Tax Act, 1957** (10hours): Meaning, Individual, Hindu Undivided Family, Company, Valuation Date, Net Wealth, Assessee, Assets, Assessment Year, Scope of Liability of Wealth Tax, Assets belonging to Others but included in the Net Wealth of Individual, and Assets exempted from Wealth Tax.
- **Unit -2: Valuation of Assets** (14 hours): Computation of Net Wealth and Wealth Tax, and Procedure for Assessment.
- **Unit -3: Computation of Income of Firms and Association of Persons** (8 hours).
- **Unit -4: Assessment of Companies** (24 hours): Meaning of Company, Types of Companies, Computation of Tax on Companies and Tax on Distributed Profits of Domestic Companies.
- **Unit -5: Assessment of Co-operative Societies** (8 hours).

Skill Development Activities

01. Collect and fill wealth tax return form with imaginary figures
02. List out imposable penalties in the following cases – (a) Willful attempt to evade tax under Wealth Tax Act, and (b) Failure to furnish net wealth
03. Filling up of ITR Form No.5 for Companies' Assessment with imaginary figures
04. Filling up of challan for making payment of tax - Corporate Tax.
05. Filling up of return of income of co-operative societies with imaginary figures

Recommended Books for Reference

01. Wealth Tax,Service Tax and Luxury Tax: A.R.Chawan
02. Direct and Indirect Taxes: Dr.H.C. Mehrotra and Dr.S.P.Goyal
03. Income Tax Law and Accounts: Dr.H.C. Mehrotra
04. Direct Taxes: Dinakar Pagre
05. Direct Taxes: Dr. Singhania and Singhania

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B.Com, Semester– VI
Specialization Stream – F: E-commerce
Course – 607F2: E-commerce - II

- Course Objectives: To enable the students to learn about the management information system, database concepts and Web-page creation
- Pedagogy: Combination of class room lectures, practice in computer laboratory, exercises, group discussion, and field work
- Teaching Hours per Week: 4 (3 hours of theory and 2 hours of practice in laboratory Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit-1**: **Information vs Data** (8 hours): Definition of Information, Forms of Business Data, Source of Data, Differences between Data and Information, Data Processing vs Information Processing; Characteristics and Usefulness of Information, Types of Information, Importance of Information in Decision Making, and Information needs at different levels of Decision Making.
- **Unit-2: Management Information System** (10 hours): Meaning and Definition of MIS, Characteristics of MIS, Objectives of MIS, Limitations of MIS. Database - Meaning, Types of Databases, Need of Relational Database, Data Normalization (Determining Tables, Determining Fields, Determining Relationships), Integrity Rules (Primary /Foreign Key, One-to-Many, Many-to-Many, One-to-One).
- **Unit-3: MS-ACCESS**: **Introduction** (16 hours): Components of an Access Table, Creation of Tables. Elements in a Table, Structure of the Table, Data entry in a Table, Saving the Table, Opening the Table, Creation of forms from the Table, Entering the values in the Forms, Viewing the Form, and Creating Tables using Wizards.

- **Unit -4: MS-ACCESS**: **Creating Reports and Queries** (16 hours): Creating Reports and Queries using Single Table or Multiple Tables, Filtering the Data using Simple Query Wizard, Administrating a Data Base using Reports and Queries, Customizing Tables by Reports and Queries, Viewing or Displaying the Reports and Queries, and Printing the Reports.

- **Unit-5: Introduction to HTML** (14 hours): HTML Documentation, Structure and Tags, Defining Web Page Appearance, Text Formatting, Writing simple HTML Documents, Front Page, Advantages and Options.

Skill Development Activities

01. Getting help in Access and Creating databases and tables
02. Editing and printing tables
03. Creating and using customized forms
04. Creating queries using Query-By-Example (QBE). Creating relationships between tables
05. Searching for values using filters. Sorting records. Creating a form that contains a sub form
06. Creating, pre-viewing and printing customized reports
07. Create students' database using design view for students mark details –(a) Add at least 10 records, (b) Sort the names in alphabetical order, (c) Find Total and Average, (d) Display the list where total is greater than 50 and greater than 400, (e) Apply sort option to display records, and (f) Generate reports by using the above queries
08. Writing HTML documents for moving messages, Display of advertisements, Creation of tables, Creation of menu forms, Creation of Application Form for a job/Bio-data, Creation of organized and un-organized lists

Recommended Books for Reference

01. Virginia Andersen, Microsoft Office Access 2007 - The Complete Reference
02. Michael R. Groh, Joseph C. Stockman, Gavin Powell, Cary N. Prague Michael R lrwin, and Jennifer Reardon:Access 2007 Bible
03. Alexis and Leon, Introduction to Computers (Vikas Publishing House)
04. R.K. Taxali, P. C. Software made simple (Tata McGraw Hill)
05. Parameshwaran, Computers in Business (Sultan Chand & Sons)

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B.Com, Semester– VI

Specialization Stream – G: Quantitative Techniques

Course – 607G2: Quantitative Techniques -II

- Course Objectives: To enable the students to understand and apply mathematical and statistical techniques to practical business problems
- Pedagogy: Combination of class room lectures, case analysis, exercises, group discussion, and field work
- Teaching Hours per Week: 4
- Maximum Marks: 100
- Examination Duration: 3 hours

Course Inputs

- **Unit-1**: **Theory of Games** (10 hours): Two-person zero-sum Game, Properties of a Competitive Game, Value of the Game, Finding Optimal Strategy by Maximin-Minimax Principle, Principle of Dominance and When Mixed Strategy is Given (Games without Saddle Point (2 × 2) Matrix only - Formula Method).

- **Unit -2: Assignment Problems** (12 hours): Hungarian Method, Typesof Solving Assignment, Problems when equal number of Rows and Columns are given by Minimization and Maximization Methods; When Unbalanced Assignment Problem is given, Restrictions on Assignment (when missing values are given); and Salesmen Problems.
- **Unit -3: Transportation Problems** (14 hours): Find IBFS by North West Corner Method, Least Cost Method and Vogel's Approximation Method; Test for Optimality by Stepping Stone Method, and IBFS in Unbalanced Transportation Problems.
- **Unit -4:** Decision Theory and Analysis (12 hours): Decision Making under Uncertainty, Decision Tree Analysis – Advantages, and Simple Problems.
- **Unit** -5: Simulation (10 hours): Definition, Reasons, Methodology Point-wise, Advantages, Drawbacks, Applications, Stochastic Simulation, Simulation of Inventory Problems, Simulation of Queuing Problems, and Capital Budgeting.
- **Unit -6: Project Management** (6 hours)**:** Introduction, Network Analysis, Methodology of PERT/CPM Networks (point-wise), Basic Concepts of Network Analysis, Applications of Network Models, Time Estimation in Vertical Path Analysis, distinction between PERT And CPM, Simple Problems, Network Diagram, Finding Critical Path and Time Estimation.

Skill Development Activities

01. Play game for competing with the rival trader, find Games Strategies to withstand in the game,
02. Give an assignment to a particular person who is capable to find suitable measures to particular assigned task,
03. Find the least root to go to the places when a travelling agent is supposed to visit more than two places simultaneously,
04. Find strategies for assigning a particular task to various persons,
05. How simulation can be derived and give suitable examples, and
06. Experiment different events for finding solution for probable events.

Recommended Books for Reference

01. Operations Research, Kanti Swarup, P. K Gupta Man Mohan
02. Quantitative Techniques, V. K. Kapoor
03. Business Mathematics, Sanchethi Kapoor
04. Business Mathematics, S. P. Gupta
05. Mathematics for Cost Accountants, R. Gupta
06. Business Mathematics: Madappa Sridhara Rao
07. Business Mathematics: Dorairaj, S. N
08. Business Mathematics: B. H. Suresh
09. Business Mathematics: Sanchethi Agarwal
10. Business Mathematics: Agarwal
11. Business Mathematics: Oak and other (Himalaya Publishing House)

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B.Com, Semester– VI

Course – 608: Soft Skills for Business

- Course Objectives: This course enables to student community to acquire the necessary skills and attributes which are very essential of successful professionals
- Pedagogy: Combination of class room lectures, group discussion, and field work

- Teaching Hours per Week: 2
- Maximum Marks: 50
- Examination Duration: 1½ hours

Course Inputs

- **Unit - 1:Personal Skills (**knowing Self) (6hours)**:** Self-concept, Self-awareness (SWOT Analysis),Self-confidence, Self-esteem,Self-control, ImpressionBuilding, Goal Setting; Mission and Vision, Positive Outlook, Assertive Skills, and Creative Thinking, Presentation Skills and Techniques, and Public Speaking.
- **Unit – 2: Non Verbal Communication** (8 hours): Body Language, Gestures, Postures, Facial Expressions, Dress Codes, Cross Cultural Dimensions of Business Communication, Listening and Speaking, Techniques of Eliciting Response, Probing Questions, and Observation.
- **Unit – 3: Meetings**(4hours)**:** Importance, Meetings Opening and Closing Meetings, Brain Storming, E-meetings.
- **Unit – 4: Employability Skills** (Preparing for a Job) (6hours): Resume Writing, Validating Resume, Group Discussion, Interview Skill – Preparation for Personal Interview, Interview Attending Skills,Most Frequently Asked Questions in the Interview, Placement Interview, Discipline Interview, Appraisal Interviews, Exit Interviews, Telephonic Interview and Video Conference Interview.
- **Unit – 5:Competency Mapping (**'Change and You'– Adaptability) (4hours)**:** Corporate Expectations –Tuning Up of Attitude, Time Management, Presentation Skills, Grooming, and Change Competency.
- **Unit –** 6**:Business Etiquettes (**Change Management) (4hours): Work Place Etiquettes, Telephone Etiquettes, Email Etiquettes, Dining Etiquettes, and Social Etiquette Conversation.

Recommended Books for Reference

01. The Working Mind, J.P.Das, Sage Publication, 1988
02. Know Yourself and Know the World: Soft Skills, Dr.K.Alex, S.Chand& Co
03. A Text Book of Psychology, Dr.K.P.Sandhya& Prof. PadmaRao, Premier Publication, 2008
04. Essence of Organizational Behavior, P.G.Aquinas and Anurag Jain, Excel Books, 2010
05. Soft Skills – An Essential Ingredient for Success, IUP (ICFAI University Press)
06. Personality Development, Wallace.Masters, Cengage Learning, 2006
07. Personality Development, G.Subrahmanya, V.Krishna Mohan and V.V.Vara Prasad, Excel Books, 2008
08. Presentation Skills, Suzy Siddons, University Press, 2008
09. Managing Stress, David Fontana, Excel Books, 1996
10. Basic Managerial Skills for All, E.H.McGrath, PHI, 2008

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First Semester BBM
BM 103: BASICS OF ACCOUNTING

Objective: To provide basic knowledge in accounting considered essential to students pursuing advanced study in accounting and other related professional subjects.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit -1: Introduction to Financial Accounting
Meaning and definition of Accounting, Objectives, Users of Accounting Information, Limitatio of Accounting, Accounting Principles:- Accounting concepts and Accounting convention Accounting standards, Meaning and Objectives - Accounting Standard–1.

(12 hours

Unit -2: Accounting Cycle
Meaning – Process of Accounting- Kinds of Accounts – Rules of Double Entry – Journal Ledger – Balancing of Accounts – Trial Balance.

(14 hours

Unit -3: Subsidiary Books
Meaning- Types of subsidiary books - Problems on Purchases Book - Sales Book and Thre column cash book – Bank Reconciliation Statement – Meaning – Reasons for difference problems on BRS (excluding over draft balance).

(14 hours)

Unit -4: Final Accounts of Sole Trading Concern
Meaning of Trading Account – Profit & Loss A/c - Balance sheet – Problems on Final account with adjustments – Manufacturing Account- Meaning & problems there on.

(16 hours)

Unit -5: Depreciation Accounting
Meaning and Causes – Methods of charging depreciation - Problems on Fixed installment and Reducing Balance Methods.

(08 hours)

Skill Development Activities

1) Accounting concepts – Illustrate Dual concept A- L = C
2) Select some 20 transactions of your own and journalize them.
3) Collect a copy of Invoice, Debit note and Credit note and affix them.
4) Collect a accounting statement from a bank customer and affix it.
5) Final Accounts of sole Trader
   a) Correcting a wrong Trial Balance.
   b) Correcting a wrong Trading and P & L A/c.
   c) Correcting a wrong Balance sheet.

Books for Reference:

1) Financial Accounting – S.P Jain and K.L Narang.
2) Elements of Accounting - T.S Grewal.
3) Advanced Accounting – R.L Gupta
4) Fundamentals of Accounting - N.K Agarwal and R.K Sharma.
5) Financial Accounting (Volume –1) B.S Raman.

First Semester BBM
BM 106: BUSINESS PERSPECTIVES

Objective: To educate the students to have awareness about environmental factors.

Pedagogy: Class room lecturers, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit -1: Introduction
Meaning of Business – Characteristics – Objectives of Modern Business - Forms of Business Organizations (in brief) Company- Meaning – Features- Merits & Demerits- Qualities of good business men.

(12 hours)

Unit-2: Business Environment
Business environment – Micro and Macro Environmental Factors - Environmental Analysis for business - Decision making - Meaning of business combination – Trade Association and chamber of Commerce (Meaning and Objectives only).

(10 hours)

Unit-3: Impacts on Business
Impact of social and cultural environment on Business - Social Responsibility & Corporate Governors - Legal Environment – Intellectual property Rights, Objectives, Benefits & Impact of IPR in Developing Countries.

(14 hours)

Unit-4: International Business
International Business - Meaning and Nature - Theories of International trade - Economic theory - Globalization- Meaning – Definition- Factors & stages of market – Production- Merits and Demerits - Essential conditions for Globalization.

(14 hours)

Unit -5: Multinational Corporation and Financial Institutions
Introduction:- Multinational corporations & International Finance – Definitions of Global companies- Features – Objectives – Merits and Demerits – Forex market structure – Functions of world Bank and IMF.

(14 hours)

Skill Development Activities:

1) Approach Businessmen and ask about the nature of business.
2) Identify special cultural demographic features of your locality make a comments as to how they are influencing on the business that you have visited.
3) List any 20 MNC's in India along with their products & services.
4) Prepare a chart showing currencies of different countries.
5) Forex market Structure.

Book for Reference:

1) Essentials of Business Environment - Ashwathappa .K
2) Business Environment & Policy – J. Madegowda
3) Business Organization - Reddy & Gulshan
4) International Business - Subbarao
5) International Business Practice - Francias Cherullian

First Semester BBM

BM 104: MARKET BEHAVIOUR AND COST ANALYSIS

Objective: To familiarize the students with the basic concepts of market forces and pricing decisions.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Market Forces

Demand: meaning, law of demand, nature of elasticity of demand, determinants of elasticity of demand, cost of advertisement and derived demand relations. Demand forecasting- meaning and methods (problems on trend projection by method least square). Supply - Law of supply, determinants of supply.

Unit -2: Cost and Profit Planning (12 hours)

Cost- meaning of short run and long run costs, fixed and variable costs, explicit and implicit costs, opportunity cost and incremental cost(concepts only). Total cost average cost and marginal cost behavior in short and long run (including problems). CVP Analysis- BEP, BE chart. Margin of safety, P/V ratio, profit planning, make or buy decisions (including problems of alternative cost and sales).

Unit-3: Pricing practices and Strategies (14 hours)

Determinates of pricing policy, pricing methods- marginal cost pricing, target rate pricing, product line pricing, administered pricing, competitive bidding, dual pricing, transfer pricing, price discrimination- requirements, types and dumping strategies. Pricing over product life cycle- skimmed pricing, penetration pricing, product- line pricing and price leadership.

Unit-4: Cost of capital and Capital budgeting (12 hours)

Meaning and types of capital, specific cost of capital; debt, preference shares and equity shares and weighted average cost of capital (concepts only). Capital budgeting- meaning and significance (problems on PB period and NPV methods only).

Unit-5: Firms and Decisions (12 hours)

Firm: Meaning and goals, profit verses values (wealth) maximization dynamics (with time value of money), Decision making, decisions under market uncertainty situations, tactical verses strategic decisions and game theory. Linear programming and sensitivity analysis- basic assumptions, merits and demerits- simple problems.

Skill Development Activities: (14 hours)

1) Compute the BEP for a Business unit.
2) Calculate the cost of capital for a manufacturing unit.
3) Calculations of cost plus price.
4) Calculation of cost and revenue.
5) Calculation of project profitability.

Books for References:

1) P.L Metha : Managerial Economics, Sultan Chand & Sons, New Delhi
2) H.L Ahuja: Business Economics, S.Chand & Company Ltd, New Delhi.
3) Reddy & Appananiah : Economics for Business.
4) K.M Pandey & Others : Economics for Managerial Decisions
5) K.P.M Sundaram : Micro Economics, Sultan Chand & sons, New Delhi.
6) Manoj Kumar Mishra: Managerial Economics, Voyu education of India, New Delhi

First Semester BBM
BM 105: MANAGEMENT PROCESS

Objective: To familiarize the students with principles practices and recent trends i management.

Pedagogy: Class room lectures, Seminars, Group discussions
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit -1: Introduction to Management

Meaning – Definition characteristics - Functions of management. Management v/ Administration. Management as science, or an art and profession - Taylors and Henry Faya contribution to management.

(16 hours

Unit -2: Planning

Meaning and Significance - Types of plans -- Strategies, Objectives Policies and Procedures o Planning.

(12 hours

Unit-3: Organizing

Meaning and Definition – Principles of Organization- Formal and Informal organization- Type of organization – Authority and Responsibility, Delegation of Authority and Span of control.

(16 hours

Unit -4: Directing and Controlling

Meaning, Importance and Principles of Directing. Need for control- features of effectiv controlling system- Modern management techniques. MBO, MBE, TQM and MIS.

(12 hours

Unit -5: Recent Trends in Management

Meaning and Objectives of Strategic Management, Stress Management, Knowledg Management.

(08 hours

Skill Development Activities:

1) Visit factory collect information from workers about the stress and their causes.
2) Draft organizational chart, Discuss the authority relationship.
3) Collection of a short- term and long term plan followed by any organization.
4) Description of skills of a good manager.
5) Mission and Vision statement of any eight organizations.

Books for References:

1) Essential Management - Appaniah and Reddy.
2) Principle of Management - L.M Prasad.
3) Essentials of Management - SVS Murthy.
4) Principles and Practice of Management - Rustem and Davan.
5) Management Principles and Practice - Srinivasan & Chunawalla.
6) Principles and Practice of Management – L.M. Prasad.

Second Semester BBM

BM 207: PRODUCTION AND OPERATION MANAGEMENT

Objective: To educate the students regarding production, planning, operation and waste management

Pedagogy: Class room lecturers, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Introduction to Production and Operation Management
Introduction- meaning and definition- Classification Objectives and scope of production and Operation Management. Automation – Introduction- meaning- Definition – need- types – Advantages - Disadvantages.

Unit -2: Plant Location and Layout **(12 hours)**
Introduction – meaning – definition - factors affecting location, Theory and practices, cost factor in locations plant – layout – principles - space requirement, Different types of facilities. Organization of physical facilities – Building- Sanitation - lighting – air conditioning and safety.

Unit-3: Material Management **(12 hours)**
Introduction – meaning- Definition - Purchasing selection of suppliers – Inventory management- materials handling, Principles and practices- Economic consideration- criteria for selection of materials handling equipment. Standardization- codifications – simplification Inventory control – Techniques of Inventory control- value analysis- value engineering – Human engineering – inter relationship of plant layout and material handlings.

Unit-4: Production Planning and Quality Control **(14 hours)**
Objectives and concepts, capacity planning, corresponding production planning, controlling, scheduling Routing, Quality control- statistical quality control, quality management. Control charts and operating- characteristics curves, acceptance sampling procedures, quality circle, meaning of ISO and TQM.

Unit-5: Maintenance and Waste Management **(12 hours)**
Introduction- meaning- Objectives- Types of Maintenance, Breakdown, space planning and control, preventive routine, relative advantage maintenance scheduling, equipment reability and modern scientific maintenance methods- waste management- Scrape and surplus disposal, salvage and recovery (theory only).

Skill Development Activities: **(14 hours)**

1. Collect the Layout structure of your nearby any two Industries.
2. Select the product of your choice and two locations select best location to manufacture your product by point rating method.
3. Collect any two industries ISO Certificates and list out requirements to get ISO Certificate.
4. Draft requisites of city waste management.
5. Collect the information about purchase and inventory management.

Books for References:

1. Production and operation management- K. Aswathappa, Himalaya Publication.
2. Production and operation management- S.N Chary, Tata McGrawhill Publication.
3. Production and operation management- Chunawalla, Himalaya Publication.
4. Elements of Production planning and control- Samuel Elion, Universal Publication Mumbai.

Second Semester BBM

BM 206: SERVICES MANAGEMENT

Objective: To familiarize the students with different services and prepare them with requisite skills to manage.

Pedagogy: Class room lectures, Seminar, Group discussion.

Teaching hour per week = 4 hours.

Maximum Marks = 100.

Exam Duration = 3 hours.

Unit-1: Introduction to Service Management

Meaning of services – concepts –characteristics of services- classification of services – marketing mix in service industry – growth of service sector – service process- Building Customer Loyalty managing the service sector.

(12 hours)

Unit -2 Banking and Insurance Services

Banking – introduction- Traditional Services- Modern Services- Recent trends in Banking services. Insurance – Introduction – meaning and definition of insurance- types of insurance- Life Insurance – Products of life insurance- General Insurance- Types of General Insurance.

(12 hours)

Unit -3 Finance and Marketing Services

Financial services- meaning- features- importance- contribution of financial services in promoting industry- Financial instruments- types – mutual funds- factoring- leasing- venture capital. Marketing Services- meaning- features- importance- contribution of marketing services in promoting industry and impact on growth of economy- customer service; types of marketing services.

(15 hours)

Unit-4 Health Care and Educational Services

Hospitals- evolution of hospitals industry- Nature of services- risk involved in health care services- Marketing of medical services- Hospital extension services- Pharmacy, nursing- medical transaction, Educational services- A brief insight into Indian Education System – Issues in Education- modern trend in education service.

(15 hours)

Unit-5 Tourism and Travel Services

Introduction – Evolution of tourism industry- concept and nature of tourism- significance of tourism Industry- Market segmentation in tourism- marketing mix of tourism- recent trends in tourism and travel services.

(10 hours)

Skill Development Activities:

- Prepare a chart on conditions to be complied for star Hotel Status.
- Procure any two insurance policies (photocopy) and paste them in the record.
- Visit a travel and tour agencies and prepare organizational chart.
- Interact with tourist operators and identify the areas of tourism management.
- Prepare a chart showing customer service rendered by at least two MF (preferably a comparative chart)
- Procedures of railway ticket booking with specimen of reservation/ cancellation slip.
- Procedure for Air Ticket booking both domestic and international.

Books of Reference:

1. Shankar, Ravi; Service Marketing- the Indian perspective; Excel books, New Delhi; First Edition 2002
2. Dr. Ramachandra, Dr. Chandrashekar; Service Management
3. Dr. Shajahans; Service marketing (concept practices and cases); Himalaya publishing house; Mumbai; First Edition 2001

Second Semester BBM

BM 204: FINANCIAL MARKET OPERATIONS

Objectives: To familiarize the students with the conceptual knowledge of financial markets and services.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Indian Financial System

Financial System ; An overview – Meaning – objectives – Functions – Chart showing Structure of Financial System – Financial markets – Financial Intermediaries – Financial Institution – Financial Services (brief introduction only)

(12 hours)

Unit-2: Regulatory Bodies

Reserve Bank of India ; Objectives – Functions – Department, Securities Exchange of India; Objectives – Functions – Rights and duties, Insurance Regulatory Development Authority – Introduction – Objectives, Association of Mutual funds of India- Introduction- Objectives.

(14 hours)

Unit -3: Money Market

Meaning- objective – Features – Scope – Functions - Players – Money Market Instruments – Sub – Markets of Money Market- Draw backs of Money Market, DFHI

(12 hours)

Unit- 4: Capital Market

Introduction – Functions- Classification – Types of Market Instruments; Primary Market; Meaning – Players – instruments – Methods of Flotation, Secondary Market; Introduction- Functions – Bombay Stock Exchange – National Stock Exchange.

(14 hours)

Unit-5: Financial Intermediaries and Stock Exchange

Meaning & Functions of Financial Intermediaries, Stock Exchange; Meaning – Objectives- Functions- Dealers in Stock Exchange.

(12 hours)

Skill Development Activities:

1) Draw a chart showing the working of Indian Financial system.
2) List out the names of stock exchange which are registered under SEBI.
3) Discuss briefly the functions of IRDA.
4) Discuss briefly the functions of AMFI.
5) List out the names of any 25 countries and their currencies.
6) Explain the methods of flotation of new shares and explain the contents of prospects.

Books for Reference:

1) Bhole – Financial & Institutions – TMH
2) Khan – Indian Financial System – Theory & Practices TMH
3) Clifford Gomez – Financial Markets, Institutions 7 Services
4) Prasanna Chandra – Financial Management – Theory and practices THM
5) Vasanth Desai – Indian Financial System
6) Varshenoy & Mittal - Indian Financial System.
7) Gordon and Natarajan – Financial Markets and Services.

Second Semester BBM
BM 204: FINANCIAL MARKET OPERATIONS

Objectives: To familiarize the students with the conceptual knowledge of financial markets and services.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Indian Financial System
Financial System ; An overview – Meaning – objectives – Functions – Chart showing Structure of Financial System – Financial markets – Financial Intermediaries – Financial Institution – Financial Services (brief introduction only)

(12 hours)

Unit-2: Regulatory Bodies
Reserve Bank of India ; Objectives – Functions – Department, Securities Exchange of India; Objectives – Functions – Rights and duties, Insurance Regulatory Development Authority – Introduction – Objectives, Association of Mutual funds of India- Introduction- Objectives.

(14 hours)

Unit -3: Money Market
Meaning- objective – Features – Scope – Functions - Players – Money Market Instruments – Sub – Markets of Money Market- Draw backs of Money Market, DFHI

(12 hours)

Unit- 4: Capital Market
Introduction – Functions- Classification – Types of Market Instruments; Primary Market; Meaning – Players – instruments – Methods of Flotation, Secondary Market; Introduction- Functions – Bombay Stock Exchange – National Stock Exchange.

(14 hours)

Unit-5: Financial Intermediaries and Stock Exchange
Meaning & Functions of Financial Intermediaries, Stock Exchange; Meaning – Objectives- Functions- Dealers in Stock Exchange.

(12 hours)

Skill Development Activities:

1) Draw a chart showing the working of Indian Financial system.
2) List out the names of stock exchange which are registered under SEBI.
3) Discuss briefly the functions of IRDA.
4) Discuss briefly the functions of AMFI.
5) List out the names of any 25 countries and their currencies.
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1) Bhole – Financial & Institutions – TMH
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3) Clifford Gomez – Financial Markets, Institutions 7 Services
4) Prasanna Chandra – Financial Management – Theory and practices THM
5) Vasanth Desai – Indian Financial System
6) Varshenoy & Mittal - Indian Financial System.
7) Gordon and Natarajan – Financial Markets and Services.

Second Semester BBM
BM 203: FINANCIAL ACCOUNTING

Objective: To provide in accounting considered essential to students pursuing advanced study in Accounting and other knowledge related professional courses.

Pedagogy: Class room lecturers, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Consignment
Meaning- common terms used – Account sale, Profarma Invoice- Commission- Delcredere & over riding commission- Difference between consignment and sale – Problems on consignment- Books of consignor and consignee- Cost and Invoice price method- Valuation of unsold stock and Accounting for normal and abnormal losses.

(16 hours)

Unit-2: Joint Venture
Meaning – Differences between Joint venture and consignment – Joint venture & Partnership, Accounting when Separate books are kept and when no separate books are kept.

(14 hours)

Unit-3: Hire Purchase Accounting
Meaning – Hire purchase v/s sale - Calculation of cash price and Interest – Journal entries and Ledger accounts in the books of Hire purchaser and Hire Vendor [excluding default and repossession]

(16 hours)

Unit-4: Royalty Accounts
Meaning – Technical terms- Royalty – Minimum Rent - Short workings - Recoupment of short working- Journal entries and Ledger accounts in the books of lessee and lessor excluding problems on sublease.

(14 Hours)

Unit-5: Human Resource Accounting
Meaning- Objectives- Methods- Advantages and Limitations – (theory only)

(04 hours)

Skill Development Activities:

1) Prepare an account sale with imaginary figures.
2) Draft a Hire purchase agreement with imaginary terms & conditions.
3) Draft a Royalty agreement with imaginary terms & conditions.
4) Collect a copy of profarma Invoice and affix it.
5) Calculate cash price of an asset with imaginary figures under back calculation method.
6) Prepare a Joint Venture A/c and Joint Bank A/c with imaginary figures.

Books for References:

1) S.P Iyangar – Advanced Accounting
2) S.N Maheshwari & S.K Maheshwari – Introduction to Accounting
3) B.S Raman – Advanced Accountancy
4) T.S Grewal – Elements of Accountancy.
5) S.P Jain & K.L Narms – Financial Accountancy

Third Semester BBM
BM 304: BUSINESS REGULATIONS

Objective: To familiarize the students with business law and its interpretations.

Pedagogy: Class room lecturers, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Indian Contract Act of 1872
Contract-Classification essentials of valid contract. Discharge of contract Mode of discharge-remedies for breach of contract – quasi contractual situations

Unit -2: Special Contracts **(20 hours)**
Contract of Indemnity , Guarantee, bailment and pledge.

Unit-3: Elements of Company Law 1956 **(12 hours)**
Meaning and features of a company – classification – Forming a Company, important documents- Memorandum and Articles o Association. Prospectus misleading prospects and its consequences.

Unit-4: The sale of Goods Act 1930 **(12 hours)**
Definition of goods – essentials of contract of sale- sale v/s agreement to sale – conditions and warranties caveat emptor – unpaid seller- rights of unpaid seller – auction sale.

Unit -5: Consumer Protection Act 1986 **(12 hours)**
Object of the Act Rights of consumer- Deficiency in service complaint- consumer protection councils consumer disputes, Redressal agencies.

Skill development Activities: **(08 hours)**

1) Write down the fact and underline the legal points involved in the following cases.
   a) Carlil and Carbolic smoke ball company.
   b) Lalman Shukla v/s Gowridutt.
   c) Mohiribiti v/s Dhesmodes ghose.
   d) Abdul Aziz v/s Masum Alli.
   e) Rangnayakamma v/s Alwa Shetty.
2) Collect a Judgement copy on damages awarded by the court for breach of contract.
3) Record the rights and duties of bailee like a) Tailor b) Mechanic c) Goldsmith.
4) Drafting / collect and filling up the following a) Affidavit b) Vakalat form c) Power of Attorney d) Pledge
5) Collect a specimen copy of M/A and A/A of a company.

Books for reference:

1) Business Law – S.S Gulshan
2) Mercantile Law – N.D Kapoor
3) Business Regulatory Frame work – Saravaneval
4) Business Regulatory Frame work – K.L Garg, V.K Sareen.

Third Semester BBM

BM 306: BANKING OPERATION AND MANAGEMENT

Objectives: To enlighten the students about existing banking laws and practices and update their knowledge.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Commercial Banks
Introduction – Role of Commercial banks – Functions – Primary and Secondary functions of commercial banks, Lending policies of commercial banks.

(08 hours)

Unit-2: Banker and Customer Relationship
Banker and Customer – Meaning – Definition, Debtor and Creditor relationship- Banker Obligations to honour cheques- Scenery of customer account, Garnishee order – rights of a banker. Banker lien Right of set off appropriation of payments law of limitations.

(12 hours)

Unit-3: Bank Accounts
Types of Bank Accounts- Current Account and Saving Bank Account. Fixed Deposit Account- Features. Procedure and Practice of opening an a/c conducting the operations of accounts- Particularly minors- Joint Account Holder - Partnership firm – Joint – Stock company with limited liability – Executors transfers.

(12 hours)

Unit-4: Negotiable Instruments
Negotiable Instruments Act 1881. Meaning – Definition – Features – kinds of negotiable instruments- Promissory Notes- Bills of exchange. Cheques- meaning – Definition- Crossing of cheque – types of crossing. Material alteration of cheque. Endorsement of cheque – meaning- essentials- kinds of endorsement.

(12 hours)

Unit-5: Paying Banker and Collecting Banker
Paying Banks- Meaning- Duties – responsibilities. Dishonor of cheque – consequences of wrongful dishonor of customer cheque.
Collecting Banker – Meaning-Duties and responsibilities of collecting banker- statutory protection to collecting banker.

(10 hours)

Unit-6: Recent Trends in Banking
Internet Banking- A.T.M Banking, Online Banking- Core Banking-Home Banking -Debit and credit cards,

(10 hours)

Skill developments Activities:

1) Collecting the Specimen account opening forms used in banks for opening and operating bank accounts and learn the process of filling up of those forms.
2) Collect the specimen forms of cheques and learn the process of different types of crossing and endorsement.
3) Collect the loan application forms and learn the filling up those firms.
4) Learn the process of documentation of loan.
5) Prepare the project report for securing loan from bank.
6) Visit nearest bank and observe the quality of services and report the same.

Books for References:

1) Law and Practice of Banking – B.S Raman.
2) Banking Law and Practice – S.N Maheshwari
3) Banking Theory law and Practices – K.D Basava
4) Law and Practices of Banking – Reddy and Appanaiah
5) Law and Practices of Banking – K.C Shekar.

Third Semester BBM
BM 303: CORPORATE ACCOUNTING

Objective: To enable the students to have a comprehensive awareness about the provisions of the company's Act and corporate Accounts

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit -1: Final Accounts of Joint Stock Company
Company final accounts under vertical format including Publishing company & Hotels.

(16 hours)

Unit-2: Final Accounts of Banking Company
Meaning of banking company - common terms used – statutory reserve - Rebate on bills discounted –Non Banking Assets- Money at call & Short Notice. Preparation of Final Accounts under vertical format – Non performing Assets and its classification (theory only).

(16 hours)

Unit-3: Final Accounts of Life Insurance Companies Under vertical format
Problems on preparation of revenue a/c and Balance sheet.

(16 hours)

Unit-4: Insurance Claims
Meaning- steps for ascertaining fire insurance claim – computation of fire insurance claim including average clause (excluding abnormal loss).

(10 hours)

Unit-5: Social Responsibility Accounting
Meaning and definition, Feature and purpose of Social responsibility Accounting (theory only)

(06 hours)

Skill Development Activities:

1) Collect the final accounts of any one joint stock co and affix them.
2) Visit any one nearest LIC Branch to collect insurance proposal from, Medical confidential report form, Nomination form and affix them.
3) Collect the final accounts of any one of your nearest bank and affix them.
4) Compute the amount of insurance claim by using imaginary figures
5) Compute the amount of Rebate on bills discounted by imaginary figures

Books for references:

1) Corporate Accounts – S.N Maheshwari
2) Corporate Accounts – R.L Gupta
3) Corporate Accounts – Jain & Narang
4) Advance Accounts – Shukla & Agewal
5) Corporate Accounts – B.S Raman
6) Advanced Accounts - S.P Iyangar.

Third Semester BBM
BM 305: COMPUTER APPLICATION IN BUSINESS

Objective: To enable the students to learn the efforts behind developing modern computer and its fundamentals along with its application areas. Student will also learn three application packages of MS-Office.

Pedagogy: Class-room Lectures, Practice in the Computer Laboratory and Exercises.
Teaching Hours per Week = 4 hours of theory and 2 hours of practice in lab
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit -1: Computer Concepts

Definition, Characteristics of Computers, Classification of Computers: Digital, Analog, Hybrid, Mini, Micro, Mainframe/Super Computers, Block diagram of digital computer, Personal Computer: Palm PC, Tablet PC, Note Book PC, Laptop, Applications of computers in Business and Office Environment and other areas.

(08 hours)

Unit -2: Computer Hardware and Software

Definition of computer system, Hardware and Software. Input and Output devices: keyboard, mouse, scanner, joystick, OMR, Barcode Reader, Modem, Printer - types of printers, Web-Camera, Visual Display Units, LCD and LED. Types of software: System Software and Application Software. Operating System: Meaning and functions.
Computer Memory: Main Memory/Primary Memory- RAM and ROM. Types of ROM, Cache Memory, and Secondary Memory- Hard disk, CD-ROM, DVDRW and Pen drive.

(12 hours)

Unit- 3: MS-WORD

Features, Advantages, Basic Operations: Word Opening Screen Elements, Creating, Opening and Saving of Word Document. Formatting, Margin, Page setting, Undo-Redo, Spell Check, Alignment, Insert Table, Mail Merge, MS-Word Shortcut Keys, Toolbars: Formatting, Standard.

(16 hours)

Unit -4: MS-EXCEL

Features, Advantages. Window Elements. Managing Workbooks-Create, Open, Save and Close. Managing Worksheets: Naming, Inserting, Moving, Coping and Deleting. Types of cell data, Entering Data, Inserting and Deleting cells, rows and columns. Basic Formulas. Practical in MS-Excel sheets.

(16 hours)

Unit -5: Power Point Introduction

Start, end, open, format, edit, print, and save a presentation. Insert, format, and modify text, Select a design template, Create a title slide, Create a multi-level bulleted list slide, display & print in black and white, describe the speech recognition capabilities of PowerPoint, Add slides to and delete slides from a presentation.

(12 hours)

Fourth Semester BBM
BM 406: FINANCIAL MANAGEMENT

Objective: To acquaint the students with the fundamental aspects of mobilizing and utilizing financial resources in the Business.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit 1: Introduction

a) Meaning of Financial management, Scope and Functions of Financial Management, Objectives of Financial Management
b) Time value of Money: Present value of future money and Future value of present money (simple problems on future values)

(10 hours)

Unit -2: Financing Decisions

a) Sources of financing – short term and long term.
b) Capital structure- Meaning; factors influencing capital structure.
c) Leverages – Operating Leverage, Financial Leverage, combined Leverage
d) Earnings per share (EPS) (Problems on Leverages and Eps)

(15 hours)

Unit -3: Cost of Capital

Meaning of cost of capital

a) Cost of Debt – redeemable and perpetual.
b) Cost of preference – redeemable and irredeemable shares.
c) Cost of Equity – Dividend yield, Earning yield and Dividend Yield plus Growth methods
d) Cost of Retained Earnings.
e) Weighted Average cost of capital (WACC) problems on all these.

(10 hours)

Unit -4: Investment Decisions

Meaning and importance of capital budgeting. Investment Evalution Techniques – Pay Back period, Accounting Rate of Return (Average Return to Average Investment method), Net present value, profitability Index Internal Rate of return
(problems on all there techniques)

(15 hours)

Unit-5: Working Capital Management

Meaning of working capital, concept of working capital, types of working capital, Factors affecting working capital, Working capital cycle (operating cycle) , (Problems on estimation of working capital requirements) , (Current assets and current liabilities method only)

(10 hours)

Fourth Semester BBM

BM 403: HUMAN RESOURCE MANAGEMENT

Objective: To help the students to know about various aspects of HRD strategies of better management of people in the organizations.

Pedagogy: Class room lecturers, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Nature and scope of Human resource Management
Meaning and Definition – Objectives – Scope and Functions of HRM. Role of human Resource manager.

(12 hours)

Unit -2: Human Resource Development
Objectives of management development – Techniques of management developments on the job techniques, under study method-off the job techniques, sensitive training – survey feed bank.

(14 hours)

Unit-3: Training
Objectives – Importance – Methods of training – Lecturer, case study role play, Business game, by suppenns, simulation – designing programme.

(12 hours)

Unit-4: Performance Appraisal
Importance – Objectives- methods a) traditional method b) Modern methods – Problems of performance appraisal. How to make performance appraisal a success.

(12 hours)

Unit-5: Recent Techniques in Human Resource Management
Employees for lease, moon light by employees, Dhal career graphics, human resource Accounting – emotional quotient the use of computer and the internet- objections against the treatment of people as asset.

(14 hours)

Skill development Activities:

1) Visit a firm in your area and collect information on how training is given to their employees.
2) Interact with an employer of a firm and ascertain the criteria to be used for performance evaluation of his subordinates.
3) Visit and identify the programme conducted by any local industry as a part of TQM.
4) Identify and record the recent trends in HRM.
5) Conduct IQ test for students.

Books for reference:

1) Human Resource Management – P. SubbaRao
2) Human Resource Management – C.B. Gupta.
3) Human Resource Management – S.S Kanka
4) Personal Management – C.B Mencoria
5) Personal Management and Industrial Relations – P.C Tripathi
6) Personal Management and Industrial Relations – Daleyoder
7) Personal Management and Industrial Relations – Edwn Z. Flippo

Fourth Semester BBM
BM 405: INSURANCE MANAGEMENT

Objective: To enable the students to understand the principles and procedures pertaining to different kinds of insurance business.

Pedagogy: Class room lecturers, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Introduction to Insurance **(12 hours)**

Origin, evolution and meaning and definition of insurance. History of Insurance, Rights and responsibilities of insurer and insured, classification of insurance – principles of Insurance, essentials of valid insurance.

Unit-2: Life insurance Contract **(10 hours)**

Meaning, definition types of Life Insurance polices and products of life insurance.

Unit-3: General Insurance **(10 hours)**

Meaning – principles – differences between life insurance and general insurance. Fire Insurance – types of fire insurance policies – Marine insurance – Types of marine insurance policies.

Unit-4: Insurance Regulatory and Development Authority **(10 hours)**

Origin and Development Functions – governing principles of IRDA – Recommendations of different committees.

Unit-5: Concept of Risk **(10 hours)**

Definition, Nature of risk management Risk, Features – Objectives – Identification, methods of handling Risk, Prevention of risk – Risk management information system

Unit-6: Miscellaneous Insurance **(12 hours)**

Motor vehicle insurance Medical insurance, Burglary insurance, Live stock insurance, Personal accident insurance, Crop insurance, Credit Guarantee corporation.

Skill Development Activities: **(10 hours)**

1) Collect the specimen of following forms and learn the process of filling up those forms) Proposal form – life insurance, vehicle insurance, Property insurance.
2) Visit a general insurance office and collect the details of organization structure.
3) Collect the insurance policy documents and identify the important content.
4) Meet the development officer and collect information about different insurance policies.
5) Collect information about documentation of the procedure for claims and their settlement.

Books for reference

1) Principles of Insurance Management - Neelan C. Gulati
2) Insurance Principles and Practice – M.N Mishra.
3) Elements of Insurance – Malhotra R.P
4) Principles and Practice of Insurance – G.S Panda.
5) Principles and Practice of Insurance – Dr. P Preiaswany

Fourth Semester BBM

BM 404: QUANTITATIVE METHODS FOR BUSINESS

Objective: To enable the students to understand and apply mathematical techniques to practical business problems.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Number System
Meaning- Natural numbers – Integers – Prime numbers – Composite numbers – Rational and irrational numbers – Real numbers, Simple problems on LCM and HCF.

Unit-2: Indices **(04 hours)**
Meaning, Laws and their applications for simplification. Logarithms – Uses of log table for multiplication, division, rising the power and roots of number.

Unit -3: Commercial Arithmetic **(08 hours)**
Simple interest – Compound interest – Annuity (Present and Future value) – Discounting of bills, TD, BD, BG – Ratio, Proportion and variations, problems relating to speed, Time, Distance and Work completion.

Unit-4: Matrices and Determinants **(15 hours)**
Meaning and types of matrices – Operations of Addition, Subtraction, Multiplication, Transpose and Inverse matrices – Determinants – Cramers rule with 2 unknown variables – Applications of matrices to solve business problems.

Unit-5; Theory of Equations **(14 hours)**
Meaning Types of equations – Simple linear equations and Simultaneous linear equation (only two variables) Elimination and Substitution method only – Quadratic equations, Factorization and Sridharacharya's formula method.

Unit-6: Progression **(15 hours)**
Arithmetic progression – Finding the n^{th} term of an AP and sum of n^{th} term of AP – Geometric progression – Finding n^{th} term of GP and sum of n^{th} term of GP – Arithmetic mean and geometric mean **(08 hours)**

Skill Development Activities:

1) Visit a Bank Co- operative society and collect information about how they calculate interest on SB, RD, FD, OD account and term loan.
2) Collect information about population of city from District Statistical Office of last five years and predict the population of next five years.
3) Visit Insurance Company, study and analyze how they will calculate the premium on different policies and calculate surrender value.
4) Collect information from company about how they make use of matrices.
5) Collect information from Small Scale industry in your locality about wage structure and analyze.

Books for reference:

1) Business Mathematics – Dorairaj S.N
2) Business Mathematics – Gupta S.P
3) Business Mathematics – Madappa and Sridhararao
4) Business Mathematics –Wilson
5) Commercial Arithmetics – Agarwal
6) Fundamentals of Business Mathematics – M.K Bhowal
7) Quantitative techniques Dr. Suresh B.H.

Fifth Semester BBM.

BM 505: BUSINESS RESEARCH METHODS

Objective: To create an awareness of the process of research, the tools and techniques of research and generation of reports.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Introduction to Research
Meaning – Objectives – Types of research – Scope of research – Research Approaches – Research Process, Research Design, Research Methods Vs Research methodology – Steps in research – Problem Formulation – Statement of research objective Exploratory – Descriptive – Experimental research.

(16 hours)

Unit-2: Methods of Data Collection
Observational and survey methods – Field work plan – Administration of surveys – Training field investigators – Sampling methods – Sample size.

(16 hours)

Unit-3: Tools for Collection of Data
Questionnaire design; Attitude measurement techniques- Motivational Research Techniques - Selection of Appropriate – Statistical techniques.

(14 hours)

Unit-4: Statistical Methods
Tabulation of data – Analysis of data – Drawing testing of Hypothesis (theory only) - Advanced techniques – ANOVA - Discriminate Analysis – Factor analysis, Conjoint analysis – Multidimensional Scaling – Cluster Analysis (concepts only)

(10 hours)

Unit-5: Report Writing
Types of Reports, Business, Technical and Academic report writing – Methodology procedure – Contents – Bibliography.

(08 hours)

Skill Development Activities:

1) Illustrate different types of samples with examples.
2) Construct a questionnaire for collection of primary data keeping in mind the topic chosen for research.
3) Narrate your experience using observation technique.
4) Diagrammatically present the information collected through the questionnaire.
5) prepare a table on tabulation of data or Illustrate different problems on tabulation.

Books for References:

1) Q.R Krishnaswamy - Research Methodology in Social Sciences, H P H, 2008.
2) R. Divivedi - Research Methods in Behaviour Science, Macmillan India Ltd, 2001
3) S.N Murthy, V. Bhojanna - Business Research Methods
4) J.K Sachdeva - Business Research Methodology, H P H
5) Levin & Rubin - Statistics for Management, Prentice Hall of India, 2002
6) Gupta S - Research Methodology and Statistical Techniques, Deep & Deep Publication
7) Thakur D - Research Methodology in Social Sciences, Deep & Deep Publications.
8) Tripathi P.C - A Textbook of Research Methodology, Sultan Chand & Sons 2002
9) Cooper - Business Research Methods, 6th edition, Mcgraw Hill.
10) C.R Kothari - Research Methodology, Vikas Publications.

Fifth Semester BBM
BM 504: BUSINESS TAXATION-I

Objectives: To Familiarize the Students with the basic legal provisions and procedural aspects of income tax.

Pedagogy: Class room lecturers, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit -1: Income Tax Act
Basic concepts – Income, Agricultural Income, Casual Income, Assesses, Assessment year, previous year, person, gross total income, Total income.

Unit-2: Residential status of Individual and Incidence of Tax (Theory and problems) **(08 hours)**

Unit-3: Tax Free Incomes U/s 10 **(12 hours)**

Unit-4: Heads of Income **(02 hours)**
All heads to be mentioned, theory and problems on salary head including retirement benefits. **(26 hours)**

Unit-5: Deductions from Gross total Income u/s 80 relating to individuals u/s 80 C, 80 CCC, 80 CCD , 80D, 80 DD, 80 DDB, 80 E, 80 G and 80 U (problems on 80C and 80G only).

Unit-6: Income Tax Authorities in India **(12 hours)**
Appointment of Income Tax Authorities and their powers.

Skill Development Activities: **(04 hours)**

1) Filling of form No. 49A [PAN].
2) Filling of form No 16 and 16 A.
3) Chart on perquisites [RFA and Motor car]
4) Filling of challan and making payment of tax challan 280 and 281.
5) List out a form Non Residential Indian firms and companies in your town or locality.
6) Draw an organizational chart of I.T authority.

Books for reference:

1) Income Tax Law and Accounts – Dr. H.C Maharotra
2) Law and Practice of Income Tax – Gaer and Narang
3) Direct Taxes – V.K Singhania
4) Direct Taxes – B.B Lal
5) Income Tax Law and Practice – Dinakar and Pagase
6) Income Tax Law and practice – M.B Kadkol

Fifth Semester BBM
BM 501: COST ACCOUNTING

Objective: The objective of this subject is to familiarize students with the various concepts and elements of cost.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Introduction
Meaning and Definition of cost, costing , Cost Accounting and Cost Accountancy – Objectives of costing – Advantages of costing – Comparison between Financial accounting and Cost accounting – Cost concepts – Classification of cost – Cost unit – Cost center – Elements of cost – Preparation of cost sheet - Tenders, Quotations, Estimates.

(18 hours)

Unit-2: Material
Meaning – types- Direct material – Indirect material – Material control – Purchasing procedure – Setting of stock levels – Store keeping – Techniques of Inventory control – EOQ – ABC analysis, VED analysis – Just in time – Perpetual Inventory system- Documents used in material accounting – Methods of pricing. Material issues – FIFO – LIFO – weighted average price and simple average price methods.

(12 hours)

Unit-3: Labour Cost Control
Meaning and Definition – Types, Direct labour – Indirect labour – Time keeping – Time booking, Idle time – Over time – Labour turnover causes, Remidies methods and labour remuneration – Time rate system – Price rate system – Incentive system- Halsey plan – Rowan plan – Taylor's differential piece rate system and Problems – Preparation of labour cost sheet.

(12 hours)

Unit-4: Overheads
Meaning and definition – Classification of overhead - Procedure for accounting – Control of overheads - Allocation of overheads - Apportionment of overhead – Absorption Factory overheads - Methods of Absorption- calculation of Machine Hour rate [Simple problems relating to single machine]

(08 hours)

Unit-5: Method of Costing
Process costing (excluding joint products, joint costs, Inter process profits and equivalent units)
Contract costing – simple problems (including estimated contract account)

(14 hours)

Skill Development Activities:

1) Write down the specimen format and a note on the following a) Bincard b) Stores ledger c) Pay Roll d) Idle time e) Material Requisition d) Labour cost sheet
2) Classification of overhead – Basis of apportionment of overhead and listing of overheads on the basis of variability.
3) Developing a case for reconciliation.
4) Identification of elements of cost in services sector.
5) Cost estimation for the making of a proposed product.

Books for reference:

1) Cost Accounting – Jain and Narang.
2) Cost Accounting – N.K Prasad
3) Cost Accounting – Nigam and Sharma
4) Cost Accounting – M.N Arora
5) Cost Accounting B.S Raman.

Fifth Semester BBM

BM 503: SMALL BUSINESS MANAGEMENT

Objectives: To enable the students to understand the theoretical and practical aspects of busines enterprises.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Introduction

Meaning and Definition of Entrepreneur and Entrepreneurship, Characteristics of Entrepreneur Types of Entrepreneurs, Role of Entrepreneurship in Economic Development, Intrapreneu Entrepreneur, Manager v/s Entrepreneur.

(12 hour

Unit-2: Rural and Woman Entrepreneurship

Meaning of Woman Entrepreneurs, Factors influencing Woman Entrepreneurs Problems Woman Entrepreneurs and remedial Measures, Development of Woman Entrepreneurs a Woman Entrepreneurship, Support to Woman Entrepreneurs, Rural Entrepreneurs- Definitio Strategies for development of Rural Entrepreneurship.

(10 hour

Unit-3: Entrepreneur Development Programmes

Meaning and Definition of Entrepreneurial Development programs,Objectives, Need for traini and development, Phases of Entrepreneurial Development programmes.

(10 hour

Unit-4: Project Identification and Formulation

Meaning of Project report and its Significance, contents, project Identification, Formulation project report, General format of a Project Report.

(10 hour

Unit-5: Small Scale Industries

Meaning and Definition, Role of Small Scale Industries in the Economy, Objectives a characteristics of Small Scale Industries, Role of Government in Promoting Small Sca Industries

(12 hou

Unit-6: Problems of Small Scale Industries

Small Scale Industries and Financial institutions, Role of financial institutions in t development of SSI – SFC, SIDBI, IFCI. (Causes and remedies, Sickness in small sca Industries, Symptoms, reasons for Sickness and remedial Measures.)

(10 hou

Fifth Semester BBM

BM 502: TECHNIQUES FOR BUSINESS DECISIONS-I

ctives: To familiarize the student with the fundamental statistical tools for business decisions.

gogy: Class room lecturers, Seminar, Group discussion.
ning hour per week = 4 hours.
mum Marks = 100.
Duration = 3 hours.

1: Meaning and Definitions of Statistics
tions and scope of Business statistics - Features and limitation of statistics - Distrust of statistics.
(08 hours)

-2: Classification and Tabulation of Data
ification – Meaning and types of classification – Problem on frequency distribution table, Tabulation aning - Rules and parts of a statistical table – Problems on tabulation.
(10 hours)

-3: Measures of Central Tendency
ing- objectives – Features of an ideal average – Types of average – Computation of simple metic Mean, Median and Mode Geometric Means and Harmonic Mean for individual series only.
(16 hours)

-4: Measures of Dispersion
ing and types- range- Quartile deviation, Standard deviation, co-efficient of variation of each ods. (excluding combined of correlated deviation)
(12 hours)

-5: Skewness
ing, types of skewness, methods – problems on Karl Pearson's co-efficient of skewness, Bowlay's ficient of skewness.
(08 hours)

-6: Diagrammatic and Graphic Representation
ing and uses – types of diagram, simple, subdivided, multiple, pie diagram, rectangle, graphs of ency distribution- Histogram- locations mode- ogives.
(10 hours)

Development Activities:
) Select any consumer durable product of your own choice and prepare of questionnaire to elicit consumer response.
) Prepare a Bivariate table for the marks of any two subjects of your class students
) Find the consistency of any cricket batsmen taking the runs scored by them in 10 international matches.
) Drawing of Histogram and location of mode.
) Narrate the points of difference between symmetrical and skewed distribution.

s for reference:

) Statistical Method – S.P Gupta
) Business Statistical - Ellahance
) Business Statistical - Chikodi and Satya Prasad.
) Business Statistical – S.K Gupta.

Sixth Semester BBM
BM 603: BUSINESS TAXATION-II

Objective: To enable the students to grasp the practical aspects of Income Tax

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Income from House Property

Basis of charge – deemed owners - Excepted incomes from house property – Annual value – Determination of Annual value a) Self occupied b) Set out deductions from annual value – Unrealized rent – Problems on Income from house property.

(14 hours)

Unit-2: Profit and Gains of Business or Profession

Meaning and Definition, Profession – Expenses expressly allowed – Expanses expressly disallowed – problems on business relating to sole trader only and problems on profession relating to charted accountant, Advocate, and Doctor

(18 hours)

Unit-3: Capital Gains

Meaning of capital assets – Types of capital assets and gains. Transfer, Exempted capital gains U/s 54, 54B, 54D, and 54F – computation of capital gains with exemption U/s 54 and 54F only

(12 hours)

Unit-4: Income from Other Sources

Specific and general Income – Problems on income from other sources – set off and carry forward of losses [Theory only]

(12 hours)

Unit-5: Computation of Total Income and Tax Liability of Individual

(08 hours)

Skill Development Activities:

1) Prepare a brief report relating to amendment made in the current finance act relating to Income Tax Act.
2) Identify the transaction not regarded as transfer for capital gain purpose.
3) Make a list of items Taxable under the head income from other sources.
4) Filling of income Tax returns of individuals.
5) Due date for filling returns of all assesses.

Books for References:

1) Income Tax Law and Accounts - Dr. H.C Mehaotra and S.P Goyal
2) Income Tax Law and Practice – Gaur and Narang
3) Income Tax and Account - Bhagavathi Prasad.
4) Direct Taxes - B.B Lal
5) Direct Taxes - Viked K. Sibghinia.

Sixth Semester BBM
BM 601: MANAGEMENT ACCOUNTING

Objective: To enable the students to grasp the fundamentals of management accounting and the tools and techniques used in management accounting.

Pedagogy: Class room lectures, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Management Accounting
Meaning- Definition – Nature – Functions – Uses and limitations of Management Accounting – Difference between Management accounting and Financial accounting - Differences between Management accounting and Cost accounting

(10 hours)

Unit-2: Financial Statement Analysis
Meaning and types of financial statement analysis (internal, external, horizontal and vertical) Technique of financial analysis, Common size comparative statement & Trend analysis and problems thereon

(10 hours)

Unit-3: Ratio Analysis
Meaning, Significance and limitations of ratio computations of ratios.

- Liquid ratio's: Current ratios, liquid ratio and debt equity ratio.
- Turnover ratios: Inventory turnover ratio, debtor's turnover ratio, average receivable period, creditor's turnover ratio and averages payment period.
- Profitability ratios: Grows profit ratio, Operating ratio, Operating profit ratio, net profit ratio and return on capital employed ratio.

(16 hours)

Unit-4: Fund Flow Statement and Cash Flow Statement
Meaning of funds, Fund flow and Fund flow statement, Managerial uses and limitations of fund flow statement, Preparation of fund flow statement and problems thereon. Cash flow statement, Meaning uses and limitation of cash flow statement. Fund flow statement v/s Cash flow statement. (theory only)

(16 hours)

Unit-5: Budgetary Control
Meaning of budget, Budgeting and Budgetary control, Significance, Limitations and classification of budgets preparation of flexible budget and sales budgets and problems thereon.

(12 hours)

Skill Development Activities:

1) Collect the financial statements of a company for 2 years and prepare comparative income statement and comparative balance sheet.
2) Compute the following ratios from the collected financial statements of a Co.
   Liquid ratio, debtor turnover ratio, creditor turnover ratio, return on capital employed and debt equity ratio and give your comments.
3) Using the collected financial statements prepare a fund flow statements.
4) Prepare a sales budget with imaginary figures
5) Prepare Flexible budget with imaginary figures.

Books for reference:

1) Khan and Jain – Management Accounting (Tata McGraw Hill)
2) Sharma and Gupta - Management Accounting (Kalayani)
3) J. Madegowda - Management Accounting (Himalaya)
4) S.P Gupta - Management Accounting (Sahitya Bhavan)
5) Pillai and Bagavati - Management Accounting (S.Chanol &Co)
6) Dr. S.N Maheshwari - Management Accounting
7) Dr. S.N Goyal and Manmohan - Management Accounting

Sixth Semester BBM

BM 604: ORGANISATIONAL BEHAVIOUR

Objective: To enable the students to understand human behavior and organizational behavior.

Pedagogy: Class room lecturers, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Introduction to Organizational Behavior

Meaning – definitions – Nature & scope of organizational behavior – need for study – contributing disciplines to organizational behavior. Models of organizational behavior – challenges for organizational behavior. Organization structure – meaning – Need and elements – Forms of Organizational structure. Organizational goals – Nature and determinants of goals.

(12 hours)

Unit-2: Organizational Culture and Change

Meaning of Organizational culture – Types of culture – Learning culture – Meaning of Organizational change – Reasons for change – Resistance to change – Managing the change Organizational Effectiveness – Meaning approaches.

(14 hours)

Unit-3: Foundation of Individual Behavior

Individual and individual differences – Factors – models of man – personality – Meaning – Determinates and theories of personality – perception process – factors affecting perception.

(14 hours)

Unit-4: Group Dynamics

Meaning – Types of group – Why do people join group? Stages of group development. Group behavior- Group norms and Group cohesion – Learning – Meaning – Definition determinants of learning – Theories of learning.

(12 hours)

Unit-5: Motivation

Meaning – Positive and Negative motivation. Theories of Motivation Maslow's need theory – Theory x and Theory Y – Morale – Meaning – Factors affecting morale.

(12 hours)

Skill Development Activities:

1) Draw different structures of an organization.
2) Identify any 10 companies and write their goals – version & slogan.
3) Identify the personality traits of any two famous personalities.
4) Visit an organization and collect information about motivational techniques adopted in it.
5) Conduct group excuses in perception.

Books for references

1) Organizational behavior – Stephen Robbins
2) Organizational behavior – Fred Luthans
3) Organizational behavior – L.M Prasad
4) Organizational behavior –S.S Kanka
5) Organizational behavior – Shashi K. Gupta, Rosy Joshi
6) Organizational behavior K.K Ahuja
7) Organizational behavior –texts, game, & cases – K Ashathayya.

Sixth Semester BBM

BM 602: TECHNIQUES FOR BUSINESS DECISION-II

Objective: To enable the students to grasp the practical applications of statistical tool for the management.

Pedagogy: Class room lecturers, Seminar, Group discussion.
Teaching hour per week = 4 hours.
Maximum Marks = 100.
Exam Duration = 3 hours.

Unit-1: Correlation Analysis
Meaning and methods of studying correlation – Karl Pearson's co-efficient of correlation – probable error – simple and bi-variate tables.

(12 hours)

Unit-2: Regression Analysis
Meaning, Difference between correlation and regression – Regression equations – Estimation of regression co-efficient through regression equations -simple and bi-variate tables

(12 hours)

Unit-3: Index Number
Meaning and purpose of index number – Limitations – Steps in construction of index number – Types On weighted simple aggregate index number – simple price relative method – weighted index number Laspeyer's, Peasches, Dorbish and Bowley's and fisher's ideal index number TRT, FRT – cost of living index number – methods aggregative expenditure method and family budget method.

(14 hours)

Unit-4: Statistical Quality Control
Meaning and objectives – Types of control – Control charts and their uses – Types of control charts - Constructions of mean and range charts

(08 hours)

Unit-5: Interpolation and Extrapolation
Meaning, utility -Algebraic methods, Binomial & Newton's Methods only.

(08 hours)

Unit-6: Chi –Square Test
Meaning- Definitions and nature- Assumption -Degree of freedom – form of chi- square distribution, Chi square test or good users for fit for independence of attitudes – Yates correction.

(10 hours)

Skill Development Activities:

1) Ascertaining correlation between any two quantitative variables like height and weight of 10 students of your class.
2) Estimation of probable values like sales, marks, income Etc through regression equation.
3) Using imaginary values of sample means (x) and range charts and comment on the state of control of the process.
4) Using imaginary figures construct the cost of living index of your own place.
5) Point out the difference between correlation and association attributes.

Books for Reference:

1) Statistics for Management – Levin .R and Rubin
2) Business Statistics – S.C Gupta.
3) Business Statistics – Ellahance
4) Business Statistics – Chikodi and Satyaprasad.

KUVEMPU UNIVERSITY

Revised syllabus

BCA, B. Sc (Computer Science) and BA (Computer Applications)

W.E.F 2019-20

DEPARTMENT OF P.G. STUDIES AND RESEARCH IN COMPUTER SCIENCE,

JANNASHAYADRI , SHAKARGHATTA

SHIMOGA, KARNATAKA

NEW SYLLABUS FOR B.Sc. (Computer Science)

(EFFECT FROM 2019-20)

Paper code	Semester	SUBJECT	Weekly hours	Internal marks	External marks	Practicals	Total
BSC1	I	CF &CP	4+3	10	50	40	100
BSC1	I	CF &CP	4+3	10	50	40	100
BSC2	II	DS	4+3	10	50	40	100
BSC3	III	DBMS	4+3	10	50	40	100
BSC4	IV	C++	4+3	10	50	40	100
		JAVA	4+3	10	50	40	100
BSC5	V	UNIX Programming	4+3	10	50	40	100
		Advanced JAVA	4+3	10	50	40	100
BSC6	VI	SE&CN	4+3	10	50	40	100

FIRST SEMESTER B.Sc (Computer science)

Computer Science -I

BSC-1 Computers Fundamentals and C Programming

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction to Computer Systems: **10 hrs**

Definition of a Computer, History of Computers, Generations of Computers, types of computer – based on size and working principle, Block diagram of a Computer with functional units(explanation), Parts of a computer system, Information processing Cycle. Definition of software and hardware, types of programming languages, assembler, compiler, interpreter, linker, loader (Definitions only),number system – decimal, binary, octal and hexadecimal number, inter-conversion of decimal to binary and vice-versa. ASCII codes.Algorithm-definition, Characteristics, notations. Flowchart-definition, Symbols used in writing the flow-chart Writing an algorithm and flow-chart of simple problems.

Unit 2- Introduction to Computer Systems: **10 hrs**

Introduction to C, features ofC , basic C program structure, character set, tokens, keywords and identifiers. Constants, variables, data types, variable declaration, symbolic constant definition.

Unit 3- Operators and Expressions: **08 hrs**

C operators- arithmetic, relational, logical, bitwise, assignment, increment and decrement, conditional (?:) and special operators, Arithmetic expressions, precedence of operators and associatively. Type conversions, mathematical functions.Definition of macro and pre-processor directives, Managing I/O operation – reading and writing a character, formatted and unformatted/O functions.

Unit 4- Control Structures: **10 hrs**

Conditional control statements- if, if-else,nested-if,switch , go to statement, while, do-while and for statements. Unconditional control statements- break, continue and return statements(definition and explanation with syntax, flowchart and examples)

Unit 5- Arrays, Strings and Functions: **10 hrs**

Definitions of an array, types-one and two dimensional array,(definition, declaration, initialization with examples).Strings–definition, declaration and initialization of string variable, string handling functions- strcmp,strcpy, strrev, strlen, strlwr, strupr(explanation with syntax and examples) Functions – definition, need, syntax for function declaration, function prototype, category of functions, nesting offunctions, function with arrays, scope of variables ,parameter passing mechanism-call by value and call by reference. Recursion and Recursive function(definitions only)

Reference :

1. Fundamentals of Computers, V. Rajaraman.

2. Computer Concepts and C Programming, P.B. Kotur

3. Let us C ,YashwanthKanetkar

4. ANSI C, Balagurusamy

QUESTION PAPER PATTERN FOR I SEMESTER B.Sc(Computer science)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL: C- PROGRAMMING LAB

1. Find the biggest of three numbers.
2. Arithmetic operations using switch statement.
3. Find the Fibonacci series between M and N.
4. Prime numbers between M and N
5. Binary to Decimal conversion
6. Sorting an unsorted array
7. Searching an element in an array.
8. Addition of two matrices
9. Multiplication of two matrices
10. Norm and trace of the matrix.
11. Count the numbers of vowels in a given string.
12. Find the factorial of a number using function.

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Program Flowchart/Algorithm 05 Marks
- ✓ Program Writing 15 Marks
- ✓ Correct output with proper display 10 Marks
  (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

SECOND SEMESTER B.Sc (Computer science)

Computer Science -II

BSC-2 DATA STRUCUTRES USING C

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction to Data Structure: **10 hrs**

Definition of Structure, syntax and example for structure declaration.Definition of union, syntax and example for union declaration, difference between structure and union.Pointers–Definition, Declaration, Examples. Dynamic memory allocation functions – syntax and examples. Definition of Data Structure and types of data structures with examples.

Unit 2 – Stack and recursion: **10 hrs**

Definition and example of stack (LIFO), operations of stack with algorithms, applications of stack, algorithm for the conversion of infix to postfix expression. evaluation of postfix expression , Tower of Hanoi problem and factorial of a number using recursion.

Unit 3- Queue: **10 hrs**

Definition and example of Queue (FIFO), operations on queue, types of queue – ordinary queue and circular queue (definitions only), disadvantages of ordinary queue. Linked list–Definitions and types of lists (definitions only), operations of Single Linked List, implementation of stack using linked list, implementation of queue using linked list,

Unit 4- Tree : **10 hrs**

Definition of a Tree, Definition of root, left sub tree, right sub tree, degree of node, terminal node, depth, Definition of Binary tree, types of binary trees (definition only), Algorithm for tree traversal.

Unit 5- Sorting and searching: **08 hrs**

Definition of sorting, explanation of bubble sort, shell sort, radix sort and merge sort with examples. Definition of searching, explanation of Binary search and linear search with examples and algorithms.

References:

1. Systematic approach to data structure - Padmareddy
2. Programming in ANSI C - E Balaguruswamy
3. Datastructures and applications - Trembly and Sorenson

QUESTION PAPER PATTERN FOR II SEMESTER B.Sc(Computer science)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL: DATA STRUCUTRES LAB

1. Implementation of stack
2. Evaluation of postfix expression
3. Conversion of infix to postfix
4. Tower of Hanoi
5. Implementation of queue
6. Implementation of stack using linked list
7. Implementation of queue using linked list
8. Quick sort
9. Shell sort
10. Binary search

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
  - ✓ Program Flowchart/Algorithm 05 Marks
  - ✓ Program Writing 15 Marks
  - ✓ Correct output with proper display 10 Marks
    (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

THIRD SEMESTER BSc (Computer science)

Computer Science -III

BSC-3OBJECT ORIENTED PROGRAMMING WITH C++

Theory Examination- 50 Max marks. Number of Teaching hours –48

Internal Assessment- 10 Max marks

Unit 1- Introduction to OOPS: 10 hrs

Object Oriented Programming paradigm, Basic concepts of Object Oriented Programming- Classes, Objects, Data Abstraction and Encapsulation, Polymorphism, Inheritance, Dynamic Binding, Message passing, Benefits of OOP, applications of OOP.

Unit 2-Introduction to C++: 10 hrs

Difference between C and C++, Structure of a C++ program, input and output statements, tokens - Keywords, identifiers, constants, strings and operators, reference variables – definition and example, special operators in C++, brief introduction to control structures in C++.

Unit 3-Classes Objects and Member Functions: 10 hrs

Difference between structure and class, syntax and example for class declaration, Definition of data member and member function, Defining member function inside and outside the class, inline functions, array of objects, default arguments, static data members and static member functions, function overloading, definition of friend function, syntax and example for the declaration of friend function, special characteristics of friend function.

Unit 4- Constructors, destructorsand Operator overloading: 09 hrs

Definition of a constructor, types - parameterized constructor, default constructor, copy constructor, special characteristics of constructor, definition of a destructor, special characteristics of destructor, definition to Operator overloading, overloading binary operator (+) to add two complex numbers, rules for operator overloading.

Unit 5: Inheritance and templates: 09 hrs

Definition of Inheritance,forms of inheritance, syntax and example for defining derived classes, visibility modes, explanation of multilevel inheritance and hybrid inheritance with examples. Definition of templates, syntax and example for class and function template.

Reference Books:

1. Object Oriented Programming with C++ - E Balaguruswamy
2. C++ - The Complete Language – BjarneSchildt
3. Object Oriented Programming in Turbo C++ - Robert Lafore

QUESTION PAPER PATTERN FOR III SEMESTER B.Sc (Computer science)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL: C++ LAB

1. Write a c++ program to find the result of a student using class concept
2. Define a class to represent product details it includes data member pname, pcode, price, pquality include member function a) to get product detail b) to display the product details and total price using class concept
3. Write a c++ program to print Fibonacci series using constructor
4. Write a c++ program to find biggest of two numbers and three numbers using function overloading
5. write a c++ program to calculate area of triangle, rectangle and circle using function overloading
6. write a c++ program to calculate family income using friend function
7. write a c++ program to add two complex numbers using operator overloading
8. write a c++ program to implement multiple inheritance by creating classes: father , mother and son
9. write a c++ program to swap two numbers using function template
10. write a c++ program to sort an array using function template

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
  - ✓ Program Flowchart/Algorithm 05 Marks
  - ✓ Program Writing 15 Marks
  - ✓ Correct output with proper display 10 Marks
    (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

FOURTH SEMESTER B.Sc (Computer science)

Computer Science -IV

BSC-4 DATABASE MANAGEMENT SYSTEM

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction to DBMS: **10 hrs**

Meaning of data and information, definitions of database, applications of database system, definition of DBMS, disadvantages of file processing system (advantages of DBMS), three levels of data abstraction, difference between schema and instance, definition of data models, types of data models (brief explanation), database languages – DDL and DML.

Unit 2- E-R model: **10 hrs**

Different types of database users, functions of Database Administrator (DBA), basic-concepts - Primary keys, foreign key, super key, definition of E-R diagram, symbols used in E-R Diagram, E-R diagram for Banking enterprise, E-R diagram for Book store, types of entities, entity sets, attributes, types of attributes, weak entity sets, cardinality ratios (mapping cardinality).

Unit 3- Relational Model: **10 hrs**

Fundamental operations of Relational algebra - select, project, union, set difference, join, division operations (explanation with examples). Types of aggregate functions – MAX, MIN, SUM, COUNT and AVERAGE (Definition with example).

Unit 4- SQL: **09 hrs**

Definition of Query, explanation of basic structure of SQL – Select, from and where clauses in SQL, data types in SQL, explanation of set operation in SQL – Union, intersection, except, NULL values.

Unit 5: Relational database design: **09 hrs**

Pitfalls in relational database design, definition of Normalization, Various types of Normal forms (Definitions only) – First Normal form, Second Normal form, Third Normal form, Boyce-Codd Normal Form (BCNF).

Reference Books:

1. Korth, Sudarshan “Database System concepts”, Mcgraw Hill-IV Edition.
2. Navathe, Silberchatz and Elmasri “fundamentals of database Systems”-Addison Wesley
3.C.J. Date “Introduction to Database systems” Addison-wesley.
4. Bipin C Desai “Introduction to Data base system” Galgotia publications

QUESTION PAPER PATTERN FOR IV SEMESTER B.Sc (Computer science)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL: SQL LAB

I. Use default emp and dept tables to write SQL statements for followingqueries
1. Find the employee details in ascending order of their name and descending order of their salary
2. Find names of all employees whose name starts with ‘s’ and having atleast 6 characters in it
3. Find the name of all managers and number of employees under them
4. Find the details of all employees in the research department
5. Find the minimum, maximum and average salary of each department
6. Find department name having least number of employees
7. Find the department name having highest annual payroll
8. Add an employee under the manager smith
9. Find the employees who are not getting commission

II. Create tables as below
Student(name string, regno string primary key, dob date, doj date ,course string foreign key)
Markscard(regno foreign key, sem string, sub1 number, sub2 number, sub3 number, tot number, avge number, result string)
Write SQL statements for the following queries.
1. List the names of students studying in BCA course in the order of their joining
2. Find the name of student who has scored highest marks in every sem of each course
3. Count the number of students in each course
4. Find the course having second highest number of students
5. Find the course having least students in I semester
6. Raise marks of sub3 in III sem BCA students by 5% if the student has failed in that subject
7. Display the details of student ‘xxx’ in every semester.
8. Find the names of al juniors of ‘yyy’ in course ‘c1’
9. Find all students studying with ‘xxx’ and elder to him (compare DOB)

III. Dept(deptno integer pkey, dname string not null, loc string not null)
Emp(eno integer pkey, ename string, deptnofkey, desgn string not null, bsal number>0)
Salary(enofkey,da,hra,gross,it,pf,net,comm)
Designations are: manager,clerk,salesman
Comm=5% of basic if desgn=salesman otherwise null
Da=15% bsalhra = 7% of bsal gross=bsal+da+hra
It =0 if gross<15000
= 10% of gross if gross between 15000 and 30000
=20% of gross if gross between 30000 and 50000
= 30% of gross otherwise
pf = 10% of gross or 1000 whichever is less
Write SQL statements for
1. Count the number of employees in every designation
2. List the employees of every department in descending order of their net salary
3. List the name and salary of highest salary payer in every department
4. List the name of employee paying highest IT
5. List the total IT paid by each department
6. List the departments in every location
7. Raise the basic salary by 10% for the managers of every department.
8. Find number of employees having at least 10 years of experience in every department.
9. Count the number of employees who are not getting commission in every department

PRACTICAL EXAM SCHEME

Practical Proper - 30 Marks
Table creation & data insertion =10 marks
SQL queries- 4 X 5 marks =20 marks[Queries writing 3 marks (each) and Execution 2 marks (each)]
Viva – voce - 05 Marks
Record - 05 Marks

FIFTH SEMESTER BSc (Computer science)
Computer Science -V

BSC-5.1 JAVA PROGRAMMING

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction to Java: **12 hrs**

History of Java, Java features, Difference between C/C++ and Java, Java program structure, Java tokens, Statements, JVM, Java and Internet, Java and WWW, Web browsers, Java support system, Java Development Kit (JDK), Application Programming Interface(API), Java Runtime Environment (JRE).Introduction to packages in Java, Applets, Operators & Expressions, Data types, Constants and Variables, Type conversions, Mathematical functions; Control Statements: Decision making and Branching with while, do-while, for and labeled loops; Arrays, Vectors & Strings: Initialization, Declaration

Unit 2-Overview: **10 hrs**

Class, Objects, Constructor, Method overloading, Static members; Inheritance: Single, Multilevel, Hierarchical, Visibility modes, Method overriding, Final variable, Abstract methods and classes; Interface: Defining, Extending and implementing assigning interface variables

Unit 3-Packagesand multithreading: **10 hrs**

Java API Packages, using system packages, naming convention, accessing and using a package, adding a class to packages, hiding classes. Multithreaded programming: Creating a thread, extending the thread class, stopping and blocking a thread, life cycle of a thread, using thread methods, thread exceptions, thread priority, synchronization, implementing the runnable interface.

Unit 4-Exceptions and Debugging: **08 hrs**

Meaning of errors and exceptions, Dealing with errors, Classifications of exceptions, syntax of handling exceptions, advertising the exceptions, throwing and re-throwing exceptions, creating Exception classes, multiple catch statements, finally clause, Debugging techniques – tricks for debugging, Assertions, Java Debugger (JDB).

Unit 5-Applets and Graphics: **08 hrs**

Applets basics, applets and application, Life cycle, Life cycle of Applet programming- passing parameter to applets, paint and repaint methods, Graphics class, Line, Rectangle, Circle, Ellipse, Arcs and Polygon, drawing bar charts.

Reference Books:

1.Programming with Java- A primer, 4th Edition, by E Balaguruswamy.
2.The Complete Reference – Patrick Naughton and Schildt
3.Programming in Java – Joseph L Weber

QUESTION PAPER PATTERN FOR V SEMESTER B.Sc (Computer science)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL: JAVA PROGRAMMING LAB

1. Write a Java program to generate first n odd numbers and pick and display prime numbers among them. Read value for n as command line argument.
2. Write a Java program to create a vector, add elements at the end, at specified location onto the vector and display the elements. Write an option driven program using switch…case.
3. Write a java program to find area of geometric figures using method overloading.
4. Write a Java program to find the circumference and area of the circle using interface.
5. Write a java program to sort the alphabets in the given string.
6. Write a java program to accept student information using array of objects and constructor initialisation.
7. Write a java program to implement constructor overloading by passing different number of parameter of different types.
8. Write a program to implement an applet by passing parameter to HTML
9. Write an applet program to display human face
10. Create an applet to display concentric n circles, input value for n.

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Program Flowchart/Algorithm 05 Marks
- ✓ Program Writing 15 Marks
- ✓ Correct output with proper display 10 Marks
  (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

FIFTH SEMESTER BSc (Computer science)

Computer Science -VI

BSC-5.2 UNIX PROGRAMMING

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1.Introduction to Operating system: 10hrs

Definition of OS, functions of operating systems. Early systems – Simple monitors, Batch Systems, Multiprogramming, Time Sharing, Real time, Parallel and Distributed systems Scheduling concepts, Scheduling algorithms: FCFS, Shortest job first, priority scheduling, round robin, Definition of deadlock problem, deadlock characteristics, deadlock prevention and avoidance. File concept –allocation and access methods, directory structures, Contiguous allocation.

Unit 2- Introduction to Unix : 08 hrs

The Unix operating system, , A brief Session, The Unix Architecture, Features of UNIX, POSIX and Single UNIX specification, Locating commands, Internal and External commands, Command Structure, Flexibility of command Usage, Man Browsing the Manual Pages ON-line, Understanding the man Documentation. General-Purpose Utilities: Cal command, date command, echo, printf, bc, script, passwd, who, uname

Unit 3- The File System in Unix: 10 hrs

The file, The Parent –Child Relationship, The HOME Variable, pwd, cd, mkdir, rmdir, Absolute Pathname, Relative Pathname, ls, The Unix File system. Handling Ordinary Files: Cat, cp, rm, mv, more, Thelp subsystem: Printing a File, File, wc, od, cmp, comm, diff, dos2unix and unix2dos, compressing and archiving files, gzip, and gunzip, tar, zip and unzip. Basic File Attributes: Listing file attributes, listing directory attributes, File Ownership, File Permissions, changing file permissions, Directory Permissions, Changing File Ownership

Unit 4-The Vi Editor 10 hrs

Vi basics, Input Mode, Saving Text and Quitting, Navigation, Editing Text, Undoing Last Editing Instructions(U and U), Repeating the last command(.), Searching for a Pattern(/ and ?), Substitution

Unit 5-The Shell 08 hrs

The shell's Interpretive Cycle, Shell Offering, Pattern Matching, Escaping and Quoting, Redirection, /dev/null and /dev/tty, Pipes, tee, Command Substitution, Shell variables. Essential shell programming: Shell scripts, read, using command line arguments, exit and exit status of command, the logical operators && and ||- conditional execution, the if conditional, using test and to evaluate expressions, the case conditional, expr, $0: calling a script by different names, while, for, set and shift, the here document (<<), trap, debugging shell scripts with set –x, sample validation and data entry scripts.

Reference Books:

1. Sumitabha Das, UNIX System V.4, Concepts and Applications, TMH.
2. Operating systems concepts, Korth

QUESTION PAPER PATTERN FOR V SEMESTER B.Sc(Computer science)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL: UNIX PROGRAMMING LAB

1.Write a shell script program to perform all arithmetic operation on floating point.
2.Write a shell script program to check whether the given number is positive or negative.
3.Write a shell script program to reverse a number.
4.Write a shell script program to find sum of digit of a number.
5.Write a shell script program to find the sum of the series (sum= 1 + ½ + ... +1/n)
6.Write a shell script program to add, subtract and multiply the two given number passed as command line argument.
7.Write a shell script to count number of characters in a given string
8.Write a shell script program to read pattern and file name and search whether the given pattern in a file or not.
9.Write a shell script to read filename from command line argument check whether the file is regular file or directory or by both.
10.Find the number of directory file and ordinary files in the current

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Program Flowchart/Algorithm 05 Marks
- ✓ Program Writing 15 Marks
- ✓ Correct output with proper display 10 Marks
  (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

SIXTH SEMESTER BSc

Computer Science -VII

BSC-6.1 ADVANCED JAVA PROGRAMMING

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1-Review of Java Concepts and AWT, Graphics Programming: 10 hrs

Review of Java Concepts .AWT and AWT Classes, Window fundamentals – Component, Container, Panel, Window, Frame, Canvas.Working with frame window. GraphicsProgramming: Graphics class, methods, drawing objects, line graphs, polygon classes,working with colours and fonts. Advanced graphics operations using Java2D.Designing,simple User Interfaces (UIs) using AWT, Layout Manages.

Unit 2- Swings and event handling: 10 hrs

Event Handling: Basics of Event Handling, the delegation event model, AWT event hierarchy and event classes, Event Listener Interfaces, Adapter Classes, Event queue. Swing: Meaning, need, difference between AWT and swing. The Model-View-Controller (MVC) designpatterns, Creating simple UIs using swing, and handling basic events.

Unit 3-Java Beans, Java Archives (JAR): 08 hrs

Meaning and need of Java Beans, Advantages, Bean writing process, Bean properties. Java Archives (JARs): Meaning, need, the JAR utility, Creating JAR files.

Unit 4-File Management and JDBC: 10 hrs

File, creating a file, writing to a file, opening a file, reading from a file, file management, checking existence of a file, deleting a file.JDBC: Meaning, need, concept and structure of JDBC, relation with ODBC, JDBC driver types and their meaning, the JDBC process – loading the driver, connecting to the DBMS, creating and executing SQL statement, Connection object, Statement object, Prepared Statement object, Callable Statement, Result Set, JDBC Exceptions.

Unit 5-Basic concepts of Collections, Generics and Network programming: 10 hrs

Collections: Meaning, need, Collection interfaces, Concrete Collections – Array List, Hash set, Map. Generics: Meaning, need, benefits, generics usage, basics of generic types, type parameter naming conventions, type wildcards, using type wildcards, generic methods, bound types, writing simple generic container, implementing the container, implementing constructors, implementing generic methods.

References:

1.Complete Reference – Java 2:Herbert Schildt, 5th / 7th Edition, Tata McGraw-Hill
2.Thinking in Java: Bruce Eckel
3. Core Java 2: Volume I – Fundamentals: Cay S. Horstmann, Gary Cornell, Pearson Education Asia.
4.Core Java 2: Volume II – Advanced Features: Cay S. Horstmann, Gary Cornell

QUESTION PAPER PATTERN FOR B.Sc(Computer science)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL: ADVANCED JAVA PROGRAMMING LAB

1. Write an applet to add, remove, select an item in a list
2. Write an applet to display selected geometric figure from a list.
3. Write a program to implement mouse events
4. Write a program to implement keyboard events
5. Write a Java program (console) to store the typed text to a file.
6. Write a Java program to display the content of a file.
7. Write a Java program with JDBC to store the details of a person on to an Oracle database table.
8. Write a Java program with JDBC to access and display the details of a person stored in an Oracle database table.
9. Write a Java program with JDBC to access and delete the details of a given person stored in an Oracle database table.
10. Write a Java program to demonstrate the use of generics.

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Program Flowchart/Algorithm 05 Marks
- ✓ Program Writing 15 Marks
- ✓ Correct output with proper display 10 Marks
  (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

SIXTH SEMESTER BSc

Computer Science -VIII

BSC-6.2 SOFTWARE ENGINEERING AND COMPUTER NETWORKS

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction to Software Engineering: **10 hrs**

IEEE definition of Software and Software Engineering, Software Problems, Software engineering challenges, Software quality attributes, phases in software development (Phased Development process), Definition of Software process, Components of software process, desired characteristics of software process, Software development process models- waterfall model, prototype model and spiral model .

Unit 2- Software design: **09 hrs**

Definition of SRS, need for SRS, Characteristics of SRS, Structure of SRS, design objectives ,design principles, module level concepts – coupling and cohesion.

Unit 3- Coding and testing : **09 hrs**

Definition of Coding, Programming principles and guidelines, top down and bottom-up Approaches, definition of testing, testing fundamentals, levels of testing, Difference between black box testing and white box testing.

Unit 4-Introduction to Computer networks Network Hardware: **10 hrs**

Definition of computer network, Goals of computer network, Types of Networks based on transmission technology - Broadcast, point- to -point, Types of Networks based on size & scale - LAN, WAN, MAN, Protocol hierarchies (Network software), Network topologies – Bus, Mesh, Ring, tree and star.

Unit 5- Network Software, Reference models and Transmission Media: **10 hrs**

Reference models - OSI / ISO model, TCP / IP model, ARPANET,Transmission Media - twisted pair, coaxial cable, fiber optics cable, Internet and its applications, Wireless media - Bluetooth, Wi-Fi, internet and its applications

References:

1. An integrated approach to Software Engineering: PankajJalote.

2. Software Engineering a practitioners approach: Roger Pressman.

3. Computer Networks:5th Edition, Andrew S Tanenbaum.

QUESTION PAPER PATTERN FOR B.Sc(Computer science)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL: PROJECT LAB

PROJECT LAB EXAM SCHEME

The objective of the project is to motivate them to work in emerging/latest technologies, help the students to develop ability, to apply theoretical and practical tools/techniques to solve real life problems related to industry, academic institutions and research laboratories. The project is of 3 hours/week for one (semester VI) semester duration and a student is expected to do planning, analyzing, designing, coding and implementing the project. The initiation of project should be with the project proposal. The synopsis approval will be given by the project guides.

The Project work should be either an individual lone or a group of not more than five members.

The project proposal should include the following:

- Title
- Objectives
- Input and output
- Details of modules and process logic
- Limitations of the project
- Tools/platforms, Languages to be used
- Scope of future application

The examiner will evaluate the project work as follows:

- Project Report - 10 Marks
- Project Demo - 10 Marks
- Viva-Voce - 20 Marks

KUVEMPU UNIVERSITY

Revised syllabus

BCA, B. Sc (Computer Science) and BA (Computer Applications)

W.E.F 2019-20

DEPARTMENT OF P.G. STUDIES AND RESEARCH IN COMPUTER SCIENCE,

JANNASHAYADRI , SHAKARGHATTA

SHIMOGA, KARNATAKA

Regulations for BCA course

Eligibility for Admission

1. A candidate who passed the three year Diploma in the branch of computer science, examination conducted by the board of Technical education, Government of Karnataka, shall be eligible for admission to first semester of BCA degree course.

2. A candidate who passed the two-year Pre-University examination in science/commerce of Karnataka state or any other examination considered as equivalent are eligible for admission to the first semester of BCA degree course.

3. A candidate who passed the three year Diploma in the branch of computer science, examination conducted by the board of Technical education, Government of Karnataka, shall be eligible for Lateral admission to the Third semester of BCA degree course.

4. Computational Mathematics-I and II Subjects should be taught by Computer Science Faculty

NEW SYLLABUS FOR BCA (EFFECT FROM 2019-20)

Semester	Paper	No of Hours (Theory)	No of Hours (Practical)	IA	External
I	English	4	-	20	80
	Kannada / Hindi/ Sanskrit/ Urdu	4	-	20	80
	Computational Mathematics - 1	4	-	20	80
	Computer Fundamentals	4	-	20	80
	Introduction to Information Technology	4	-	20	80
	Programming Fundamentals & C-Programming	4	-	20	80
	Excel & C Lab	-	3	20	80
	TOTAL			**140**	**560**
II	English	4	-	20	80
	Kannada/Hindi/ Sanskrit/ Urdu	4	-	20	80
	Computational Mathematics - 2	4	-	20	80
	C & Linear Data Structures	4	-	20	80
	Database Management System – 1	4	-	20	80
	Digital Fundamentals	4	-	20	80
	DS & Advanced Excel Lab	-	3	20	80
	TOTAL			**140**	**560**
III	English	4	-	20	80
	Kannada / Hindi/ Sanskrit/ Urdu	4	-	20	80
	Non Linear Data Structures using C++	4	-	20	80
	Database Management System – II	4	-	20	80
	System Software	4	-	20	80
	DS Lab Using C++	-	3	20	80
	SQL Using MYSQL	-	3	20	80
	TOTAL			**140**	**560**
IV	English	4	-	20	80
	Kannada / Hindi/ Sanskrit/ Urdu	4	-	20	80
	Java	4	-	20	80
	PL/ SQL and Data Warehousing	4	-	20	80
	Software Engineering	4	-	20	80
	Java Lab	-	3	20	80
	PL/ SQL & DW Lab	-	3	20	80
	TOTAL			**140**	**560**
V	Advanced programming in java	4	-	20	80
	Web Programming	4	-	20	80
	Operating System	4	-	20	80
	Data Communication	4	-	20	80
	Computer Networks	4	-	20	80
	Advanced java Lab	-	3	20	80
	Web Programming Lab	-	3	20	80
	TOTAL			**140**	**560**
VI	Unix Operating System	4	-	20	80
	. Net Programming	4	-	20	80
	Elective - 1 Digital Image Processing / Cloud Computing	4	-	20	80
	Elective – 2 Computer Graphics/Operation Research	4	-	20	80
	Unix & Net Lab	-	3	20	80
	Project Lab	-	3	20	80
	TOTAL			**120**	**480**

BCA - 1.3 : Computational Mathematics - 1

PART- A

Unit-1 Sets, Relations and Functions 12 hrs

Definition of a set, sub-set with examples, Venn diagrams, types of sets-equal sets, null set, disjoint sets, finite set, infinite set, power set, cardinality of set. Operations on sets-union and intersection of two sets, complement of a set, difference of two sets, symmetric difference of sets. Algebraic properties of set operations, strings and regular expressions. Definition of a relation with examples, types of relations-empty, universal, trivial, equivalence, reflexive, symmetric, transitive relation (definition and examples only, no problems). Definition of a function with examples, types of function, one-to-one (injective).Binary operation - commutative, associative, identity and invertible (definition and examples only, no problems).Functions for computer science - characteristic function, floor function and ceiling function.

Unit-2 Logic and Reasoning 12 hrs

Definition of proposition or statement, proposition variables, negation of statements, truth table, conjunction, disjunction, implications quantifiers- predicate, universal quantifier, universal quantification, existential quantification. Conditional statement/implication, contrapositive and converse, equivalence or bi conditional, tautology, contradiction, logical equivalence, properties of proposition operation-commutative, associative, distributive, idempotent negation. Simple problems on tautology and equivalence. Rules for validating statements

PART- B

Unit-3 Mathematical Induction and Counting 12 hrs

Principle of mathematical induction, simple problems on principle of mathematical induction. Fundamental principle of counting (statement with examples only), permutations-definition and simple problems. Combinations - definition and simple problems. Pigeon hole principle- statement and proof, extended pigeonhole principle- statement and proof.

Unit-4 Matrices and Determinants 12 hrs

Definition of matrix and order of matrix, types of matrices-column matrix, row matrix, square matrix, diagonal matrix, scalar matrix, identity matrix, zero matrix(definition and examples only, no problems),equality of matrices(definition and examples), simple problems on equality of matrices. Operations on matrices-addition, subtraction, product of two matrices, scalar multiplication of a matrix, inverse of a matrix, simple problems on these operations. Matrices applications in computer science.

Definition of determinant (definition and examples), determinant of matrix of order one , order two and order three(simple problems), properties of determinant(examples only, no verification),applications of determinants and matrices for solving the system of linear equations of two variables and three variables(simple problems),applications of determinant and matrices for checking the system of linear equations for consistency and inconsistency(simple problem).

Refences:

1. Text book of Mathematics – Shanthi Narayan

2. Text book of Mathematics – S. Lipschutz

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2. There shall be 08 questions (4 questions from each part).
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4. The student has to attend any 05 full questions (16*5).
5. The student has to attend at least one question from each unit.

BCA 1.4 COMPUTER FUNDMENTALS

PART- A

Unit 1- Introduction to Computer Systems **12 hrs**

Definition of a Computer, History of Computers, Generations of Computers, classification Of Computers, Applications of Computer, Capabilities and limitations of computer. Block diagram of a Computer with functional units (explanation), Parts of a computer system with peripherals (explanation of peripherals), and essential computer hardware , Information processing Cycle. Input and output device**:** Input devices-key board mouse (explanation with diagram and working), output devices, monitors types of monitors, types of printers – line and page printers, laser printer – working, advantages and disadvantages. Representation of data, text code -EBCDIC, ASCII, UNICODE.

Unit 2 Computer Organisation & Storage Device **12 hrs**

Basic computer organization, bus Architecture and types .Primary Vs Secondary Storage, Primary Storage: RAM – SRAM, DRAM, SDRAM, DDR. ROM - PROM, EPROM, EEPROM, cache memory. Secondary Storage: Magnetic Tapes, Magnetic Disks. hard disks, Zip Drive, Flash Drives.

PART -B

Unit 3- MS Word and Power point **12 hrs**

MS Word**:** Working with documents, formatting documents, Setting page style and page layout, Creating Tables, Printing documents, Mail merging.

Power point**:** Introduction to presentation, Creating presentation, Formatting presentation, Adding effects to presentation, Printing Handouts.

Unit 4 –MS Excel **12 hrs**

Spread sheet and its applications, Data Formatting, Working with sheets, insertion and deletion of rows, columns and sheets, using formula in workbooks, creating charts, cell validation, filters.

References:

1. Computer fundamentals- V Rajaraman
2. Computer fundamentals- P B Kottur

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BCA 1.5 INTRODUCTION TO INFORMATION TECHNOLOGY

PART- A

Unit 1-Software **12 hrs**

Definition of software, types of software - application software, general purpose and specific purpose, scientific and business software examples. System software - operating system, assembler, compiler, interpreter, linker, loader. Classification of programing languages - machine level, assembly level, high level languages, event driven, object oriented - advantage and disadvantages examples.

Unit 2. Computer Networks **12 hrs**

Definition, uses of network, applications of computer networks, types of network- point-to-point, broad cast, LAN, MAN, WAN network topology, introduction to different protocols (TCP/IP, SNMP, SMTP, FTP, HTTP, Telnet, ARP, DNS, Gopher, POP), network transmission Media (twisted pair, co axial, optical fiber), definitions of network interface card (NIC), Hub, Bridge, Switch, Router, Bandwidth, internet and its applications, understanding world wide web - how the web works, web browsers – examples, features, Telecommunication overview, Client server.

PART- B

Unit -3 E-Commerce **12 hrs**

Defining commerce , main activities of electronic commerce, benefits, goals, components, functions, process management, service management, transaction capabilities, types, scope.

Unit – 4 Introduction to clouds, big data and IOT **12 hrs**

Cloud- introduction, cloud computing at a glance. Vision of cloud computing, defining a cloud, characteristics, advantages, disadvantages, examples. Big Data – meaning, 3Vs in big data, challenges. IOT- meaning, compoonents, scope, IOT in education.

References:

1. Computer fundamentals- V Rajaraman
2. Computer fundamentals- P B Kottur
3. Mastering Cloud. Computing - RajKumarBuyya, Christian Vecchiola and ThamaraiSelvi
4. Ecommerce concepts and applications – NidhiDhavan

GENERAL INSTRUCTIONS FOR PAPER SETTING

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BCA 1.6: PROGRAMMING FUNDAMENTALS & C

PART -A

Unit 1-Problem Solving Techniques: 12 hrs

Problem solving techniques – problem definition, analysis, design, debugging, testing, documentation and maintenance. Design Tools - ALGORITHM: definition, characteristics, advantages and disadvantages. FLOWCHART - definition, symbols, advantages and disadvantages. Writing an algorithm and flowchart : Area of circle, arithmetical operations, simple interest and compound interest, quadratic equation, largest of three numbers, sum of N natural numbers, factorial of number, Fibonacci series, prime number, reverse a given number, evaluation of series like sin(x), cos(x), e^x, log(x) etc.

Unit 2- C Basics 12 hrs

History of c-programming, Features, basic program structure, character set, tokens, keywords and identifiers. Constants, variables, data types, variable declaration, symbolic constant definition.

PART - B

Unit 3 - Operators 12 hrs

Arithmetic, relational, logical, assignment, increment and decrement, conditional, bitwise and special operators, Arithmetic expressions, precedence of operators and associatively. Type conversion(implicit and explicit) and mathematical functions. Managing I/O operations – reading and writing a character, formatted and unformatted I/O.

Unit 4- Decision making, branching and looping 12 hrs

Decision making - if and if-else statement, nested if, else if ladder, switch statements, conditional operator, goto statement. Looping - while, do-while and for, nested for. break and continue statements. Programs on these concepts.

References :

1. Computer Concepts and Programming, *Padma Reddy*
2. Let us C , Yashwanth Kanetkar
3. Ansi C, *Balagurusamy*
4. Problem solving with C, M. T. Somashekara and D. S. Guru

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5. The student has to attend at least one question from each unit.

BCA 2.3 - Computational Mathematics -II

PART -A

Unit 1 - Graph theory **12 hrs**

Definition of graph, graph as models, matrices and isomorphism, graph terminologies- definitions, properties and examples, Decomposition and special graphs. Paths, cycles and trails -connection in graphs, bipartite graphs, Eulerian circuits. Vertex, degree, bijections paths, cycles and trails-connection in graphs,

Unit 2 : Directed Graphs **12 hrs**

Definition of directed graph, properties and examples, vertex degrees, Trees and distance-basic properties, properties of trees, distance in trees and graphs, disjoint spanning trees, spanning trees and enumeration of trees, Hamilton paths and circuits, Decomposition of graphs, special graphs. Optimization and trees-minimum spanning tree, shortest paths, trees in computer science.

PART- B

Unit 3 - Statistics **12 hrs**

Definition, scope, characteristics, functions and limitations of statistics. Basic concepts-units/individuals, populations/universe, sample, variable, attribute, discrete variable, continuous variable, qualitative data and quantitative data. Stages of Statistical method – collection, organization presentation, analysis and interpretation of data. Classification of data - definition, objectives, types of classification, frequency, class frequency, frequency distribution ,discrete frequency distribution, continuous frequency distribution, inclusive class and exclusive class, class limits, correction factor, open-end frequency distribution, mid-point or class mark, width/size of class, number of classes, cumulative frequency, frequency density, construction of FDT for discrete and continuous data. Tabulation-definition, objectives, types of tables-one way/simple, two way and manifold tables.

Unit 4 : Central Tendency **12 hrs**

Definition, average, arithmetic mean, mode, median, geometric mean and harmonic mean, advantages and limitations. Simple problems on arithmetic mean, geometric mean and harmonic mean. Measures of Dispersion - range, range coefficient, mean deviation, mean deviation coefficient and standard deviation, standard deviation coefficient (definitions only). Problems on mean deviation, mean deviation coefficient and standard deviation, standard deviation coefficient.

Reference s:

1. Introduction to Graph theory by S.Lipschutz
2. Statistics and probability by B.M Aggarwal
3. Statistics by Rajmohan

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5. The student has to attend at least one question from each unit.

BCA 2.4: C and Linear Data Structures

PART -A

Unit 1- Arrays and Functions **12 hrs**

One and two dimensional arrays, array initialization. Strings - declaration and initialization of string variable, reading and writing strings, string handling functions. Functions – Need, syntax of function declaration, all types of functions, nesting of functions, categories, parameter passing mechanism, function with arrays.

Unit 2- Pointers & Structures **12 hrs**

Pointer arithmetic, dynamic memory allocation, command line arguments. Structure-Definition, declaration, accessing structure members, structure with in structure, example programs, structure with array, union and difference between structure and union with example programs, typedef, enum

PART -B

Unit 3-Stack **12 hrs**

Definition of data structure, types(primitive, non primitive-linear and nonlinear).Linear data structure-Stack: Definition and example, operations, representation of stack in C, evaluation of postfix expression, conversion from infix to postfix using stack table. Recursion: Recursive definition, and process, Recursion in C, writing Recursive programs- factorial. GCD, tower of hanoi, fibanocci, binomial coefficient, efficiency of recursion

Unit 4 –Queue and Linked List **12 hrs**

Queue – Definition, operations, representation of queue in C. Types- circular queue, double ended queue. Linked list - Definition and example, insert and delete (any where), search, count and display, . Circular linked list and doubly linked list (concepts only).

References :

1. Computer Concepts and Programming, *Padma Reddy*
2. Let us C – Yashwanth Kanetkar
3. ANSI C, -*Balagurusamy*
4. Data structures using C and C++ - Yedidyiahetal
5. Programming in ANSI C - E.Balaguruswamy
6. Data structures and programming design using C - Robert Kruse PIII publications
7. Data structures and applications - Trembly and Sorenson
8. Systematic approach to data structure – Padma Reddy

GENERAL INSTRUCTIONS FOR PAPER SETTING

1. In each paper unit-1 and unit-2 are Part-A and unit-3 and unit-4 are Part-B.
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5. The student has to attend at least one question from each unit.

BCA-2.5 DATABASE MANAGEMENT SYSTEM-I

PART- A

Unit 1-Introduction **12 hrs**

Definitions of Data, database, database system, DBMS, examples, database system applications. Meaning of data and information, database management system vs. file management system, views of data, data independence, data models, database languages, database users and administrators, database system structure, application architecture, advantages of using DBMS, classification of DBMS, meaning of schema and instance.

Unit 2 -E-R Model **12 hrs**

Basic-concepts, Definition of Data Models, Using high-level, conceptual data models for database design, , constraints, keys, an example database application, E-R diagram, types of entities, entity sets, attributes, types of attributes, weak entity sets, cardinality ratios (mapping cardinality), Definition of Ordinality, specialization, generalization. Differences between specialization and generalization.

PART- B

Unit 3 –Relational Model **12 hrs**

Structure of relational Databases, Relational algebra - select, project. union, set difference, rename, division operations, Modification of the database, queries using relational algebra. Extended relational algebra operations.

Unit 4 - SQL **12 hrs**

SQL- Background, basic structure, set operation, aggregate functions, NULL values, nested sub queries, Views, complex queries, Modification of the database, joined relations, Data Definition Language**,** domain constraints, referential integrity in SQL. Assertions, authorization, privileges in SQL.DDL Commands.

References:

1. Korth, Sudarshan "Database System concepts", Mcgraw Hill-IVEdition.
2. Navathe, Silberchatzand Elmasri "fundamentals of database Systems"
3. Addison C.J. Date "Introduction to Database systems" Addison-wesley.
4. Bipin C Desai "Introduction to Data base system" Galgotia publications

GENERAL INSTRUCTIONS FOR PAPER SETTING

1. In each paper unit-1 and unit-2 are Part-A and unit-3 and unit-4 are Part-B.
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5. The student has to attend at least one question from each unit.

BCA-2.6 DIGITAL FUNDAMENTALS

PART- A

Unit 1- Number System and Boolean Algebra **12 hrs**

Binary number system, decimal number system, octal number system, hexadecimal number system. Bases inter conversions. Representation of negative numbers - 1's and 2's complements. Codes - BCD, GRAY, EXCESS-3. Laws of Boolean algebra, Evaluation of Boolean expression, De Morgan's theorems and proof, simplification of Boolean expressions using Boolean laws, Basic gates (AND, OR, NOT): truth table, Definition, Boolean expression and symbols, universal gates (NAND, NOR) : truth table, definition, Boolean expression and symbols, SOP and POS form, min term and max term, expression of Boolean equation in Min and Max term(conversion of SOP and POS forms to standard form)

Unit 2- Logic Systems and K- Map **12 hrs**

Realization basic gates using NAND and NOR gates. Realization of Boolean expression using basic gates and universal gates. XOR and XNOR gate (working, Boolean expression, symbol and truth table), **K-map method: Rules,** simplification of Boolean equation using K-map (up to 4 variables), without and with don't-care condition, Implementation using basic gates and universal gates, Quine-McCluskey Tabulation method to determine and select essential prime implicantes.

PART- B

Unit 3-Combinational Logic: **12 hrs**

Half adder and full adder, half subtractor and full subtractor. Code converters - BCD to Excess 3 and BCD to gray code, magnitude comparator, encoders (BCD to decimal), decoder (decimal to BCD), multiplexer(4:1 and 8:1), de-multiplexer(1:4 and 1:8).

Unit 4-Sequential Logic: **12 hrs**

Introduction, Flip-flops – SR, JK, D, T, JK-MS (Detailed Study) Registers – Introduction, shift register- types and applications. Counters – synchronous and asynchronous counters (Up, down, up down and Mod counters(asynchronous only)) with timing diagram.

References:

1. Digital Logic and Computer Design- M. Morris Mono
2. Digital fundamentals – B.Basavaraj
3. Digital fundamentals – L Krishnananda

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1. In each paper unit-1 and unit-2 are Part-A and unit-3 and unit-4 are Part-B.
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5. The student has to attend at least one question from each unit.

BCA -3.3 Non Linear Data Structures using C++

PART- A

Unit 1 - Introduction to C++ and OOPS **12 hrs**

Object Oriented Programming paradigm, Limitations of structures in C, Basic concepts of Object Oriented Programming- Classes, Objects, Data Abstraction and Encapsulation, Polymorphism, Inheritance, Dynamic binding, Message passing, Benefits of OOP, Object Oriented languages, applications of OOP.C++ features, Comparison with C, Structure of a C++ program, input and output statements Keywords, Data types, symbolic constants, type compatibility, declaration of variables, reference variables, operators in C++, control structures.

Unit 2 - Classes Objects, Member Functions And Constructors- Destructors **12 hr**

Specifying a class, creating objects, memory allocation for objects, static data members, arrays within a class, local classes. Defining member functions, call by reference, return by reference, inline functions, default arguments, making an outside function inline, nesting of member functions, private member functions, function overloading, static member functions, const member functions, pointer to members, friend and virtual functions. Constructors, parameterized constructors, multiple constructors in a class, constructors with default arguments, copy constructor, dynamic constructors. Destructors.

PART- B

Unit 3–- Operator overloading And Inheritance **12 hr**

Overloading unary operators, overloading binary operators, overloading operators using friends, string manipulations using operators, rules for operator overloading, type conversions. Inheritance definition, defining derived classes, types-single inheritance, making a private member inheritable, multilevel inheritance, multiple inheritance, hierarchical inheritance, hybrid inheritance, virtual base classes.

Unit 4 – Trees And Sorting **12 hrs**

Tree terminologies, Binary tree, binary tree representation, types of binary tree - linked representation, tree traversals, and binary search tree and their applications, algorithm on searching element in a binary search tree, linear search and hashing, Quick sort, insertion sort, shell sort, radix sort, tree sort, heap sorting.

References:

1. E Balguruswamy, Data Structures using C
2. RB Patel, Expert Data Structures with C++, Khanna book publishing
3. YashwanthKanatkar, Data Structures through C

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BCA-3.4 DATABASE MANAGEMENT SYSTEM- II

PART -A

Unit 1- Relational Database Design **12 hrs**

Review of relational algebra and relational calculus concepts, Pitfalls in relational data base design, Normalization for relational databases. Normal forms based on primary keys, General definitions of first, second and third normal forms, Functional Dependency (concept and example) decomposition, Boyce-Codd Normal Form - definition and example, fourth Normal form - Multi valued Dependencies - definition and example.

Unit 2 - Storage and File Structure **12 hrs**

Overview of physical storage media, MAGNETIC AND FLASH DISKS – performance measure of a disk optimization of disk block access, RAID, improvement of reliability via redundancy, improvement of performance via parallelism RAID levels, choice of RAID level, File organization – fixed and variable length records, organization of records in files, Data dictionary, Indexing and hashing – basics , Ordered indices, , B+ index files, structure of B+ index tree.

PART- B

1.

Unit 3- Transaction management and Recovery system **12 hrs**

Transaction management- Concepts, simple transaction model, storage structure, transaction atomicity and durability. Recovery system- Failure classification, storage, recovery and atomicity- log records, data modification, concurrency control and recovery, transaction commit (concepts).

Unit 4 - PL/SQL **12 hrs**

Features of PL/SQL, Advantages of PL/SQL, basic syntax, data types and Subtypes. Variables -: declaration, initializing variables, variable scope, assigning SQL query results to PL/SQL variables. Constants And Literals: Declaring a Constant, The PL/SQL Literal, Operators, Precedence, Conditions: IF-THEN and it's flavours, CASE Statement, Searched CASE Statement, Basic Loop Statement, WHILE LOOP Statement, FOR LOOP Statement, Reverse FOR LOOP Statement, Nested Loops, Labeling a PL/SQL Loop, The Loop Control Statements, EXIT Statement, The EXIT WHEN Statement, CONTINUE Statement, GOTO Statement, STRINGS: Declaring String Variables, String Functions and Operators, ARRAYS: Creating a Varray Type.

References:

1. Data base system concepts - Korth , Sudarshan 6th Edition
2. Muruch's Oracle SQL and PL/SQL
3. Oracle Database 11G PL/SQL Programming

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BCA 3.5 SYSTEM SOFTWARE

PART- A

Unit 1 -Machine Architecture **12 hrs**

Introduction, System software and machine architecture, Simplified Instructional Computers (SIC) and its architecture, Instruction Formats of IBM-360. Searching& Sorting - Linear and binary search, comparison, examples. Interchange sort, shell sort, bucket sort, radix exchange sort, address calculation sort, Random entry searching.

Unit 2-Assembler and Loader **12 hrs**

Introduction, General design procedure, design of Assembler, statement of problem, data Structure, Format of Date bases, Algorithm for pass 1 and pass 2, look for modularity. Explanation along with flowcharts for both pass 1 and pass 2 (detailed flowchart). Introduction to loader, Loader schemes-compile and go , general loader, Absolute loader, Sub routine linkage, Relocating loader, Direct linking loader, overlays, Dynamic loading.

PART- B

Unit 3 - Macro Language and macro processor **12 hrs**

Introduction, Macro instructions, Features of macro facility-macro instruction arguments, Conditional macro Expansion, Macro calls within macro, Macro instruction defining macro. Macro processor implementation: statement of problem, specification of databases and specification of database format, Algorithm and flowchart for processing macro definitions and macro expansion.

Unit 4 – Compiler **12 hrs**

Introduction, Statement of problem, Phases of compiler, Detailed study of - Lexical phase, syntax phase, interpretation phase optimization phase, storage assignment phase, code generation phase, Assembly phase, passes of compiler. Data Structures: statement of problem, storage classes and its use.

References:

1. System programming – John. J. Donovan
2. System Software – Leland L. Beck, Third edition, Addison Wesley1997
3. Systems programming and operating systems –Dhamdare

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BCA - 4.3 JAVA PROGRAMMING

PART- A

Unit 1 - Introduction to Java and Java Program Structure **14 hrs**

History of Java, Java features, Difference between C/C++ and Java, Java program structure, Java tokens, Statements, JVM, Java environment- JDK, JSL. Data types, Constants and Variables, Operators &Expressions, Type conversions, Mathematical functions; Control Statements: Decision making, Branching and looping with while, do-while, for and labeled loops; Arrays- Declaration of 1D, 2D arrays, Class, Objects, Constructor, Method overloading, Static members.
Strings-Introduction, classes and its methods.Vectors.Wrapper classes. Inheritance: Single, Multilevel, Hierarchical, Visibility modes, Method overriding, Final variable, Abstract methods and classes; **Interface**: Defining, Extending and Implementing assigning interface variables

Unit 2 –Packages and multithreading **12 hrs**

Java API Packages, using system packages, naming convention, accessing and using a package, adding a class to packages, hiding classes. Multithreaded programming: Creating a thread, extending the thread class, stopping and blocking a thread, life cycle of a thread, using thread methods, thread exceptions, thread priority, synchronization, implementing the runnable interface.

PART -B

Unit 3- Exceptions and Debugging **12 hrs**

Meaning of errors and exceptions, Dealing with errors, Classifications of exceptions, syntax of handling exceptions, advertising the exceptions, throwing and rethrowing exceptions, creating Exception classes, multiple catch statements, finally clause, tips for using exceptions, Debugging techniques – tricks for debugging, Assertions, Java Debugger (JDB).

Unit 4 – Applets and Graphics **10 hrs**

Applets basics, applet types, applets and application, Life cycle of an applet, applet programming-passing parameter to applets, paint and repaint methods, Graphics class, Line, Rectangle, Circle, Ellipse, Arcs and Polygon. Using control loops in applets, drawing bar charts.

References:

1. Java, The Complete Reference – Patrick Naughton and Schildt
2. Programming in Java – Joseph L Weber
3. Java Programming – E Balaguruswamy
4. Object oriented programming with Java – Mt Somashekara Ds Guru Ks Manjunath

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BCA 4.4 PL/SQL DATA WAREHOUSING

PART- A

12.

Unit 1-Procedures, Functions and Triggers 12 hrs

15.

Parts of a PL/SQL Subprogram, Creating a Procedure, Executing a Standalone Procedure, Deleting a Standalone Procedure, Parameter Modes in PL/SQL Subprograms, Methods for Passing Parameters. Functions: Creating a Function, Calling a Function, Cursors : Implicit Cursors, Explicit Cursors, Declaring the Cursor, Opening the Cursor, Fetching the cursor, Closing the, Cursor, Exceptions: Syntax for Exception Handling, Raising Exceptions, User-defined Exceptions, Pre-defined Exceptions, Triggers: Creating Triggers, Triggering a Trigger

Unit 2– Packages, Collections and Transactions 12 hrs

PL/SQL — PACKAGES: Package Specification, Package Body, Using the Package Elements, COLLECTIONS: Index-By Table, Nested Tables, Collection Methods, Collection Exceptions

TRANSACTIONS: Starting and Ending a Transaction, Committing a Transaction, Rolling Back Transactions, Automatic Transaction Control. OBJECT-ORIENTED: Instantiating an Object, Member Methods, Using Map method, Using Order method, Inheritance for PL/SQL Objects, Abstract Objects in PL/SQL

PART -B

Unit 3 - Data Warehousing and OLAP 12 hrs

Data Warehouse basic concepts: ODS, ETL functions, ODS and DW architecture, Guidelines for implementing DW, Difference between ODS and DW, OLTP and DW, OLTP and OLAP, Data Warehouse Modeling, Data warehouse Schema. OLAP: Characteristics, Multi-dimensional view and data cube, Data cube operations

Unit 4 - Data Mining 12 hrs

Introduction to Data Mining: KDD process, Architecture of Data Mining, Motivating Challenges, Data Mining Tasks, Data Mining Technologies Data Pre processing: Cleaning, integration, transformation, data reduction, data normalization. Data Mining Applications. Classification and Clusters- concepts and examples, Decision tree- concepts, algorithm, creating decision tree using information gain.

References:

1. Pang-Ning Tan, Michael Steinbach, Vipin Kumar: Introduction to Data Mining Addison- Wesley,2005.
2. G.K.Gupta : Introduction to Data Mining with Case Studies, 3rd Edition, PHI, NewDelhi,2009
3. Arun K Pujari: Data Mining Techniques University Press,2nd Edition, 2009.
4. Jiawei Han and Micheline Kamber : Data Mining-Concepts and Techniques, II Edition, Morgan KaufmannPublisher,2006.
5. Alex Berson and Stephen J. Smith: Data Warehousing, Data Mining and OLAP Computing, Mc GrawHill Publisher,1997.

GENERAL INSTRUCTIONS FOR PAPER SETTING

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BCA -4.5 SOFTWARE ENGINEERING

PART- A

Unit 1–Introduction **10 hrs**

Definition of software, software problems (industrial strength software, software is expensive, late and unreliable maintenance and rework), software engineering challengers (scale, quality and productivity, attributes), software engineering approach (phased development process, managing process, components.

Unit 2 –Software processes and Software Planning **14 hrs.**

Introduction to software process (processes and process modules, component of software process), characteristics of software process(predictability, support, testability and maintainability, support change, early defect removal, process improvement and feedback), and software process models (waterfall, prototype, iterative enhancement model, spiral) comparison of processmodels. Introduction to planning, effort estimation (uncertainties, building efforts, bottom-up, COCOMO model), project scheduling and staffing (overall, detailed scheduling, team structure), risk management (concepts, assessment), project monitoring plan (measurements, project monitoring and tracking).

PART- B

Unit 3 – Analysis and Design **12 hrs**

Software requirements (needs and requirement process), problem analysis (informal approach, data flow modeling, object oriented modeling, prototyping), requirement specification (characteristics of SRS, components of SRS, specification language, structure of requirement document), validation. Design: Function oriented design: design principles, module level concept (coupling, cohesion), structure design methodology (DFD, first level factoring).

Unit 4 –Coding and Testing **12 hrs**

Coding: programming principles and guidelines (common coding errors, structured programming, information hiding, some programming practices, coding standards), refactoring (basic concepts with examples, common refactoring), verification (code inspections, static analysis, proving correctness, unit testing). Testing: testing fundamentals, black box and white box testing, comparison between black box and white box testing, regression testing, testing process- levels of testing, test plan.

References:

1. An integrated approach to software engineering-Pankaj Jalote.
2. Roger Pressman, Software Engineering- A Practitioner's Approach TMH
3. Ian Sommerville, Software Engineering, Pearson Publications Ltd.

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BCA - 5.1 ADVANCED PROGRAMMING IN JAVA

PART- A

Unit 1 - AWT, Advanced Graphics Programming 12 hrs

Review of Java Concepts .AWT and AWT Classes, Window fundamentals – Component, Container, Panel, Window, Frame, Canvas. Working with frame window. Graphics Programming: Graphics class, methods, working with colors and fonts. Advanced graphics operations using Java2D. Designing simple User Interfaces (UIs) using AWT (Label, Text Field, Choice, List, Checkbox, Checkbox Group, Scrollbar, Button, Text Area, Panel), Layout Manager.

Unit 2 –Event Handling and Swings: 12 hrs

Event Handling: Basics of Event Handling, the delegation event model, AWT event hierarchy and event classes, Event Listener Interfaces, Adapter Classes, anonymous inner class, Event queue. Swing: Meaning, need difference between AWT and swing. The Model-View-Controller (MVC) design patterns, Creating simple UIs using swing (JLabel, JText Field, JCombobox, JList, JCheckbox, JScrollbar, JButton, JRadioButton, JScroll Pane, J Panel, J Tabel, J Tree, JFrame) and handling basic events.

PART- B

Unit 3 - File Management and JDBC 12 hrs

File, creating a file, writing to a file, opening a file, reading from a file, file management, checking existence of a file, deleting a file. JDBC: Meaning, need, concept and structure of JDBC, relation with ODBC, JDBC driver types and their meaning, the JDBC process – loading the driver, connecting to the DBMS, creating and executing SQL statement, Connection object, Statement object, Prepared Statement object, Callable Statement, Result Set, JDBCExceptions.

Unit 4 -Fundamental concepts of Collections, Generics and Java Beans 12 hrs

Collections: Meaning, need, Collection interfaces, Concrete Collections – Array List, Hash set, Map . Generics**:** Meaning, need, benefits, generics usage, basics of generic types, type parameter naming conventions, type wildcards, using type wildcards, generic methods, bound types, writing simple generic container, implementing container, implementing constructors, implementing generic methods. Meaning and need of Java Beans, Advantages, Bean writing process, Bean properties. Java Archives (JARs): Meaning, need, the JAR utility, Creating JARfiles.

References:

1. The Complete Reference – Java 2: Herbert Schildt, 5th Edition, Tata McGraw-Hill
2. Thinking in Java: Bruce Eckel
3. Core Java 2: Volume I – Fundamentals: Cay S. Horstmann, Gary Cornell, Pearson Education Asia.
4. Core Java 2: Volume II – Advanced Features: Cay S. Horstmann, Gary Cornell, Pearson Education Asia.

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BCA5.2 WEB PROGRAMMING

PART -A

Unit 1–Introduction **12 hrs**

Internet, WWW, Web Browsers and Web Servers, URLs, HTTP, Evolution of the Web, Peak into the History of the Web, Internet Applications, Important Components of the Web, Web Search Engines, Application Servers.HTML and DHTML Concepts : Programming structure, different basic tags , Images, Hyper text Links. Lists, Tables, Forms, Frames. Cascading Style Sheets**:** Introduction, Levels of style sheets, Style specification formats, Selector forms, Property value forms, Font properties, List properties, Color, Alignment of text, The box model, Background images, The and tags.

Unit 2 –The JavaScript **12 hrs**

Overview of JavaScript, Execution Environment, Object orientation and JavaScript, Syntactic characteristics, Primitives, operations, and expressions, Arrays, Functions, Pattern matching using regular expressions, Examples. Events and Event Handling, Meaning of client and server, Client-Server architecture, benefits, concept of ports and sockets. Protocol – Meaning, definition, examples, meaning of stateless and state (state full) protocols. HTTP protocol – meaning, http protocol request and response header formats, status codes. Client-Server communication scenario.

PART -B

Unit 3 – JEE Technology Concepts **12 hrs**

Multi-tier architecture for application development – Meaning, need, advantages. Meaning of enterprise application and web application, various tiers in enterprise application – client tier, web tier, business tier, enterprise information system tier. Introduction to JEE concepts – Need, advantages, characteristics of JEE technology, the concepts of containers, components and services – meaning of web container, application client container, EJB container.

Unit 4 – Basics of PHP and Java Server Pages Programming Concepts **12 hrs**

Introduction to JSP - language structure, advantages, characteristics, comparison between Java and Java Server Pages. Various aspects of Java Server Pages programs, writing and executing JSP programs. Writing dynamic programs using JSP. Database programming through JSP. Basics of PHP : Introduction ,variables ,functions, sessions, date, my sql integrations with php, file uploading.

References:

1. The Complete Reference – J2EE – Jim Keogh
2. J2EE – Kevin Mukhar, James L. Weaver, James P Crume, RonPhillips
3. learningphp and mysql4thEdition Robin Nixon.
4. Begining php-5 and Mysql Cristian Darie.

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BCA 5.3 OPERATING SYSTEM

PART- A

Unit 1–Introduction **12 hrs**

Definition of Operating System, need. Early systems – Batch Systems, Multiprogramming, Time Sharing, Parallel and Distributed systems. Special Purpose Systems – Real Time, Embedded Systems, Multimedia Systems, Handheld Systems. Computing Environments – Traditional, Client Server, Peer-to-Peer and Web based. Open Source Operating Systems.

Unit 2 –Process Management **14 hrs**

Process concept – meaning of process, sequential and concurrent processes, process state, process control block, threads, Process scheduling – scheduling queues, schedulers, context switch. Operations on Processes – creation and termination. Inter process communication – Independent and co-operating processes. Communication in client-server systems – RPC and RMI. Process scheduling – Basic concepts Processor - CPU I/O burst cycle, CPU Scheduler, Preemptive scheduling, dispatcher. Scheduling criteria, Scheduling algorithm – First-Come-First-Served (FCFS), Shortest Job First (SJF), Priority Scheduling, Round Robin. Multi-level queue scheduling (Concepts only), multi- level feedback queue scheduling (Concepts only). Multiple processor scheduling, real time scheduling.

PART -B

Unit 3–Deadlocks **08 hrs**

Definition with example, System model, Dead lock characterization – Necessary Conditions, Resource Allocation Graph, Dead lock prevention, Avoidance and detection, Recovery from deadlock.

Unit 4 –Memory Management, Disk and File Management **14 hrs**

Logical and Physical address space, Swapping, Contiguous allocation, Paging, Segmentation, Virtual memory - demand paging and its performance, Page replacement algorithms, Allocation of frames, Thrashing. Secondary Storage Structure and Disk Management: Disk structure & scheduling methods, Disk management, disk reliability. File concepts, Access methods, Directory structure, Protection and consistency semantics, File system structure, Allocation methods, free space management.

References:

1. Abraham Silberschatz and Peter Baer Galvin, Operating System Concepts, Fifth edition, Addison - wesley 1989.
2. Milan Milonkovic, Operating System Concepts & Design, II Edition, McGRaw Hill 1992.
3. Stallings, Operating Systems, PearsonEdition.
4. Tanenbaum, Operating System Concepts, PearsonEducation
5. Nutt : Operating System, 3/e Pearson Education2004

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BCA5.4 DATACOMMUNICATION

PART- A

Unit 1 - Introduction to Data Communication 14 hrs

Communication model & Data Communication networking –types. Data Transmission- Transmission terminology, Analog & Digital data transmission, Transmission impairments – attenuation, delay distortion & noise. Guided Transmission- types- Twisted pair, coaxial cable & optical fiber – physical description, application & characteristics. Unguided Transmission- wireless transmission: types- Terrestrial type, Satellite, Broadcast radio – physical description, application & characteristics.

Unit 2-Dataencoding 10 hrs

Basics, types and description of different signals, Digital data & digital signals: NRZ, multilevel binary, Bi phase techniques. Digital data & Analog signals: Encoding techniques- ASK, FSK, PSK Analog data & Digital signals: PCM & delta modulation Analog data & Analog signals: Modulation- AM & FM Spread spectrum: Frequency hoping, direct sequence Asynchronous & synchronous transmission: Line configurations- full duplex & half duplex.

PART- B

Unit 3- Data link control & medium access sub 12 hrs

Flow control: Stop and wait & sliding window flow control. Error detection: Parity check, CRC Error control: Stop and wait ARQ, Go Back-N ARQ High-level data link control: basics, Characteristics, frame structure, operation Medium access sub layer- the channel allocation problem. Multiple access Protocol- ALOHA, carriers sense multiple access protocol, collision free protocol.

Unit 4- Multiplexing and Switching 12 hrs

Frequency division multiplexing- characteristics, analog carrier systems, Time division multiplexing- characteristics, link control. Digital carrier system, ISDN user network interface. Circuit switching networks- switching concept, space division & time division switching- Pocket switching networks-principles, switching technique, and packet size. Comparison of Circuit switching & Pocket switching

References:

2. Data and Computer Communications – William Stallings.
3. Computer Networks – Andrew S.Tanen baum.
4. Data Communication – Ulysis D Black.
5. Data Communication and Networking – Behrouz A. Forouzan.
6. Internetworking with TCP/ IP – Douglas E comer, PHI

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BCA 5.5 COMPUTER NETWORKS

PART -A

Unit 1-Basics **14 hrs**

Uses of computer networks, network hardware- broadcast networks, point – to -point networks, network software-protocol hierarchies, design issues, interface & services, connection oriented & connection less services, service primitives, OSI reference model- description of each layer. TCP/IP reference model, comparison of the two models, Critique of the OSI model and protocols, Critique of the TCP/IP model and protocols, Example networks-ARPANET,ATM.

Unit 2- The Network layer **12 hrs**

Design issues, routing algorithms- the optimality principle, shortest path routing, distance vector routing, and link state routing. Congestion control algorithms- general principle, Congestion prevention policies, traffic shaping. The network layer in the internet - the IP protocol, IP address, and subnet. Internet control protocol.

PART -B

Unit 3- The Transport layer **12hrs**

The transport service- services provided to the upper layer, quality service, and transport service primitives. Elements of transport protocol - addressing, establishing a connection, releasing a connection. A simple transport protocol- the example service primitives, the example transport entity. The Internet transport protocol (TCP & UDP)- the service model, the TCP segment header, the TCP connection management. UDP - header.

Unit 4- The Application layer **10hrs**

Network security - traditional cryptography, two fundamental cryptographic principles, secret key & public key algorithms.DNS - Name space, SNMP - model.Electronic mail, architecture and services, www.

References:

1. Data and Computer Communications – WilliamStallings.
2. Computer Networks – Andrew S.Tanenbaum.
3. Data Communication – Ulysis DBlack.
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BCA - 6.1 UNIX OPERATINGSYSTEM

PART- A

Unit 1-Introduction **12 hrs**

The Unix operating system, , A brief Session, The Unix Architecture, Features of UNIX, POSIX and Single UNIX specification, Locating commands, Internal and External commands, Command Structure, Flexibility of command Usage, Man Browsing the Manual Pages ON-line, Understanding the man Documentation. General-Purpose Utilities: Cal command, date command, echo, printf, bc, script, passed, who, uname.

Unit 2 – The File System **10 hrs**

The file, The Parent –Child Relationship, The HOME Variable, pwd, cd, mkdir, rmdir, Absolute Pathname, Relative Pathname, ls, The Unix File system. Handling Ordinary Files: Cat, cp, rm, mv, more, The lp subsystem: Printing a File, File, wc, od, cmp, comm, diff, dos2unix and unix2dos, compressing and archiving files, gzip, and gunzip, tar, zip and unzip. Basic File Attributes: Listing file attributes, listing directory attributes, File Ownership, File Permissions, changing file permissions, Directory Permissions, Changing File Ownership.

PART- B

Unit 3 – The Vi Editor **14 hrs**

Vi basics, Input Mode, Saving Text and Quitting, Navigation, Editing Text, Undoing Last EditingInstructions(UandU),Repeatingthelastcommand(.),SearchingforaPattern(/and ?), Substitution. Process basics, process status, system process, Mechanism of process creations, Internal and external commands, process states and zombies, running jobs in background, nice, killing process with signals, job control, at and batch, cron, timing process. Simple Filters: The sample database, pr, head, tail,cut, paste, sort, uniq, tr, displaying a word- count list. Filters using regular expressions: grep, basic regular expressions, extended regular expressions.

Unit 4 –The Shell **12 hrs**

The shell's Interpretive Cycle, Shell Offering, Pattern Matching, Escaping and Quoting, Redirection, /dev/null and /dev/tty, Pipes, tee, Command Substitution, Shell variables. Essential shell programming: Shell scripts, read, using command line arguments, exit and exit status of command, the logical operators &&and ||- conditional execution, the if conditional, using test and to evaluate expressions, the case conditional, expr, $0: calling a script by different names, while, for, set and shift, the here document (<<), trap, debugging shell scripts with set –x, sample validation and data entryscripts.

References :

1. Sumitabha Das, UNIX System V.4, Concepts and Applications, TMH

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BCA - 6.2 .NET PROGRAMMING

PART -A

Unit 1 - Introduction to C# & .NET platform and Building C# Applications 10 hrs

Introduction to C# and .NET platform : .NET solution, Building blocks of the .NET platform(CLR, CTS, CLS), Role of .NET base class libraries, .NET Aware programming languages, role of common intermediate languages & type metadata and assembly manifests, A tour of the .NET namespaces. Building C# Applications : Role of the command line complier(csc.exe), Building a C# application using csc.exe, the command line debugger(cordbg.exe), using the visual studio.NET IDE & its debugging, C# pre-processor directives.

Unit 2 - C# language fundamentals 14 hrs

Anatomy of a basic C# class, creating objects: constructor basics, Default assignments & variables scope, variables initialization syntax, basic inputs & output with the console class, understand static methods, arrays & string manipulations, Encapsulation Services, Class Properties , Read and Write only Properties, Static Properties, Inheritance Is As keyword Usage, Controlling Base Class Creation With Base, Sealed Classes, Delegation , Polymorphism, The Virtual and Override Keywords ,Abstract Classes, Abstract Methods

PART- B

Unit 3 - Exception & object life time and Interface and Collections 12 hrs

Exception & object life time :The Basics of Object Life Time, The Role Of Application Roots, Understanding Object Generations, The Role Of .NET Exception Handling, Throwing a Generic Exception ,Catching Exceptions, Properties of Exception, Multiple Exception (Concepts Only),The Finally Block. Interface & Collections : Definition, Implementing an Interface in C#, Interface members at object level, Interface as Parameters, Interface as Return Values, Arrays of Interface Types, Interface Hierarchies, Interface as polymorphic agents, Exploring the system. Collections Namespaces.

Unit 4 – Introducing windows forms 12 hrs

Overview of the system. windows. Forms Namespaces, An Anatomy of a Form, A Simple Form Program, Function with Control Class, The Functionality Of the Form Class, Component class, control class, Programming with windows forms controls : Working with Button types, Check Boxes, Radio Buttons, Group Boxes, List Boxes, Calender control, assigning tool tips for controls.
The Two Faces Of ADO. NET, Understanding ADO.NET Data Providers, Understanding The Connected Layer of ADO.NET, Working with Connection Object, Inserting, Updating and Deleting Records

References:

1 Pro C# with .NET 3.0 Andrew Troelsen
2 2 C# Programming E Balaguruswamy

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BCA - 6.3.1 ELECTIVE-I DIGITAL IMAGE PROCESSING

PART- A

Unit 1- Digital Image **12 hrs**

Introduction: Motivation and Perspective, Scenes and Images, Application: Components of Image Processing System. Visual Preliminaries: Brightness Adaptation and Contrast- Acuity and Contour, Texture and Pattern Discrimination, Shape Detection and Recognition- Perception of Color. Image Formation: Geometric Model, Basic Transformations, Perspective Projection, Camera Calibration-Photometric Model. Digitization:Sampling, Quantization, Visual Detail inthe Digital Image, Digital Image, Elements of Digital Geometry.

UNIT-2: Image Processing **12 hrs**

ImageEnhancement: Contrast Intensification, Smoothing, Image Averaging, Mean Filter, Ordered Statistic Filter, Edge Preserving Smoothing Low Pass Filtering. Image Sharpening, High, PassFiltering, Homomorphic Filtering. Restoration: Minimum Mean, Square Error Restoration, Least Square Error Restoration ,Constrained, LeastSquare Error Restoration, Restoration by Singular Value Decomposition-Restoration by Maximum A Posterior Estimation, Restoration by Homomorphic Filtering.

PART- B

UNIT-3 :Image Compression **12 hrs**

Error Criterion: Lossy Compression methods, loss –less compression, Huffman coding, Run length coding- Block coding, Quad Tree coding- contour coding. Registration: Geometric Transformation, Plane toPlane Transformation, Mapping Problem in Discrete Domain –Stereo Imaging Algorithms.

Multi-Valued Image Processing: Processing of color Images, Processing of Satellite Image, and Medical Image Processing. Segmentation: Region Extraction-Pixel based Approach, Feature Thresholding, Optimum Threshold, Threshold Selection Methods, Multi-level Thresholding, Local Thresholding, Region based Approached.

UNIT-4: Image Analysis and Feature Extraction **12 hrs**

Edge and Line Detection: Edge Detection, Derivation operators, Pattern Filling Approach, Morphologic Edge Detection, Edge Linking and Edge Following, Edge elements Extraction by Thresholding, Edge Detector Performance, Line Detection, Corner Detection. Representation: Topological Attributes, Geometrical Attributes, Some other Properties, Description, - Boundary based Description-Region based Description-Relationship. Recognition: Deterministic Methods, Clustering, Statistical Classification,Fuzzy Mathematical Recognition,Syntactic Recognition, Grammar, Recognition Strategy, Tree search, Graph Matching.

References:

1) B. Chand and D. DuttaMajumder ,Digital Image Processing and analysis, PHI(2001)
2) Milan Sonka, "Image Processing Analysis and Machine Vision", PWS Pub.2nd Ed.
3) Adrian Low, Computer vision and Image Processing, McGraw Hill (1991)
4) Kenneth R. Castle man, Digital Image Processing ,PHI

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BCA - 6.3.2 ELECTIVE-I CLOUD COMPUTING

PART- A

Unit1 - Cloud Computing Basics **12 hrs**

Cloud Computing Overview- Applications – Intranets and the cloud – Why Cloud Computing Matters – Benefits – Limitations – Companies in the Cloud Today – Cloud Services.

Unit 2 - Cloud Computing Technology **12 hrs**

Hardware and Infrastructure – Clients – Security- Network – Services – Accessing the Cloud - platforms – Web Applications – Web APIs –Web Browsers –Cloud Storage – Overview – Cloud Storage Providers –Standards –Application – Client – Infrastructure – Service.

PART -B

Unit 3 - Cloud Computing At Work **12 hrs**

Software as a service – Overview – Driving Forces – Company offerings – Industries– Software plus Services – Overview - Mobile Device Integration –Providers – Microsoft Online.

Unit 4 - Developing Applications **12 hrs**

Google – Microsoft – Intuit Quick Base – Cast Iron Cloud – Bungee Connect - Local clouds and Thin Clients – Virtualization – Server Solutions – Thin Clients. Cloud Services for Individuals – Cloud services aimed at the mid-market –Enterprise-Class Cloud Offerings – Migration.

References:

1. Velte T. Antony, Velte J. Toby. andElsen Peter Robert (2010), "Cloud Computing: A Practical Approach", Tata McGraw- Hill
2. Miller Michael (2008), "Cloud Computing: Web-Based Applications That Change the Way You Work and Collaborate Online", Que Publishing.
3. Beard Haley (2008), "Cloud Computing Best Practices for Managing and Measuring Processes for On-demand Computing, Applications and Data Centers in the Cloud with SLAs", EmereoPvt. Limited.

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BCA- 6.4.1 ELECTIVE-II COMPUTERGRAPHICS

PART -A

Unit 1 - IntroductiontoMultimedia **12 hrs**

Definition, CD-ROM and the multimedia highway, Uses of Multimedia, Introduction to making multimedia – The stages of Project, the hardware & software requirements to make good multimedia, Multimedia skills .Multimedia building blocks- SOUND: MIDI, Digital audio, audio file formats. Images: still images, color and file formats. ANIMATION: principles of animation, making animation. VIDEO: using video, how video works, and videostandards.

Unit 2 - Introduction toGraphics applications **12 hrs**

CAD , presentation graphics, computer art, entertainment, education and training, visualization, image processing. Display devices – raster scan displays – color CRT, DVST, LCD, 3D viewing devices. Raster scan systems, Random scan systems.

PART-B

Unit 3 -Outputprimitives **12 hrs**

Points and lines, line drawing algorithm, DDA algorithm, Bresenham's line algorithm, examples, parallel line algorithm, loading the frame buffer, circle generating algorithm, midpoint circle algorithm, and ellipse generating algorithm. Pixel addressing and object geometry. Color and gray scale levels, color tables, character attributes. Basic Transformations- translation,scaling, rotation, matrix representation and homogeneous coordinates, composite transformations, general pivot point and fixed point rotation, scaling directions, other transformations – reflection, shear, transformation between coordinates, inverse transformations.

Unit 4- WindowingandClipping **12 hrs**

Introduction, the viewing transformation, viewing transformation implementation, clipping, Cohen-Sutherland outcode algorithm, Liang-Barsky line clipping algorithm, Sutherland- Hodgeman polygon algorithmand adding clipping to the system, text clipping, exterior clipping, curve clipping.

References:

1. Tay Vaughan "Multimedia – making it work", TMH publication, fifthedition.
2. D Hearn & M P Baker: "Computer Graphics C version", PearsonEducation
3. D Newman and Sproull: "Principles of Interactive Computer Graphics -, TMH,IIedition.
4. Steven Harrington "Computer graphics: A programming Approach", TMH publication. Secondedition
5. Roy plastock and Zhigang Xiang: " Computer graphics". Schaum's outline series, II edition.

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BCA - 6.4.2 ELECTIVE-II OPERATIONS RESEARCH

PART-A

Unit1-Operations Research & Linear Programming 14 hrs

Operations research: Nature and meaning, models characteristics, advantages, scope. Linear Programming Problems: Formulation (both minimization and maximization type) solution of LPP using graphical method. General LPP. Basic solutions and degenerate solutions.Standard form and canonical form. Characteristic features of LPP. Simplex method for solving LPP.

Unit 2 - Transportation Problem 12 Hrs

Big-M method and 2 phase method for solving LPP. Transportation Problem - Formulation, Necessary and sufficient condition for the existence of feasible solution to a Transportation problem. Initial Basic Feasible Solution by North West Corner Rule, Least Cost Method and Vogel's Approximation Method. Optimal solution using U-V method.

PART-B

Unit 3 – Assignment Problem and Game Theory 14 Hrs

Assignment Problem.:Formulation, optimal solution using Hungarian algorithm, traveling salesman problem. Game Theory:Basic definitions, minmax - maxmin principle and optimal strategy solution of games with saddle point, dominance rule for solving a two-person Game, Graphical method for solving two-person game.

Unit 4 -Network analysis 10 Hrs

Basic differences between PERT and CPM, PERT, CPM, Network components and precedence relations, rules of network construction, errors and dummies in network, critical path analysis, project time cost trade-off, resource allocation.

References:

1. S. D. Sharma – Operations research
2. Hamdy A. Taha, " Operation Research – An introduction" 5th edition, PHI.,
3. KantiSwarup, P. K. Gupta &Manmohan – "Operation Research", 1996.
4. S. Kalavathy: "Operations Research", Second Edition – Vikas Publications

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I -SEMESTER

Excel & C Lab

PART- A

1. Write DOS commands for the following:
   a. To create a file
   b. To view a created file
   c. To edit the contents of file
   d. To rename an existing file
   e. To delete an existing file
2. Write DOS commands for the following:
   a. To make a directory
   b. To rename a directory
   c. To delete a directory
   d. To change the directory
   e. To display date, time and version

PART -B

Table A

Sales Person	Gender	Number of Sales	Sales Amount	Sold Month and Year
Cara	F	10	8000	12013
Jessy	F	7	6000	12013
Lewis	M	5	4000	32013
Tommy	M	3	2000	42013
Annie	F	2	2000	12013
Jack	M	3	2000	52013
Hugo	M	1	400	52013
Jonathan	M	1	400	72013
Aaaron	M	1	400	12014
Willy	M	4	2800	82013
Patrick	M	3	900	12013
Simmons	M	5	1750	12014
Pattrick	M	6	2250	82013
Taylor	M	2	800	42013
Boon	M	3	1275	42014
Walsh	M	1	450	72013
Julie	F	5	2375	22013

Use only Formula's to Derive the results

Questions	Answers
Sum of sales amount	
Average of sales amount	
Minimum Sales amount	
Maximum number of sales	
Count of Sales Person	
Count of Male Sales person	
Sum of Sales amount of Female Person	
Average of sales amount of Female Person	
Average of Sales amount made in January 2013	
Median of Total Sales amount	
First Quartile to Sales Amount	
Third Quartile to Sales Amount	

Populate the number of sales for below listed Sales Person (Use formula)

Sales Person	Number of Sales
Aaaron	
Pattrick	

1. Consider the above excel sheet and derive the answers using formulae
2. Demonstration of sorting, filters and advanced filters
3. Usage of pivot table.

PART -C

1. Program to find the biggest and the smallest among 4 numbers using nested if.
2. Program to find the roots of quadratic equation.
3. Program to check whether the given number is Armstrong number, odd or even, perfect square or cube.
4. Program to check whether nth prime is palindrome.
5. Program to find the factors of nth Fibonacci number.
6. Program to convert decimal to binary.
7. Program to generate n terms of the series 1,-2,6,-24,120…….
8. Program to find e^x using n terms of the series $1+ x + x^2/2! + x^3/3! +$…..
9. Program to count the number of vowels, consonants and special characters in a string by reading the string character by character.
10. Generate n prime numbers and print them in the following pattern

```
            2                               2
         3  5        OR                3    5    7
      7  11  13                    11   13   17   19   23
  17  19  23  29 …              29   31   37   41   43   47   53…..
```

PRACTICAL EXAM SCHEME

Practical Proper: 60 Marks
Record : 10 Marks
Viva : 10 Marks

DOS (any 5 commands) (10 marks)	**Writing of DOS Commands**	**5 Marks**
	Error free execution of DOS Commands	**5 Marks**
MS Excel (10 marks)	**Any five functions from questions 1 2 and 3 Proper syntax and result (2 marks each)**	**10 marks**
C- Program (40 marks)	**Flowchart/Algorithm**	**5 Marks**
	Program writing	**20 Marks**
	Correct program and Error free compilation	**10 Marks**
	Correct output	**5 Marks**

II -SEMESTER

DATA STRUCTURES & Advanced Excel Lab

PART -A

1. All types of data validation
2. Data visualisation using charts
3. Data visualization using scatter charts, spark lines and gauge charts
4. Usage of hyper links.

PART -B

1. Program to insert an element at given position in an array.
2. Program to multiply two matrices using functions.
3. Program to swap two integers using function with call by value and call by reference mechanism.
4. Program to create a dynamic array of n elements and find their sum and print in reverse order using functions with pointers(sum(int *,int)and rev_print(int *,int))
5. Program to store information of n students (name, regno, dob, m1,m2,m3,tot, avg and result) in an array of structures and find total, average and result using function.
6. Program to find a^b using union to store the values of a, b and a^b (for both int and/or float values of a and b)

PART- C

1. Program to implement the operations of stack using array.
2. Program to implement the operations of circular queue.
3. Program to convert infix expression to prefix notation.
4. Program to evaluate postfix expression.
5. Program to implement any three recursive functions.
6. Program to implement queue using linked list.
7. Program to evaluate an expression using linked list

PRACTICAL EXAM SCHEME

Practical Proper: 60 Marks
Record : 10 Marks
Viva : 10 Marks

MS Excel (10 Marks)	Any one problem from the list	10 Marks
C- Program (25 marks)	Flowchart/Algorithm	5 Marks
	Program writing	10 Marks
	Correct program and Error free compilation	5 Marks
	Correct output	5 Marks
Linear Data Structure (25 marks)	Algorithm	5 Marks
	Program writing	10 Marks
	Correct program and Error free compilation	5 Marks
	Correct output	5 Marks

III- -SEMESTER DS Lab Using C++

PART- A

1. Consider a class student with data members name, regno, course, m1, m2, m3 and member functions getdata(), showdata(), result() to read, print and tabulate result. Write C++ program to store the details of n students and display their result in tabulated form.
2. Write a C++ program to define a class BankAccount including the following class members and store information of n customers and display their details. DataMembers:, cust name, accno, balance.
   Member Functions: a) getdata(custname,accno,balance). b) display(). c).Transaction(tr_type,amt) if Tr_type='D' transaction is deposit else transaction is withdrawal. This function should update the balance according to tr_type after checking the minimum balance of Rs 1000.
3. Write C++ program to demonstrate operator overloading
4. Program to demonstrate the use of simple, parameterised and copy constructors
5. Program to demonstrate inline and friend function.
6. Program to demonstrate function overloading.
7. Program to demonstrate multiple or multilevel inheritance

PART- B

1. Program to demonstrate the operations of doubly linked list
2. Program to demonstrate tree traversal
3. Program to implement tree sort.
4. Program to implement quick sort
5. Program to implement heap sort.
6. Program to implement radix sort.
7. Program to demonstrate time and space complexity in binary and linear searching
8. Program to compare shell and insertion sort methods.

PRACTICAL EXAM SCHEME

Practical Proper: 60 Marks
Record : 10 Marks
Viva : 10 Marks

C++- Program (25 marks)	Program writing	15 Marks
	Correct program and Error free compilation	5 Marks
	Correct output	5 Marks
Linear Data Structure (35 marks)	Flowchart/Algorithm	10 Marks
	Program writing	15 Marks
	Correct program and Error free compilation	5 Marks
	Correct output	5 Marks

III-SEMESTER
SQL LAB

I. Create emp and dept tables as below and write SQL statements for the following queries

Emp(ename not null, eno primary key, doj date,dob ,mgrno self reference key, salary >0 , comm, deptno foreign key)

Dept(dname not null, dno primary key, location)

1. Find the employee details in ascending order of their name and descending order of their salary
2. Find the details of all employees in the research department
3. Find the minimum, maximum and average salary of each department
4. Find department name having least number of employees
5. Find the department name having highest annual payroll
6. Add an employee under the manager smith
7. Find the employees who are not getting commission
8. Display the eno, name manager name and department name in the order of their department

II. Create tables as below Student(name string, regno string primary key, dob date, doj date ,course string foreign key) Markscard(regno foreign key, sem string, sub1 number, sub2 number, sub3 number, tot number, avge number, result string)

Calculate total, average and result using update statement

Write SQL statements for the following queries.

1. List the names of students studying in BCA course in the order of their joining
2. Find the name of student who has scored highest marks in every sem of each course
3. Count the number of students in each course (consider only distinct students of the course)
4. Find the course having second highest number of students
5. Raise the marks of sub3 in III sem BCA students by 5% if the student has failed in that subject
6. Display the details of student 'xxx' in every semester.

III. Dept(deptno integer pkey, dname string not null, loc string not null)

Emp(eno integer pkey, ename string, deptno fkey, desgn string not null, bsal number>0) Salary(eno fkey,da,hra,gross,it,pf,net,comm) DESGN ARE manager,clerk,salesman. Comm=5% of basic if desgn=salesman otherwise null. Da=15% bsal hra = 7% of bsal gross=bsal+da+hra.

IT =0 if gross<15000

= 10% of gross if gross between 15000 and 30000

=20% of gross if gross between 30000 and 50000

= 30% of gross otherwise

PF =10% of gross or 1000 whichever is less. Calculate salary using update statement

Write sql statements for

1. Count the number of employees in every designation
2. List the employees of every department in descending order of their net salary
3. List the name and salary of highest salary payer in every department
4. List the name of employee paying highest IT in each department
5. List the departments in every location
6. Raise the basic salary by 10% for the managers of every department.

IV. Create tables as below

Employee(eno primary key, ename, street, city)
Company(cno primary key, cname, city)
Works(eno foreign key, cno foreign key, sal>0)
Manages(mno foreign key from employee table , eno foreign key from employee table)

Write sql statements for the following queries

1. Find the name of all employee working in the city in which they live
2. Find the company having most employee
3. Count the number of employees under each manager.
4. Find the company having second highest payroll
5. Find employee drawing more salary than his manager in every company
6. Raise the salary of every manager by 25%
7. Find name of employees who are not having managers
8. Find average, highest and lowest salary of every company
9. Delete the employees and the information of company 'xxx'

PRACTICAL EXAM SCHEME

Practical Proper: 60 Marks
Record : 10 Marks
Viva : 10 Marks

Table creation	10 Marks
Inserting proper data	08 Marks
Table updation (if necesssary)	12 Marks
5 / 7 writing	15 / 21 Marks
Execution	15 / 21 Marks

IV -SEMESTER
PLSQL BASIC PROGRAMS

PART - A

1. Create a library table with attributes book id, author_name, publisher, price and edition. Write PL/SQL code block to accept the publisher name and count number of books under that publisher and display it. Also display the publisher with maximum publication.
2. Write a function to display employee name with distinct salaries

   For eg

   if a 's salary is 100
   b 's salary is 200
   c 's salary is 100
   display either (a or c) and b
3. Write a function to rank the employees based on their salary (use RANK function)
4. Write a function to validate the Employee email id.
5. Write a procedure to capture the error log in a table in case of an exception using Autonomous_transaction,
6. From employee table, store ename and salary in varrays and display the contents of the arrays in table format.
7. Write an Anonymous block which raise a user defined exception on thursday?
8. Write an anonymous block using associative array that is indexed by a string, populates it, and prints it.

PART -B

1. Write a pl/sql code block to create a table and menu driven code to add, modify and drop specified column in it.
2. Write a pl/sql code block to create a database and menu driven code to add, rename and drop specified table into it.
3. Write a PL/SQL cursor program which is used to calculate total salary from emp table without using sum() function?
4. Create a trigger to record the changes like insert, update, delete over the employee table (The changes should be recorded in new audit table Employee_au)
5. Write a function to remove the duplicates in the employee table and copy all the records into another new table.
6. Write a function using bulk collect , to process set of 100 records in one iteration
7. Write a statement trigger on emp table such that the insertion is possible only on Thursday.
8. Write a function using dynamic sql statements , where the column names and the table name should be provided as input to the function.
9. Write an anonymous block to create nested tables and compare the values in nested tables
10. Write an anonymous block using multilevel VARRAY
11. Write an anonymous block to check if a collection element exists or not ?
12. Write a function using NEXT and PRIOR to access the elements in a collection TABLE

PRACTICAL EXAM SCHEME

Practical Proper: 60 Marks
Record : 10 Marks
Viva : 10 Marks

Part A (20 marks)	Program writing	10 Marks
	Error free compilation	05 Marks
	Correct output	05 Marks
Part B (40 marks)	Program writing	20 Marks
	Error free compilation	10 Marks
	Correct output	10 Marks

IV -SEMESTER
Java Lab

PART- A

1. Write a Java program to display only those multi-digit prime numbers between a given range whose digit sum is prime. Display the prime number and its digit sum side by side. Read the value for the range using *readLine()* method of *BufferedReader* class.

   Sample output:
   If range is; m = 20, n=50

Prime number		Sum of digits
23	-	5
29	-	11
41	-	5
43	-	7
47	-	11

2. Write a Java program to sort the elements of a square matrix. Read the order and elements of the matrix during execution. Before sorting the elements of the matrix, display the source matrix.

   Sample output:
   Input Matrix is:

   20 2 35
   4 16 7
   41 3 2

   Matrix elements after sorting:

   2 2 3
   4 7 16
   20 35 41

3. Write a java code to create a class with data members name, category, doj, and fees and static members total_fee, categorywise_no_students, methods to Insert data using parameterized constructor, display student information along with total fees and number of students in each category.
4. Write java program to demonstrate method overloading to generate random numbers, random alphabet sequence and random strings.
5. Assume that an examination authority conducts qualifying examination for candidates twice each year. First, in the month of June, second, in the month of December. Before the exam, it opens a registration process so that candidates register themselves. After the end of the registration dates, the authority consolidates the list of candidates and generates the unique register numbers. These numbers are assigned to each candidate. The format of the register numbers is as below. Each register number should contain exactly 10 characters.

	year of Registration	cle	·ial Number

For example, if year of registration 2018, cycle 2 and there are five candidates registered then, registration numbers are: QE20182001, QE20182002, QE20182003, QE20182004, QE20182005.

The serial numbers should contain exactly 3 digits. To maintain it, prefix zeros as needed. (up to 9 serial number should be prefixed with two zeros, after 9, upto 99 it should be prefixed with single zero and after 99, no zeros). Write a Java program to generate the registration numbers as per the above requirement.

6. Write a Java program to read name, register number, date of birth, address, phone number a student. Concatenate these to frame a single content by delimiting each detail with a special symbol, pass it to a method which should separate and display the details of the student. Declare a class containing the following methods:

   void getInformation() – to read student information. It should call concatenate(,,,,) by passing relevant information.

   void concatenate(String name, string regNo, String dob, String address, String phoneNo) to join the information to frame a single content. It should call

extractInformation(…) by passing the concatenated information.

void extractInformation(String joinedInfo)

to extracted concatenated contents and to display the information.

Declare another class to contain main () method which calls *void getInformation().*

Sample output:

Student Name: Venkata Krishna

Register Number: BC171128

Date of Birth: 10/05/1996

Address: No. 5, First Cross, Nehru Nagar, Sagar.

Phone Number: 9900990099

Concatenated content:

Venkata Krishna%BC171128%10/05/1996%No. 5, First Cross, Nehru Nagar, Sagar.%9900990099

(Application: This is the way using which collection of information is communicated between client and server in networked environment)

7. Consider class person with fields name, address and date of birth and methods read_data() and show() and another class employee inherited form person class with fields emp_id, date of join and salary and methods read() and show(). Write java program to implement the concept of single inheritance with method overriding concepts for the above classes.

PART B

1. Write a Java program to create a vector, add elements at the end, at specified location onto the vector and display the elements. Write an option driven program using switch…case and also insertion of any type of objects must be possible. Read input as strings and find the type of data and convert them into appropriate objects of appropriate classes. (Ex: 10 must be converted to object of Integer class, 2.5 into object of Float class etc.). Handle exception while converting the inputs.
2. Declare an interface containing methods *float addition(float x, float y)* and *float subtraction(float x, float y)*. Declare the classes implementing the interface to perform respective operations as listed below.

Bank - to carryout deposit and withdrawal operations. In addition to the implementation for the abstract methods, the class should contain additional methods to read and display customer information to perform the respective transaction.

EmployeeSalary - to calculate the gross and net salary. In addition to the implementation for the abstract methods, the class should contain additional methods to read and display employee information, allowance amount and deduction amount to perform the respective transaction.

Main class - which instantiates above two classes and calls respective methods.

3. Write java program to demonstrate multi level inheritance using appropriate real life example.
4. Write a java program to create a package Number which contains a class with three static methods prime, fibanocii and Armstrong that checks whether the passed value is belongs to the corresponding types.
5. Write a java program to demonstrate multithreading using runnable interface.
6. Write an applet to display the address of a person (atleast 4 lines) using parameter passing concept. Appropriate message should be displayed for wrong input.
7. Write an applet to draw a polygon based the number of sides of the polygon as input. Ex. If sides =3 it should draw a triangle, for 4 square for 8 octagon etc.
8. Write an applet to draw n squares, rectangle and circles.

PRACTICAL EXAM SCHEME

Practical Proper: 60 Marks
Record : 10 Marks
Viva : 10 Marks

Part-A (25 marks)	**Program writing**	**15 Marks**
	Correct program and Error free compilation	**5 Marks**
	Correct output	**5 Marks**
Part-B (35 marks)	**Program writing**	**20 Marks**
	Correct program and Error free compilation	**10 Marks**
	Correct output	**5 Marks**

KUVEMPU UNIVERSITY

Revised syllabus

BCA, B. Sc (Computer Science) and BA (Computer Applications)

W.E.F 2019-20

DEPARTMENT OF P.G. STUDIES AND RESEARCH IN COMPUTER SCIENCE,

JANNASHAYADRI , SHAKARGHATTA

SHIMOGA, KARNATAKA

NEW SYLLABUS FOR B.A (Computer Applications)

(EFFECT FROM 2019-20)

Paper code	Semester	Subject	Weekly hours	Internal marks	External marks	Practicals	Total
BAC-1	I	Computer Fundamentals	4+3	10	50	40	100
BAC-2	II	C-programming	4+3	10	50	40	100
BAC-3	III	Introduction to Data Structure	4+3	10	50	40	100
BAC-4	IV	OOPS with C++	4+3	10	50	40	100
BAC-5.1	V	JAVA	4+3	10	50	40	100
BAC-5.2	VI	DBMS	4+3	10	50	40	100
BAC-6.1	VII	Internet Programming	4+3	10	50	40	100
BAC-6.2	VIII	SE&CN	4+3	10	50	40	100

FIRST SEMESTER BA (Computer Applications)

Computer Applications -I

BAC-1 Computers Fundamentals

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction: **10 hrs**

Definition of computer, Characteristics of computer, history of computers,generations of computer,functional units of a computer, types of computers-based on principle of working, based on size & speed, Definitions of digital computer&analog computer, Definition of super computer,example for super computer.

Unit 2- Hardware: **10 hrs**

Input Device- Keyboard & mouse, OCR, OMR. Output device- monitor and brief description of CRT monitor, Printer and brief description of dot matrix printer, Projector and Headphone (Definition and Uses). Memory-Primary memory: RAM, types of RAM, ROM and its types, Difference between RAM &ROM,Secondary memory: Brief description of working of hard disk and floppy disk,Types of CD-ROM.

Unit 3-Software : **10 hrs**

Definition of software, types of software's – application, system and utility software, Definitions of assembler, compiler, interpreter, linker, loader. Types of Programming Languages -assembly language and machine level language (advantage and disadvantages). Definition of operating System, functions of an operating system, types of operating system, MS DOS Commands with syntax and example (copycon, type, copy, rename, del, make directory, remove directory, dir and its types, copy files from one drive to other drive, tree, hiding files)

Unit 4-Problem solving techniques: **09 hrs**

Algorithm-definition, Characteristics, Notations, Advantages and Disadvantages.Flowchart-Definition, Symbols, Advantages and Disadvantages. Writing an algorithm and flowchart: Area of circle, Arithmetical operations, simple interest and compound interest, Swapping of two numbers, largest of two numbers, factorial of a number, reverse a number, Fibonacci series.

Unit 5-Logic gates: **09 hrs**

Binary number system- Conversion of decimal number into binary number and Conversion from Binary to Decimal number system. ASCII code(brief), Gates – AND, OR, NOT, NAND, NOR, XOR (Definition, Truth Table & Logic Symbol), De-Morgan's Theorem (Statement and Proof).Boolean Laws.

References:

1. Computer fundamentals- P B KOTTUR
2. Computer fundamentals- RAJARAMANNA
3. Digital Logic and Computer Design- M. Morris Mono

QUESTION PAPER PATTERN FOR I SEMESTER B.A (Computer Applications)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL :COMPUTER BASICS LAB

1.DOS COMMANDS: DATE , TIME, CLS, COPY CON, TYPE, DIR with wild cards, MD, CD, RD, COPY, XCOPY, FORMAT, DISKCOPY etc,.

2.**MS-WORD:**Drafting, Entering, Working with all Menus, Using different fonts and colours the following:

1. Bio-Data
2. Application for Job
3. Joining Report
4. Creation of Marks Card

3.**MS-EXCEL:**Drafting, Entering, Working with all Menus, Using different fonts and colours the following:

1. Bio-data
2. Creation of marks card
3. Result calculation

4.POWERPOINT: Formatting, updating and printing of the following:

1. Text matter with different fonts
2. Preparing Charts : Pie Chart
3. Preparing Graphs: Bar Graph
4. Introducing Animation
5. Introducing Sound Effect
6. Using Hyperlinks

PRACTICAL EXAM SCHEME

- Practical Proper - 30 marks
- ✓ **DOS COMMANDS**–Any two 2X 5marks=10 m
- ✓ arks (writing-2 marks and execution-3marks)
- ✓ **MS-WORD/MS-EXCEL/POWERPOINT**-20marks(writing-10marks and execution-10 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

SECOND SEMESTER BA (Computer Applications)

Computer Applications -II

BAC-2 C- Programming

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1-Introduction to C: **10 hrs**

History of C, features of C, basic structure of C, character set, tokens- keywords, identifiers, constants, variables, strings, definition, types, rules for naming, syntax for the declaration, symbolic constant definition.

Unit 2- Operators: **10 hrs**

Increment and Decrement operators, Arithmetic, relational, logical, assignment and bitwise operators, conditional operator and special operators of C, data type conversion, precedence and associativity of operators. Mathematical functions. Formatted and unformatted Input and Output functions – gets(), puts(), getchar(), putchar(), printf() and scanf().

Unit 3-BranchingControl Structures: **09 hrs**

Conditional Control Structures: If Statement, if-else statement, nested if, Switch statement (Explanation with syntax, flowchart and example), goto statement (syntax and example, use).

Unit 4- Looping Control Structures: **09 hrs**

while, do-while and for statements (Explanation with syntax, flowchart and example),Nested for statement. Unconditional control statements - break continue, return and exit(syntax and example).

Unit 5-Arrays and Functions: **10 hrs**

Definition of array, Declaration and initialization, One and two dimensional arrays, string definition, Declaration and Initialization of String variable, String handling functions. Definition of Function, syntax for function declaration and function definition, types of functions, Recursion –definition and example.

References:

1. Computer Concepts and C Programming by P B Kottur.
2. Ansi C, by Balagurusamy E

QUESTION PAPER PATTERN FOR II SEMESTER B.A (Computer Applications)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL : C PROGRAMMING

1. Conversion of temperature given in Degree Fahrenheit to temperature in degree Celsius using the formula C = (F-32)/1.8 and vice-versa.
2. Find the biggest amongtwo numbers.
3. Find whether the entered number is odd or even.
4. Arithmetic operations using switch statement.
5. Check whether an entered number is Prime number or not.
6. Find the Fibonacci series between M and N.
7. Searching an element in an array.
8. Addition of two matrices
9. Find the factorial of a number using function.
10. Perform swapping of two numbers using functions

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Program Flowchart/Algorithm 05 Marks
- ✓ Program Writing 15 Marks
- ✓ Correct output with proper display 10 Marks
  (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

THIRD SEMESTER BA (Computer Applications)

Computer Applications -III

BAC-3 INTRODUCTION TO DATA STRUCUTRES

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction : **10 hrs**

Definition of Structure, syntax and example for structure declaration.Definition of union, syntax and example for union declaration, difference between structure and union.Pointers–Definition, Declaration, Examples. Dynamic memory allocation functions – syntax and examples. Definition of Data Structure and types of data structures with examples.

Unit 2- Stack and recursion: **10 hrs**

Definition and example of stack (LIFO), operations of stack with algorithms, applications of stack, algorithm for the conversion of infix to postfix expression.Tower of Hanoi problem and Factorial of a number using recursion.

Unit 3- Queue : **10 hrs**

Definition and example of Queue (FIFO), operations on queue, types of queue – ordinary queue and circular queue (definitions only), disadvantages of ordinary queue.Linked list–Definitions and types of lists – Single Linked List, Doubly Linked List (definitions only).

Unit 4-Tree : **09 hrs**

Definition of a Tree, Definition of root, left sub tree, right sub tree, degree of node, terminal node, depth,Definition of Binary tree, types of binary tress (definition only), Algorithm for tree traversal.

Unit 5-Sorting and searching : **09 hrs**

Definition of sorting, explanation of bubble sort, radix sort and merge sort with examples. Definition of searching, explanation of Binary search andLinear search with examples.

References:

1. Systematic approach to data structure –A M Padmareddy
2. Programming in ANSI C - E Balaguruswamy
3. Datastructures and applications - Trembly and Sorenson

QUESTION PAPER PATTERN FOR III SEMESTER B.A (Computer Applications)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL :DATA STRUCUTRES LAB USING C

1. Employee program using structure.
2. Implementation of stack
3. Recursive program to simulate Tower of Hanoi concept
4. Recursive program to find factorial of a number
5. Implementation of queue
6. Implementation of linked list
7. Binary tree traversals
8. Bubble sort
9. Binary search
10. Linear Search

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Program Flowchart/Algorithm 05 Marks
- ✓ Program Writing 15 Marks
- ✓ Correct output with proper display 10 Marks
  (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

FOURTH SEMESTER B.A (Computer Applications)

Computer Applications -IV

BAC-4 OBJECT ORIENTED PROGRAMMING WITH C++

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction to OOP: **10 hrs**

Object Oriented Programming paradigm, Basic concepts of Object Oriented Programming-Classes, Objects, Data Abstraction and Encapsulation, Polymorphism, Inheritance, Dynamic Binding, Message passing, Benefits of OOP, Object Oriented languages, applications of OOP.

Unit 2-Introduction to C++: **10 hrs**

Difference between C and C++, Structure of a C++ program, input and output statements, tokens - Keywords, identifiers, constants, strings and operators, reference variables – definition and example, special operators in C++, brief introduction to control structures in C++.

Unit 3-Classes Objects and Member Functions: **10 hrs**

Difference between structure and class, syntax and example for class declaration, Definition of data member and member function, Defining member function inside and outside the class, inline functions, memory allocation for objects, static data members and static member functions, function overloading, definition of friend function, syntax and example for the declaration of friend function, special characteristics of friend function.

Unit 4-Constructors, destructorsand Operator overloading: **09 hrs**

Definition of a constructor, types - parameterized constructor, default constructor, copy constructor, special characteristics of constructor, definition of a destructor, special characteristics of destructor, definition to Operator overloading, overloading binary operator (+) to add two complex numbers, rules for operator overloading.

Unit 5: Inheritance and templates: **09 hrs**

Inheritance definition, forms of inheritance, syntax and example for defining derived classes, visibility modes, explanation of multilevel inheritance and hybrid inheritance with examples. Definition of templates, syntax and example for class and function template.

Reference Books:

1. Object Oriented Programming with C++ - E Balaguruswamy
2. C++ - The Complete Language – BjarneSchildt
3. Object Oriented Programming in Turbo C++ - Robert Lafore

QUESTION PAPER PATTERN FOR IV SEMESTER B.A (Computer Applications)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL :C++ LAB

Write a C++ Program:

1. Which reads a radius of a circle and computes the area of the circle.
2. Which takes an ‘n’ digits integer number as input and computes the sum of the digits and prints it.
3. To check whether the number is palindrome or not.
4. To find the result of a student using class concept.
5. To Define a class employee having data members name, basic salary, net salary with the member function getdata(), showdata(). Calculate the net salary assuming appropriate % for all allowance and deductions using class concept.
6. To concatenate two strings using library functions.
7. To print Fibonacci series using constructor.
8. To find biggest of two numbers using function overloading.
9. To calculate area of triangle, rectangle and circle using function overloading.
10. To implement Multilevel inheritance by creating classes: Grand Father, Father and Son

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Program Flowchart/Algorithm 05 Marks
- ✓ Program Writing 15 Marks
- ✓ Correct output with proper display 10 Marks
  (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

FIFTH SEMESTER B.A (Computer Applications)

Computer Applications -V

BAC-5.1 DATABASE MANAGEMENT SYSTEM

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction DBMS: **10 hrs**

Meaning of data and information, definitions of database, applications of database system, definition of DBMS, disadvantages of file processing system (advantages of DBMS), three levels of data abstraction, difference between schema and instance, definition of data models, types of data models (brief explanation), database languages – DDL and DML.

Unit 2- E-R model : **10 hrs**

Different types of database users, functions of Database Administrator (DBA), basic-concepts - Primary keys, foreign key, super key, definition of E-R diagram, symbols used in E-R Diagram, E-R diagram for Banking enterprise, E-R diagram for Book store, types of entities, entity sets, attributes, types of attributes, weak entity sets, cardinality ratios (mapping cardinality).

Unit 3- Relational model: **10 hrs**

Fundamental operations of Relational algebra - select, project, union, set difference, join, division operations (explanation with examples). Types of aggregate functions – MAX, MIN, SUM, COUNT and AVERAGE (Definition with example).

Unit 4-SQL: **09 hrs**

Definition of Query, explanation of basic structure of SQL – Select, from and where clauses in SQL, data types in SQL, explanation of set operation in SQL – Union, intersection, except, NULL values.

Unit 5- Database: **09 hrs**

design Pitfalls in relational database design, definition of Normalization, Various types of Normal forms (Definitions only) – First Normal form, Second Normal form, Third Normal form, Boyce-Codd Normal Form (BCNF).

Reference Books:

1. Korth, Sudarshan "Database System concepts", Mcgraw Hill-IV Edition.
2. Navathe, Silberchatz and Elmasri "fundamentals of database Systems"-Addison Wesley-2004
3. C.J. Date "Introduction to Database systems" Addison-wesley. 4. Bipin C Desai "Introduction to Data base system" Galgotia publications

QUESTION PAPER PATTERN FOR V SEMESTER B.A (Computer Applications)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL :SQL LAB

I. Design an ER-Diagram for representing the BANK scenario.

II. Design an ER-Diagram for representing the College Library Scenario.

III. Use the default EMP and DEPTtables to write SQL statements for the followingqueries

1. Find the employee details in ascending order of their name and descending order of their salary
2. Find names of all employees whose name starts with ‘s’.
3. Find names of all employees who have atleast 6 characters in their name.
4. Find the details of all employees in the research department
5. Find the minimum, maximum and average salary of each department

IV. Create table with the following fields:

TEACHER (teacher-Id, Name, Subject(sub1,sub2,sub3))

Write SQL queries to perform the following:

1. List all the teachers whose teacher-Id lies between 10-20.
2. List all the teachers whose name starts with letter ‘a’.
3. Listall the teachers who are teaching ‘sub2’.
4. List the teacher whose teacher-Id is 12 and teaching ‘sub2’.

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Writing ER-Diagram-10 Marks
- ✓ Table creation & data insertion -10 marks
- ✓ SQL queries- 2 X 5 marks =10 marks[Queries writing 3 marks (each) and Execution 2 marks (each)]
- Viva – voce - 05 Marks
- Record - 05 Marks

FIFTH SEMESTER BA (Computer Applications)

Computer Applications -VI

BAC-5.2 JAVA PROGRAMMING

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction: **10 hrs**

History of Java, Java features, Difference between C/C++ and Java, Java and Internet, Java and WWW, Web browsers, Java support system, Java Development Kit (JDK), Application Programming Interface(API), Java Runtime Environment (JRE).

Unit 2-Overview: **10 hrs**

Structure of Java program, Java tokens, java character set, Java Statements, Implementing Java program, Java Virtual Machine, difference between Applets and applications,

Unit 3- Control Statements and operators in Java: **10 hrs**

Constants, Variables and Data Types in Java, Type casting, Arithmetic operators, relational operators, logical and assignment, conditional, bitwise and special operators, Control Statements: Branching Decision making – if, if-else, nested if, else-if ladder & switch and Looping statements with while, do-while, for statements.

Unit 4- Method overloading: **09 hrs**

Definition of a Class, syntax and example for the declaration and for defining the class, Objects, class members, Constructor, Method overloading, Inheritance: forms of inheritance, Method overriding, Visibility Controls.

Unit 5-Packages : **09 hrs**

Array – 1D array, declaration, creation and initialization of 1D array, Strings – String methods, Vector – Vector methods, , Defining, Extending and Implementing Interfaces, Definition of a Packages, Java API Packages, Creation, accessing and usage of packages.

Reference Books:

1. Programming with Java- A primer, 4th Edition, by E balaguruswamy.
2. The Complete Reference – Patrick Naughton and Schildt
3. Programming in Java – Joseph L Weber

QUESTION PAPER PATTERN FOR I SEMESTER B.A (Computer Applications)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL – JAVA PROGRAMMING LAB

1.Write a Java program to convert the given temperature in Fahrenheit to Celsius and display the values in tabular form.
2.Write a Java program to generate first n odd numbers.
3. Write a java program to find area of circle and rectangle using method overloading.
4.Write a Java program to find the circumference of the circle using interface.
5.Write a java program to sort the alphabets in the given string.
6.Write a Java program to create a vector, add elements at the end, at specified location onto the vector and display the elements. Write an option driven program using switch…case.
7.Write a java program to accept student information using array of objects and constructor initialization.
8.Write a java program to perform matrix addition and multiplication using case statement
9.Write a java program to implement constructor overloading by passing different number of parameter of different types.
10.Write a java program to accept studentinformation to perform relevantcomputation using single inheritance.

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Program Writing 20 Marks
- ✓ Correct output with proper display 10 Marks
  (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

SIXTH SEMESTER BA (Computer Applications)

Computer Applications -VII

BAC-6.1 INTERNET PROGRAMMING

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction: **10 hrs**

Internet basics, basic concepts, communicating on the internet, internet domain, internet server identities, establishing connectivity on internet, client IP address, Overview of TCP/IP and its services, TCP protocols – WWW,FTP, TELNET.

Unit 2-Introduction to HTML: **10hrs**

Information files creation, Web server, web client/browser, HTML tags, structure of HTML program, Text formatting, Text styles, text effects.

Unit 3-Lists: **10hrs**

Definition, types - Unordered and ordered list, adding graphics to HTML Documents. Tables – Definition, table tags and attributes. Definition of Link and its attributes, external and internal document references.Images as Hyperlinks.

Unit 4- Frames: **09 hrs**

Definition, tags, examples. Cascading Style Sheets (CSS) and its Attributes – font, color and background, text, border, list. Span and Divtags.External Style sheets.

Unit 5: Introduction to Javascript: **09 hrs**

Web pafes, Forms, Form validation, Netscape and javascript, Client side javascript, Advantages of javascript, writing javascript into HTML, Basic programming Techniques - Data types and literals, Creating Variables.

References:

1. Web enabled Commercial Application Development using HTML, JAVASCRIPT, DHTML and PHP, by IVAN BAYROSS, 4th Edition, BPB Publication.

QUESTION PAPER PATTERN FOR VI SEMESTER B.A (Computer Applications)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL – INTERNET PROGRAMMING LAB

1. Working with web browsers
2. Understanding the working of a web server
3. Home Page Design – Bio Data
4. Home Page Design – College
5. Home Page Design – With Audio Integrated
6. Home Page Design – With Video Integrated
7. Home Page Design – With Audio and Video Integrated
8. Home Page Design – With Animation

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
- ✓ Program Writing 20 Marks
- ✓ Correct output with proper display 10 Marks
  (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

SIXTH SEMESTER B.A (Computer Applications)

Computer Applications -VIII

BAC-6.2 SOFTWARE ENGINEERING & COMPUTER NETWORKS

Theory Examination- 50 Max marks. **Number of Teaching hours –48**

Internal Assessment- 10 Max marks

Unit 1- Introduction to Software Engineering: 10 hrs

IEEE definition of Software and Software Engineering, Software Problems, Software engineering challenges, Software quality attributes, phases in software development (Phased Development process), Definition of Software process, Component software process,desired characteristics of software process, Software development process models- waterfall model.

Unit 2- Software design: 09 hrs

Definition of SRS, need for SRS, Characteristics of SRS, Structure of SRS, design principles, module level concepts – coupling and cohesion.

Unit 3- Coding and testing : 09 hrs

Definition of Coding, Programming principles and guidelines, definition of testing, testing fundamentals, levels of testing, Difference between black box testing and white box testing.

Unit 4-Introduction to Computer networksand Network Hardware: 10 hrs

Definition of computer network, Goals of computer network, Types of Networks based on transmission technology - Broadcast, point- to -point, Types of Networks based on size & scale - LAN, WAN, MAN, Protocol hierarchies (Network software), Network topologies – Bus, Mesh, Ring, tree and star.

Unit 5- Network Software, Reference models and Transmission Media: 10 hrs

Reference models - OSI / ISO model, TCP / IP model, Transmission Media - twisted pair, coaxial cable, fiber optics cable, Internet and its applications, Wireless media - Bluetooth, Wi-Fi.

References:

1. An integrated approach to Software Engineering:PankajJalote.
2. Software Engineering a practitioners approach : Roger Pressman.
3. Computer Networks:5th Edition, Andrew S Tanenbau

QUESTION PAPER PATTERN FOR VI SEMESTER B.A (Computer Applications)

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions from 05 units, each question carrying 05 Marks, The student has to attend only 03 questions out of 05 questions.

PART- IV: 20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1
Question 2 from Unit 2 & Unit 3.
Question 3 from Unit 4 & Unit 5.

PRACTICAL: PROJECT LAB

PROJECT LAB EXAM SCHEME

The objective of the project is to motivate them to work in emerging/latest technologies, help the students to develop ability, to apply theoretical and practical tools/techniques to solve real life problems related to industry, academic institutions and research laboratories. The project is of 3 hours/week for one (semester VI) semester duration and a student is expected to do planning, analyzing, designing, coding and implementing the project. The initiation of project should be with the project proposal. The synopsis approval will be given by the project guides.

The Project work should be either an individual (one) or a group of not more than five members.

The project proposal should include the following:

- Title
- Objectives
- Input and output
- Details of modules and process logic
- Limitations of the project
- Tools/platforms, Languages to be used
- Scope of future application

The examiner will evaluate the project work as follows:

- Project Report - 10 Marks
- Project Demo - 10 Marks
- Viva-Voce - 20 Marks

KUVEMPU UNIVERSITY

Revised syllabus for BCA Course

And

BSc Computer Science Course

W.E.F 2016-17

DEPARTMENT OF STUDIES AND RESEARCH IN COMPUTER SCIENCE JANNASHAYADRI CAMPUS, SHAKARGHATTA

KARNATAKA,INDIA

KUVEMPU UNIVERSITY

DEPARTMENT OF COMPUTER SCIENCE

Syllabi of UG Courses in BCA and B.Sc (Computer Science)

For 2016-2017 New Batch

U. G. Board of Studies (BOS) in Computer Science

01	**Dr. Narasimhamurthy V.** Associate Professor, Govt. First Grade College, Shimogga	**Chairman**
02	**Dr. Prabhakar C.J** Assistant Professor, Dept. of Computer Science, Kuvempu University.	**Member**
03	**Shri. Ravikumar M** Assistant Professor, Dept. of Computer Science, Kuvempu University.	**Member**
04	**Dr. Suresha M** Assistant Professor, Dept. of Computer Science, Kuvempu University.	**Member**

Regulations for BCA course under semester scheme
(With effect from 2016-17)

Eligibility for Admission

1. A candidate who passed the three year Diploma in the branch of computer science, examination conducted by the board of Technical education, Government of Karnataka, shall be eligible for admission to first semester of BCA degree course.

2. A candidate who passed the two-year Pre-University examination in science/commerce of Karnataka state or any other examination considered as equivalent there to is eligible for admission to the first semester of BCA degree course.

3. If he/she is unable to pass or complete the degree within 6 years he/she should take readmission into BCA for I semester (study all the 6 semesters from first).

II) Claim of Exemption
A candidate who keeps terms for I, II and V semesters be allowed to keep terms for II, IV and VI semesters respectively, subjected to the following conditions:

1. A candidate who passes 50% of theory and practical's put together of I and II semester examinations (at the end of second semester) be allowed to keep terms for III semester.

2. A candidate who passes fully I and II semesters and 50% of theory and practical's put together of III and IV semesters examinations (at the end of IV semester) be allowed to keep terms for V semester.

BCA Regulations
For BSc course only students completing PUC or its equivalent examination with science subjects are eligible. For BCA course only students completing PUC or its equivalent examination with science subjects and PUC (Commerce) or its equivalent examination with Mathematics as one of the subjects are eligible.

R.1

a) Title of the course: Bachelor of Computer Applications (BCA)

b) Duration of the Course: The course shall be of three years duration spread over six semesters

c) Scheme of the Study:

- **i)** There shall be six theory papers and one practical each carrying 100 marks (80+20) for first semester and second semester
- **ii)** There shall be five theory papers, two practical papers each carrying 100 marks (80+20) from third to fifth semester
- **iii)** The project work shall be carried out either independently or jointly (minimum 3 students and maximum 5 students in a batch)
- **iv)** Medium of Instruction: The medium of instruction shall be English

d) Scheme of Examination:

i) At the end of each semester there shall be university examination of three hours duration in each of the theory paper/practical carrying 80 marks

ii) Internal assessment (IA) carrying 20 Marks in each of the theory Paper /practical shall be based on the performance of the student in two tests of one hour duration. No minimum for passing is required in IA

iii) At the end of the sixth semester each student shall able to submit the completed project report for the evaluation which shall be certified by internal guide and duly signed by the HOD and the principal. The project report and Viva-voce shall be evaluated by both Internal and External examiners.

R.2 Each semester shall be of 4 months duration

R.3 Attendance

Each student must have at least 75% attendance in each of the course (theory and Practical) in each semester. Shortage of attendance will be dealt with as per university rule from time to time.

R.4 Carry over system

A candidate is allowed to carry over maximum of 60% uncleared (failed) papers and/Practical's of previous semester to subsequent semesters from the first to sixth semester to subsequent semester from the first to sixth semester

R.5 The maximum period for completion of the course shall be six years from the date of admission

R. 6 Eligibility for admission:

a) Any student who has passed PUC-II in science or commerce subject secured a minimum of 35% of marks.

OR

b) Any student who has passed JOC(job Oriented Course) in Computer Technique/computer Applications/Electronics/Electrical branch with minimum of 35% of marks in aggregate in all the semesters/years.

OR

c) Any student who has passed diploma in engineering (Three years duration of course Regulated by and affiliated to AICTE) in computer science/Computer applications/Electronics/Electrical branch with minimum of 35% of marks in aggregate in all the semesters/years

OR

d) Any student who has passed Industrial training Institutes(ITI) (Regulated by and affiliated to AICTE) in Computer Science/Computer applications/Electronics/Electrical branch with minimum of 35% of marks in aggregate in all the semesters

R.7 Admission Procedure

a)Merit list shall be prepared based on marks obtained in eligible course.

b)Reservation: as per the notification/Govt.orders from the university/Govt from time to time.

R.8 Results:

a) Minimum for pass in each of theory paper/practical (computer lab)/Project report shall be 35% at the university semester examination.

b) The aggregate minimum for pass in each of the theory/Practical (computer lab)/Project work shall be 40% of marks in each course including IA/Viva-volcano minimum marks is required in IA/Viva-Voce

NEW SYLLABUS FOR BCA (EFFECT FROM 2016-17)

Semester	First	Weekly hours	Internal marks	External marks	total
Paper code	Subject				
BCA01/02/03/04	KAN/SANS/URDU/HINDI-I	4	20	80	100
BCA05	ENGLISH-I	4	20	80	100
BCA13	MATHEMATICS-I FOR COMPUTER APPLICATION	4	20	80	100
BCA14	COMPUTER FUNDAMENTALS	4	20	80	100
BCA15	C -PROGRAMMING	4	20	80	100
BCA18	DIGITAL FUNDAMENTALS	4	20	80	100
BCA17	C PROGRAMMING LAB	3	20	80	100
Total		27			700

Semester	second	Weekly hours	Internal marks	External marks	total
Paper code	Subject				
BCA01/02/03/04	KAN/SANS/URDU/HINDI-II	4	20	80	100
BCA05	ENGLISH-II	4	20	80	100
BCA23	MATHEMATICS-II FOR COMPUTER APPLICATION	4	20	80	100
BCA24	COA	4	20	80	100
BCA25	STATISTICS AND PROBABILITY	4	20	80	100
BCA26	DATA STRUCTURE USING C	3	20	80	100
BCA27	DATA STRUCTURE LAB	3	20	80	100
Total		27			700

Semester	THIRD	Weekly hours	Internal marks	External marks	total
Paper code	SUBJECT				
BCA01/02/03/04	KAN/SANS/URDU/HINDI-III	4	20	80	100
BCA05	ENGLISH-III	4	20	80	100
BCA33	OBJECT ORIENTED PROGRAMMING WITH C++	4	20	80	100
BCA34	SYSTEM SOFTWARE	4	20	80	100
BCA35	DATA BASE MANAGEMENT SYSTEM	4	20	80	100
BCA36	C++ LAB	3	20	80	100
BCA37	SQL LAB	3	20	80	100
TOTAL		26			700

Semester Paper code	FOURTH SUBJECT	Weekly hours	Internal marks	External marks	total
BCA01/02/03/04	KAN/SANS/URDU/HINDI-IV	4	20	80	100
BCA05	ENGLISH-II	4	20	80	100
BCA43	JAVA PROGRAMMING	4	20	80	100
BCA44	COMPUTER GRAPHICS AND MULTIMEDIA	4	20	80	100
BCA45	DATAWAREHOUSING AND DATA MINIG	4	20	80	100
BCA46	JAVA LAB	3	20	80	100
BCA47	CG LAB	3	20	80	100
TOTAL		26			700

Semester Paper code	FIFTH SUBJECT	Weekly hours	Internal marks	External marks	total
BCA51	ADVANCED JAVA PROGRAMMING	4	20	80	100
BCA52	DATA COMMUNICATION	4	20	80	100
BCA53	WEB TECHNOLOGY WITH PHP	4	20	80	100
BCA54	OPERATING SYSTEM	4	20	80	100
BCA55*	SOFTWARE ENGINEERING	4	20	80	100
BCA56	WEB TECHNOLOGY LAB	3	20	80	100
BCA57	ADVANCED JAVA LAB	3	20	80	100
TOTAL		26			700

Semester Paper code	SIXTH SUBJECT	Weekly hours	Internal marks	External marks	total
BCA61	COMPUTER NETWORKS	4	20	80	100
BCA62	DOT NET WITH C#	4	20	80	100
BCA63	UNIX AND SHELL PROGRAMMING	4	20	80	100
BCA64	UNIX AND SHELL PROGRAMMING LAB	3	20	80	100
BCA65	PROJECT LAB	3	20	80	100
TOTAL		18			500

NEW SYLLABUS FOR B.Sc. (Computer Science)

(EFFECT FROM 2016-17)

Paper code	Semester	SUBJECT	Weekly hours	Internal marks	External marks	PRACTICALS	total
BSC1	I	CF &CP	4+3	10	50	40	100
BSC2	II	DS	4+3	10	50	40	100
BSC3	III	DBMS	4+3	10	50	40	100
BSC4	IV	C++	4+3	10	50	40	100
BSC5	V	JAVA	4+3	10	50	40	100
		OS&UNIX	4+3	10	50	40	100
BSC6	VI	ADV JAVA	4+3	10	50	40	100
		SE&CN	4+3	10	50	40	100
TOTAL							800

FIRST SEMESTER BCA

BCA-13 : MATHEMATICS –I FOR COMPUTER APPLICATIONS

Number of Teaching hours – 48

Theory Examination- 80 Max marks.
Internal Assessment- 20 Max marks

Unit-1 SETS, RELATIONS AND FUNCTIONS 10hrs

Definition of a set,sub-set with examples,Venn digrams,types of sets-equal sets,null set,disjoint sets,finite set,infinite set,power set,cardinality of set.Operations on sets-union and intersection of two sets,complement of a set,difference of two sets,symmetric difference of sets.Algebraic properties of set operations,addition principle for two finite sets and for three disjoint sets.Computer representation of sets and subsets,strings and regular expressions. Definition of a relation with examples,types of relations-empty,universal,trivial,equivalence, reflexive, symmetric,transitive relation(definition and examples only,no problems).Definition of a function with examples,types of function,one-to-one(injective),Binay operation-commutative,associative,identity,invertible(definition and examples only,no problems).Functions for computer science-characterstic function,floor function,ceiling function.

Unit-2 LOGIC AND REASONING 10 hrs

Definition of proposition or statement, proposition variables, negation of statements,truth table, conjunction,disjunction,implications quantifiers- predicate,universal quantifier, universal quantification,existential quantification.Conditional statement/implication, contrapositive and converse,equivalence or biconditional, tautology, contradiction,logical equivalence, properties of proposition operation-commutative,associative,distributive,idempotent negation. Simple problems on tautology and equivalence. Rules for validting statements

Unit-3 MATHEMATICAL INDUCTION AND COUNTING 10hrs

Principle of mathematical induction,simple problems on principle of mathematical induction.Fundmental principle of counting(statement with examples only),permutations-definition and simple problems.combinations- definition and simple problems.pigenhole principle- statement and proof, extended pigenhole principle- statement and proof.

Unit-4 MATRICES 10 hrs

Definition of matrix and order of matrix,types of matrices-coumn matrix,row matrix,squre matrix,diagonal matrix,scalar matrix,identity matrix,zero matrix(definition and examples only,no problems),equality of matrices(definition and examples), simple problems on equality of matrices.operations on matrices-addition, subtraction, product of two matrices,scalar multiplication of a matrix,inverse of a matrix, simple problems on these operations.

Unit-5 DETEMINANTS **08 hrs**

Definition of determinant(definition and examples), determinant of matrix of order one , order two and order three(simple problems),properties of determinant(examples only, no verification),applications of determinants and matrices for solving the system of linear equations of two variables and three variables(simple problems),applications of determinant and matrices for checking the system of linear equations for consistency and inconsistency(simple problems).

Refence Books:

1.Text book of Mathematics – Shanthi Narayan
2.Text book of Mathematics – S. Lipschutz

QUESTION PAPER PATTERN

PART -I 05 Marks
There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART- II 75 Marks
There shall be 07 questions carrying equal 15 Marks.
Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions

Question Paper must contain:
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 2
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 4
Question 7 from Unit 5

BCA 14 COMPUTER FUNDMENTALS

Number of teaching hours – 48

Theory Examination- 80 Max marks.
Internal Assessment- 20 Max marks

Unit 1- Introduction to Computer Systems **10hrs**

Definition of a Computer, History of Computers, Generations of Computers, Block diagram of a Computer with functional units (explanation), Parts of a computer system with peripherals (explanation of peripherals), and essential computer hardware , Information processing Cycle.

Unit 2- Input and output device **05hrs**

Input devices-key board mouse, track ball, light pen, joy stick(explanation with diagram and working),outputdevices,monitors types of monitors printing and types of printers and working with advantages and disadvantages. Representation of data, text code-EBCDIC, ASCII, EXTENDED, ASCII, UNICODE. Memory: Tracks and sectors, cache memory Primary memory: RAM and its types,ROM and its types Secondary memory : hard disk,CD-ROM,DVD

Unit 3. Software: **08 hrs**

Definition of software, types of software's application and system software with example , assembler, compiler, interpreter, linker, loader (Definitions only).Classification of languages high level and low level language(assembly and machine level) advantage and disadvantages.Operating System Basics : Definition, functions of an operating system, types of operating system, graphical user interface - basic components of GUI.MS DOS COMMANDS with syntax and example : copycon,type,copy,rename,del,make directory,remove directory,dir and its types,copy files from one drive to other drive,tree,hiding files)

Unit 4- Problem Solving Techniques : **10 hrs**

Problem Definition, Problem Analysis, Design of Problems and Design Tools. ALGORITHMS: Algorithm-definition, Characteristics, Notations, Advantages and Disadvantages. FLOWCHART: Definition, Symbols, Advantages and Disadvantages. Debugging, Testing, Documentation and Maintenance. Writing an algorithm and flowchart : Area of circle, arithmetical operations, simple interest and compound interest, quadratic equation, largest of three numbers, sum of N natural numbers, factorial of number, Fibonacci series, prime number,reverse a given number.

Unit 5- Computer Networks -basic concepts **05 hrs**

Definition,uses of network,types of network,network topology,network transmission media(twisted pair,co axial,optical fiber), definitions of network terface card(NIC),Hub,Bridge,Switch,Router,Bandwidth),internet and its applications,understanding world wide web(how the web works,web browsers)

References:

1. Computer fundamentals- RAJARAMANNA
2. Computer fundamentals- P B KOTTUR

QUESTION PAPER PATTERN

PART -I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART- II 75 Marks

There shall be 07 questions carrying equal 15 Marks.
Each question must contain sub-questions-(a), (b), (c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions

Question Paper must contain:

Question 1 from Unit 1
Question 2 from Unit 2
Question 3 from Unit 2
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 4
Question 7 from Unit 5

BCA 15: C Programming

Number of Teaching Hours – 48
Theory Examination- 80 Max marks. **Internal Assessment- 20 Max marks.**

Unit 1- Introduction **8hrs**
History of c-programming, Features, basic program structure, character set, tokens, keywords and identifiers. Constants, variables, data types, variable declaration, symbolic constant definition.

Unit 2 –Operators **10hrs**
Arithmetic, relational, logical, assignment, increment and decrement, conditional, bitwise and special operators, Arithmetic expressions, precedence of operators and associatively. Type conversions, mathematical functions. Managing I/O operations – reading and writing a character, formatted and unformatted I/O. Review of algorithm and flow chart

Unit 3- Decision making, branching and looping **10hrs**
If and if-else statement, nested if, else if ladder, switch statement, ? operator, go to statement, while, do-while and for, nested for, infinity for loop, examples, break and continue statements.

Unit 4- Arrays and Functions **10hrs**
One and two dimensional arrays, array initialization. Strings - declaration and initialization of string variable, reading and writing strings, string handling functions. Functions – Need, syntax of function declaration, all types of functions, nesting of functions, categories, parameter passing mechanism, function with arrays, Recursion .

Unit 5-Structures And Pointers: Pointers- concept, pointer operator and operation **10hrs**
Pointer arithmetic, dynamic memory allocation, command line arguments. Structure Definition, declaration, accessing structure members, structure with in structure, example programs, structure with array, union and difference between structure and union with example programs,typedef,enum

Reference :

1. Computer Concepts and Programming, *Padma Reddy*
2. Let us C , Yashwanth Kanetkar
3. Ansi C, *Balagurusamy*

QUESTION PAPER PATTERN

PART- I 05 Marks
There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART- II 75 Marks There shall be 07 questions carrying equal 15 Marks.
Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions

Question Paper must contain:
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 4
Question 7 from Unit 5

BCA-16 DIGITAL FUNDAMENTALS

Number of Teaching Hours – 48
Theory Examination- 80 Max marks. **Internal Assessment- 20 Max marks.**

Unit 1- Number system and codes: **04 Hrs**
Binary number system, decimal number system, octal number system, hexadecimal number system. Bases inter conversions. Representation of negative numbers 1's and 2's complements. Codes:. BCD, GRAY, EXCESS-3.

Unit 2- Boolean algebra and logic systems: **10 Hrs**
Laws of Boolean algebra, Boolean laws. Evaluation of Boolean expression, De Morgan's theorems and proof, simplification on Boolean expressions using Boolean laws Basic gates (AND, OR, NOT): truth table, Definition, Boolean expression and symbols, universal gates (NAND, NOR): truth table, definition, Boolean expression and symbols, design of basic gates using NAND and NOR gates. Logical gates using NAND and NOR, Design of given Boolean expression using basic gates or NAND gate or NOR gate. XOR and XNOR gate (Definition, Boolean expression and symbols, truth table).

Unit 3- Simplification of Boolean functions: **12 Hrs**
SOP and POS form, min term and max term, expression of Boolean equation in Min and Max term(conversion of SOP and POS forms to standard form) **K-map method: Rules,** simplification of Boolean equation using K-map (up to 4 variables), without and with don't-care condition, Implementation using basic gates or NAND gate or NOR gate, Quine - Mc Cluskey Tabulation method ,determination and selection of prime implicates.

Unit 4- Combination logic: **08Hrs**
Design procedure, design of half adder and full adder, half subtract or and full sub tractor. Code converters:- BCD to Excess 3 code, gray code, magnitude comparator, encoders (BCD to decimal), decoder (decimal to BCD), multiplexer(4:1 and 8:1), de-multiplexer(1:4 and 1:8).

Unit 5- Sequential logic: **14 Hrs**
Introduction, Flip-flops – SR,JK, D, T, JK-MS (Detailed Study) Registers – Introduction, shift register- types and applications. Counters – synchronous and asynchronous counters (Up, down, up down and Mod counters, ring counter, Johnson counter) with timing diagram.

References:
1. Digital Logic and Computer Design- M. Morris Mono
2. Digital fundamentals – B.Basavaraj

QUESTION PAPER PATTERN

PART- I 05 Marks
There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART -II 75 Marks There shall be 07 questions carrying equal 15 Marks.
Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions

Question Paper must contain:
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 17 C- programming lab

PART - A

1. All roots of quadratic equation
2. First biggest and second biggest among n numbers
3. Prime numbers between M and N (M<=N)
4. Fibonacci series between M and N
5. Binary to Octal conversion
6. Sorting an unsorted array'
7. Deleting the repeated elements in an array

PART - B

8. Any four String handling function using switch-case
9. Addition of two matrices
10. Multiplication of two matrices
11. Comparison of [A] and $[A]^T$
12. Sum of upper triangular, lower triangular and diagonal elements of a square matrix.
13. Binary and linear search in an array using function
14. Norm and trace of a matrix

PRACTICAL EXAM SCHEME

Practical Proper - 60 Marks
Viva – voce - 10 Marks
Record - 10 Marks

C-Program	Flowchart/Algorithm	10 Marks
	2 Program Writing	30 Marks
	Error free Compilation or Partial output	10 Marks
	Correct output with proper display	10 Marks

SECOND SEMESTER BCA

BCA 23 MATHEMATICS –II FOR COMPUTER APPLICATIONS

Number of Teaching hours – 48

Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks.

Unit 1 - Groups theory 08 hrs

Definition of group, sub group, integral powers of element of a group, order of an element, properties related to order of an element of a group, cyclic groups, properties of cyclic group, coset decomposition of a group with examples

Unit 2 - Introduction to Graph theory 10 hrs

Definition of graph, graph as models, matrices and isomorphism, graph terminologies-definitions, properties and examples, Decomposition and special graphs. Paths, cycles and trails -connection in graphs, bipartite graphs, Eulerian circuits. Vertex degree and counting-counting extremal problems and graphic sequences and bijections paths, cycles and trails-connection in graphs

Unit 3 – Directed Graphs 10 hrs

Definition of directed graph, properties and examples, vertex degrees, Eulerian digraphs, orientations and tournaments. Trees and distance-basic properties, properties of trees, distance in trees and graphs, disjoint spanning trees, spanning trees and enumeration of trees, Hamilton paths and circuits, Representation and Isomorphism, colouring graphs. Decomposition of graphs, special graphs. Optimization and trees-minimum spanning tree, shortest paths, trees in computer science.

Unit 4 – Introduction to operations research 10 hrs

Nature and definition of OR, meaning, models characteristics, advantages. General methods for solving O.R..models - analytical, numeric and Monte Carlo. Advantages and scope. 10hrs

Unit 5 – Linear programming problem, transportation, assignment 10 hrs

Linear Programming Problems: Formulation (both minimization and maximization type) solution of LPP using graphical method. General LPP. Basic solutions and degenerate solutions. Standard form and canonical form. Characteristic features of LPP. Transportation problem(NWC,LC,VAM),Assignment problem, Travelling salesman Problem

Reference Books:

1. Introduction to Graph theory by S. Lipschutz
2. Operations research by S. D. Sharma
3. Operation Research by Kalavathi.
4. Discrete Mathematical Structures by Bernard Kolman

QUESTION PAPER PATTERN

PART -I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART- II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 24 COMPUTER ORGANISATION AND ARCHITECTURE

Number of Teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks.

Unit 1- Basic Structure of Computers **10hrs**
Basic operational concepts, Bus Structures, performance, Multiprocessors and Multicomputer, Historical perspective.

Unit 2- Machine instructions and programs **10 hrs**
Numbers, Arithmetic Operation and Characters, Memory Location and Addresses, Memory Operations, Instruction and Instruction Sequencing, Addressing Modes, Assembly Language, Basic Input/output Operation, Stacks and Queues, Subroutines, Additional Instructions.

Unit 3- Input/ output organization **10 hrs**
Accessing I/O Devices, Interrupts, Direct Memory Access, Buses, Interface Circuits, Standard I/O interfaces

Unit 4- The memory system **10 hrs**
Basic Concepts, Semiconductor RAM memories, Cache memories, Virtual Memories.

Unit 5- Basic processing unit **10 hrs**
Some fundamental concepts , execution of complete instruction, multiple-bus organization , introduction on hardwired control and Micro programmed control, distinguish between hardware control and micro control

References:

1. Computer organization : Carl Hamacher, Zvonko Vranesic and Safwat Zaky McGraw
2. Digital Logic and computer design : Morris Mano, M.
4. Computer Architecture and Organisation : Tanenbaum, A.S.
5. Computer Architecture and Organisation : Hayes, J.P

QUESTION PAPER PATTERN

PART- I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.

The student has to attend all the 05 questions.

PART- II 75 Marks

There shall be 07 questions carrying equal 15 Marks.

Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.

The student has to attend any 05 full questions

Question Paper must contain:

Question 1 from Unit 1

Question 2 from Unit 2

Question 3 from Unit 2

Question 4 from Unit 3

Question 5 from Unit 4

Question 6 from Unit 5

Question 7 from Unit 5

BCA 25 STATISTICS AND PROBABILITY

Number of teaching hours – 48

Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks.

Unit 1- Introduction to statistics 10 hrs

Definition of statistics, scope of statistics, characteristics of statistics, functions and limitations of statistics. Basic concepts(definitions only)-units/ individuals, populations/universe, sample, variable, attribute, discrete variable, continuous variable, qualitative data and quantitative data. Stages of Statistical method – collection, organisation/classification, presentation, analysis and interpretation of data (in brief).Classification of data-definition, objectives, types of classification. Definitions of frequency, class frequency, frequency distribution ,discrete frequency distribution, continuous frequency distribution, class-inclusive class and exclusive class, class limits, correction factor, open-end frequency distribution, mid-point or class mark, width/size of class number of classes, cumulative frequency, frequency density. Rules/Guidelines for classification. Tabulation-definition, objectives, types of tables-one way/simple, two way and manifold tables(dominions only).

Unit 2 -Analysis of Univariate data 10 hrs

Definitions-central tendency, average, arithmetic mean, mode, median, geometric mean and harmonic mean. Simple problems on arithmetic mean ,geometric mean and harmonic mean. Measures of Dispersion- range, range coefficient, mean deviation, mean deviation coefficient and standard deviation, standard deviation coefficient (definitions only). simple problems on mean deviation, mean deviation coefficient and standard deviation, standard deviation coefficient.

Unit 3 -Analysis of Bivariate data 10 hrs

Correlation-definition, types of correlation (i)based on number of variables-simple, multiple and partial correlation, (ii) based on direction of change –positive and negative correlation, (iii) based on change in proportion-linear and non- linear correlation(explanation in brief).Measurement of correlation-scatter diagram method to represent data(brief explanation with merits and demerits),Karl Pearson's coefficient of correlation formula and simple problems on this formula, Spearman's Rank correlation coefficient formula and simple problems on this formula.

Regression- definition, difference between correlation and regression, regression line, regression equation, properties of regression lines, uses of regression analysis. Simple problems on regression equations.

Unit 4 - Probability theory 10 hrs

Definition of probability, experiment, events, sample space. Types of events-simple, composite, equally likely, mutually exclusive, exhaustive, independent and dependent events(definition and examples).Classical definition of Probability with example, axiomatic

definition of probability with example. Union and intersection of two events with example. Definition of conditional probability, statement and proof of addition theorem of probability for two non-mutually exclusive events(theorem of total probability)and problems on this theorem, statement and proof of multiplication theorem of probability for two independent events(theorem of compound probability)and problems on this theorem. Bayer's theorem(statement only).

Unit-5 Probability distributions 08 hrs

Random variable-definition, types of random variables-discrete and continuous(definitions and examples only), definition of probability distribution, definition of mathematical expectation E(X) and variance V(X) of random variable 'X', types of probability distributions-Bernoulli distribution, Binomial distribution, Poisson distribution and Normal distribution(simple problems on these).

Reference Books:

1. Statistics and probability by B.M Aggarwal
2. Statistics by Rajmohan

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 4
Question 7 from Unit 5

BCA 26 DATA STRUCUTRES USING C

Number of Teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks.

Unit 1-Introduction 10 hrs

Review of structures and pointers(briefly),definition of data structure, types(primitive, noprimitive-linear and non linear).Linear data structure-Stack: Definition and example, operations, representation of stack in C, evaluation of postfix expression, conversion from infix to postfix using stack table. Recursion: Recursive definition, and process, Recursion in C, writing Recursive programs
efficiency of recursion- examples

Unit 2 – Queue 10 hrs

Definition and example, operations, representation of queue in C and its types- Ordinary queue, circular queue, priority queues, double ended queue.

Unit 3- Linked list 10 hrs

Definition and example, stack and queue operations using linked list, insert and delete node in between a list, circular linked list and doubly linked list (concepts only).

Unit 4- Trees 10 hrs

Tree terminologies, Binary tree, binary tree representation, types of binary tree - linked representation, tree traversals, and binary search tree and their applications, algorithm on searching element in a binary search tree, arithmetic expression in tree representation

Unit 5- Searching and Sorting 08 hrs

Basic search technique, sequential search, and its efficiency searching ordered table- index sequential search, Binary search, interpolation search, binary tree searching, Hashing (open address and close address).Sorting**:** General background, quick sort, insertion sort – simple insertion, shell sort, radix sort, selection sort, binary tree sort,
heap sort, merge sort.

Reference Books:

1. Data structures using C and C++ - Yedidyiah et al
2. Programming in ANSI C - E. Balaguruswamy
3. Data structures and programming design using C - Robert Kruse PIII publications
4. Data structures and applications - Trembly and Sorenson
5. Systematic approach to data structure Padmareddy

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:

Question 1 from Unit 1
Question 2 from Unit 1
Question 3 from Unit 2
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 27 DATA STRUCTURES LAB

Part – A

1. Implementation of stack
2. Evaluation of post fix expression
3. Implementation of queue
4. Implementation of circular queue using structures
5. Shell sort

Part – B

1. Conversion of infix to postfix
2. Implementation of stack using linked list
3. Implementation of queue using linked list
4. Binary tree traversals
5. Quick sort
6. Heap sort
7. Tree sort

PRACTICAL EXAM SCHEME

Record Manual- 10 Marks
Practical Proper - 60 Marks
Viva – voce - 10 Marks

Part –A	One Program Max marks 30	Flowchart/Algorithm	05 Marks
		Program writing	10 Marks
		Error free compilation or partial output	05 Marks
		Correct result with proper display	05 Marks
Part - B	One Program Max marks 30	Flowchart/Algorithm	10 Marks
		Program writing	10 Marks
		Error free compilation or partial output	10 Marks
		Correct result with proper display	05 Marks

THIRD SEMESTER BCA

BCA 33 OBJECT ORIENTED PROGRAMMING WITH C++

Number of Teaching hours – 48

Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks.

Unit 1 - Introduction to C++ and OOPS 08 hrs

Object Oriented Programming paradigm, Basic concepts of Object Oriented Programming-Classes, Objects, Data Abstraction and Encapsulation, Polymorphism, Inheritance, Dynamic binding, Message passing, Benefits of OOP, Object Oriented languages, applications of OOP.C++ features, Comparison with C, Structure of a C++ program, input and output statements Keywords, symbolic constants, type compatibility, declaration of variables, reference variables, operators in C++, control structures.

Unit 2 - Classes Objects and Member Functions 10 hrs

Limitations of structures in C, specifying a class, creating objects, memory allocation for objects static data members, arrays within a class, local classes. Defining member functions, call by reference, return by reference, inline functions, default arguments, making an outside function inline, nesting of member functions, private member functions, function overloading, static member functions, const member functions, pointer to members, friend and virtual functions.

Unit 3 - Constructors and Destructors 10 hrs

Introduction, constructors, parameterized constructors, multiple constructors in a class, constructors with default arguments, dynamic initialization of objects, copy constructor, dynamic constructors, constructing two dimensional arrays, const objects, destructors.

Unit 4 - Operator overloading 08 hrs

Introduction, definition, overloading unary operators, overloading binary operators, overloading operators using friends, string manipulations using operators, rules for operator overloading, type conversions.

Unit 5 - Inheritance and Templates 10 hrs

Inheritance definition, defining derived classes, types-single inheritance, making a private member inheritable, multilevel inheritance, multiple inheritance, hierarchical inheritance, hybrid inheritance, virtual base classes. Template definition, class templates, class templates with multiple parameters, function templates, function templates with parameters.

Reference Books:

1. Object Oriented Programming with C++ - E Balaguruswamy
2. Object Oriented Programming in Turbo C++ - Robert Lafore
3. C++ The complete Language – Bjarne Schildt

QUESTION PAPER PATTERN

PART -I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART- II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1
Question 2 from Unit 2
Question 3 from Unit 2
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 34 SYSTEM SOFTWARE

Number of Teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks.

Unit 1 - Machine Architecture 08 hrs

Introduction, System software and machine architecture, Simplified Instructional Computers (SIC) and its architecture, Instruction Formats of IBM-360.

Unit 2 - Assembler 10 hrs

Introduction, General design procedure, design of Assembler, statement of problem, data Structure, Format of Date bases, Algorithm for pass 1 and pass 2, look for modularity. Explanation along with flowcharts for both pass 1 and pass 2 (detail flowchart).Table Processing :Searching & Sorting - Linear and binary search , comparison, examples. Interchange sort,, shell sort, bucket sort, radix exchange sort, address calculation sort,. Random entry searching

Unit 3 - Macro Language and macro processor 10 hrs

Introduction, Macro instructions, Features of macro facility-macro instruction arguments, Conditional macro Expansion, Macro calls within macro, Macro instruction defining macro implementation: statement of problem, Specification of databases and specification of database format, Algorithm and flowchart for processing macro definitions and macro expansion

Unit 4 - Loader 10 hrs

Introduction, Loader schemes-compile and go loader scheme, general loader, Absolute loader, Sub routine linkage, Relocating loader, Direct linking loader, overlays, Dynamic loading.

Unit 5 - Compiler 10 hrs

Introduction, Statement of problem, Phases of compiler, Lexical phase, syntax phase, interpretation phase optimization phase, storage assignment phase, code generation phase, Assembly phase, passes of compiler. Data Structures: statement of problem, storage classes and its use.

References:

1. System programming – John. J. Donovan
2. System Software – Leland L. Beck, Third edition, Addison Wesley 1997
3. Systems programming and operating systems – Dhamdare

QUESTION PAPER PATTERN

PART -I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART- II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions

Question Paper must contain:
Question 1 from Unit 1
Question 2 from Unit 2
Question 3 from Unit 2
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 35 DATABASE MANAGEMENT SYSTEM

Number of Teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks.

Unit 1 - Introduction 10 hrs

Meaning of data and information. Meaning of persistent data, definitions for DBMS, database, database system, examples, database system applications. database management system vs. file management system, views of data, data independence, data models, database languages, database users and administrators, database system structure, application architecture, advantages of using DBMS, classification of DBMS, meaning of schema and instance.

Unit 2 - E-R Model 10 hrs

Using high-level, conceptual data models for database design, basic-concepts, constraints, keys, an example database application, E-R diagram, types of entities, entity sets, attributes, types of attributes, weak entity sets, cardinality ratios (mapping cardinality), specialization, generalization

Unit 3 - Relational Model 12 hrs

Structure of relational Databases, Relational algebra - select, project. union, set difference, rename, division operations, Modification of the database, queries using relational algebra. Extended relational algebra operations.SQL- Background, basic structure, set operation, aggregate functions, NULL values, nested sub queries, Views, complex queries, Modification of the database, joined relations, Data Definition Language**,** domain constraints, referential integrity in SQL. Assertions, authorization, privileges in SQL, Encryption techniques.

Unit 4 - Relational Database Design 10 hrs

Pitfalls in relational data base design, Normalization for relational databases. Normal forms based on primary keys, General definitions of first, second and third normal forms, Functional Dependency (concept and example) decomposition, Boyce-Codd Normal Form - definition and example, fourth Normal form - Multi valued Dependencies - definition and example.

Unit 5 - Storage and File Structure 06 hrs

Overview of physical storage media, RAID, Organisation of records in files, Data dictionary, Ordered indices, B+ tree, introduction to transactions.

Reference Books:

1. Korth, Sudarshan “Database System concepts”, Mcgraw Hill-IV Edition.
2. Navathe, Silberchatz and Elmasri “fundamentals of database Systems”
3. Addison C.J. Date “Introduction to Database systems” Addison-wesley.
4. Bipin C Desai “Introduction to Data base system” Galgotia publications

QUESTION PAPER PATTERN

PART -I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART- II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1
Question 2 from Unit 2
Question 3 from Unit 2
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 36 C++PROGRAMMING LAB

PART A

1. Write a c++ program to find the result of a student using class concept
2. Define a class employee having data members name, basic salary, net salary with the member function getdata() , showdata(). Calculate the net salary assuming appropriate % for all allowance and deductions using class concept
3. Define a class to represent product details it includes data member pname, pcode, price, pquality include member function a) to get product detail b) to display the product details and total price using class concept
4. Write a c++ program to print Fibonacci series using constructor
5. Write a c++ program to find biggest of two numbers and three numbers using function overloading
6. write a c++ program to calculate area of triangle, rectangle and circle using function overloading
7. write a c++ program to calculate family income using friend function

PART – B

8. write a c++ program to add two complex numbers using operator overloading
9. write a c++ program to concatenate two string using operator overloading
10. write a c++ program to implement multiple inheritance by creating classes- father, mother and son
11. write a c++ program to swap two numbers using function template
12. write a c++ program to sort an array using function template
13. Write a c++ program to define a class Bank Account including the following class members.
    DataMembers:, cust name, accno, balance.
    Member Functions: a) getdata(custname,accno,balance).
    b) display(accno).
    c) deposit(acno,amt).
    d) withdrow(accno,amt) updation aftern checking the balance.
    e) To display name & balance of all the records
14. Write a c++ program to implement multilevel inheritance by creating classes:
    College—> name_id, location,dept
    Student—>name ,reg_no, course, age
    DOB—>date, month, year, place

PRACTICAL EXAM SCHEME

Practical Proper - 60 Marks

Viva – voce - 10 Marks

Record - 10 Marks

Part –A	One Program Max marks 30	Program writing	15 Marks
		Error free compilation or partial output	05 Marks
		Correct result with proper display	05 Marks
Part - B	One Program Max marks 30	Program writing	20 Marks
		Error free compilation or partial output	10 Marks
		Correct result with proper display	05 Marks

BCA 37 SQL LAB

I. Use the default emp and dept table to write SQL statements for the following queries

1. Find the employee details in ascending order of their name and descending order of their salary
2. Find the name of all managers and number of employees under them
3. Find the details of all employees in the research department
4. Find the minimum, maximum and average salary of each department
5. Find department name having least number of employees
6. Find the department name having highest annual payroll
7. Add an employee under the manager smith
8. Find the employees who are not getting commission

II. Creat**e** tables as below

Student(name string, regno string primary key, dob date, doj date ,course string foreign key)

Markscard(regno foreign key, sem string, sub1 number, sub2 number, sub3 number, tot number, avge number, result string)

Write SQL statements for the following queries.

1. List the names of students studying in BCA course in the order of their joining
2. Find the name of student who has scored highest marks in every sem of each course
3. Count the number of students in each course
4. Find the course having second highest number of students
5. Find the course having least students in I semester
6. Display the details of student 'xxx' in every semester.
7. Find the names of al juniors of 'yyy' in course 'c1'
8. Find all students studying with 'xxx' and elder to him (compare DOB)

III Dept(deptno integer pkey, dname string not null, loc string not null)

Emp(eno integer pkey, ename string, deptno fkey, design string not null, bsal number>0)

Salary(eno fkey, da, hra,gross,it,pf,net,comm)

DESGN ARE manager,clerk,salesman

Comm=5% of basic if design=salesman otherwise null

Da=15% bsal hra = 7% of bsal gross=bsal+da+hra

It =0 if gross<15000

= 10% of gross if gross between 15000 and 30000

=20% of gross if gross between 30000 and 50000

= 30% of gross otherwise

pf = 10% of gross or 1000 whichever is less

Write SQL statements for

1. Count the number of employees in every designation
2. List the employees of every department in descending order of their net salary
3. List the name and salary of highest salary payer in every department
4. List the name of employee paying highest IT
5. List the total IT paid by each department
6. List the departments in every location
7. Raise the basic salary by 10% for the managers of every department.
8. Find the number of employees having atleast 10 years of experience in every department.

IV Create tables as below

Employee(eno, ename,street,city)
Company(cno,cname,city)
Works(eno,cno,sal)
Manages(mno,eno)

Write SQL statements for the following queries

1. Find the name of all employee working in the city in which they live
2. Find the company having most employee
3. Count the number of employees under each manager.
4. Find the company having second highest payroll
5. Find employee drawing more salary than his manager in every company
6. Raise the salary of every manager by 25%
7. Find name of employees who are not having managers
8. Find average, highest and lowest salary of every company

PRACTICAL EXAM SCHEME

Practical Proper - 60 Marks
Viva – voce - 10 Marks
Record - 10 Marks

Table Creation	2 Tables creation & data insertion from any two cycles	20 marks
SQL queries	2 SQL queries from I cycle and 6 SQL queries from any two other cycles for which tables created	40 marks
	Queries writing 3 marks (each)	
	Execution 2 marks (each)	

NOTE: Examiner has to ask 8 queries from two cycles in which students should answer minimum 3 queries in any one cycle

FOURTH SEMESTER BCA

BCA 43 JAVA PROGRAMMING

Number of Teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 - Introduction to Java and Java Program Structure 10 hrs

History of Java, Java features, Difference between C/C++ and Java, Java program structure, Java tokens, Statements, JVM, Introduction to packages in Java, Applets, Operators & Expressions, Data types, Constants and Variables, Type conversions, Mathematical functions; Control Statements: Decision making and Branching with while, do-while, for and labeled loops; Arrays, Vectors & Strings: Initialization, Declaration of 1D, 2D arrays, String arrays, String methods, Vectors, Wrapper classes.

Unit 2 - Overview 10 hrs

Class, Objects, Constructor, Method overloading, Static members; Inheritance: Single, Multilevel, Hierarchical, Visibility modes, Method overriding, Final variable, Abstract methods and classes; **Interface**: Defining, Extending and Implementing assigning interface variables

Unit 3 -Packages and multithreading 10 hrs

Java API Packages, using system packages, naming convention, accessing and using a package, adding a class to packages, hiding classes. Multithreaded programming: Creating a thread, extending the thread class, stopping and blocking a thread, life cycle of a thread, using thread methods, thread exceptions, thread priority, synchronization, implementing the runnable interface.

Unit 4 - Exceptions and Debugging 10 hrs

Meaning of errors and exceptions, Dealing with errors, Classifications of exceptions, syntax of handling exceptions, advertising the exceptions, throwing and rethrowing exceptions, creating Exception classes, multiple catch statements, finally clause, tips for using exceptions, Debugging techniques – tricks for debugging, Assertions, Java Debugger (JDB).

Unit 5 - Applets and Graphics 08 hrs

Applets basics, applets and application, Life cycle, Life cycle of Applet programming- passing parameter to applets, paint and repaint methods, Graphics class, Line, Rectangle, Circle, Ellipse, Arcs and Polygon. Using control loops in applets, drawing bar charts.

Reference Books:

1. Java, The Complete Reference – Patrick Naughton and Schildt
2. Programming in Java – Joseph L Weber
3. Java Programming – E Balaguruswamy

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1.
Question 2 from Unit 1
Question 3 from Unit 2
Question 4 from Unit 2 and 3
Question 5 from Unit 3
Question 6 from Unit 4
Question 7 from Unit 5

BCA 44 COMPUTER GRAPHICS

Number of Teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 - Introduction to Multimedia 10 hrs

Definition, CD-ROM and the multimedia highway, Uses of Multimedia, Introduction to making multimedia – The stages of Project, the hardware & software requirements to make good multimedia, Multimedia skills .Multimedia building blocks- SOUND: MIDI, Digital audio, audio file formats. Images: still images, color and file formats. ANIMATION: principles of animation, making animation. VIDEO: using video, how video works, and video standards.

Unit 2 - Introduction to Graphics applications 10 hrs

CAD , presentation graphics, computer art, entertainment, education and training, visualization, image processing. Display devices – raster scan displays – color CRT, DVST, LCD, 3D viewing devices. Raster scan systems, Random scan systems. List of I/O devices.

Unit 3 - Output primitives 10 hrs

Points and lines, line drawing algorithm, DDA algorithm, Bresenham's line algorithm, examples, parallel line algorithm, loading the frame buffer, circle generating algorithm, midpoint circle algorithm, ellipse generating algorithm. Pixel addressing and object geometry. Color and gray scale levels, color tables, character attributes.

Unit 4 - 2D Transformation 10 hrs

Basic Transformations- translation,. Scaling, rotation, matrix representation and homogeneous coordinates, composite transformations- translation, scaling, general pivot point and fixed point rotation, scaling directions, other transformations – reflection, shear, transformation between coordinates, inverse transformations.

Unit 5 - Windowing and Clipping 08 hrs

Introduction, the viewing transformation, viewing transformation implementation, clipping, the Cohen-Sutherland outcode algorithm, Liang-Barsky line clipping algorithm, the Sutherland-Hodgeman algorithm, the clipping of polygons and adding clipping to the system, text clipping, exterior clipping, curve clipping.

Reference Books:

1. Tay Vaughan “Multimedia – making it work”, TMH publication, fifth edition.
2. D Hearn & M P Baker: “Computer Graphics C version”, Pearson Education
3. D Newman and Sproull: “Principles of Interactive Computer Graphics -, TMH,II edition.
4. Steven Harrington “Computer graphics: A programming Approach”, TMH publication. Second edition
5. Roy plastock and Zhigang Xiang: “ Computer graphics”. Schaum’s outline series, II edition.

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 45 Data Warehousing and Data Mining

Number of teaching hours – 48

Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 - Data Warehousing and OLAP **10 hrs**

Data Warehouse basic concepts, Data Warehouse Modeling, Data Cube and OLAP, Data warehouse Schemes.

Unit 2 - Data Mining **10 hrs**

Introduction, Data Mining, Motivating Challenges, Data Mining Tasks, Technologies, Data Mining Applications, Data Preprocessing.

Unit 3 - Association Analysis **10 hrs**

Frequent Item set Generation, Rule Generation, Compact Representation of Frequent Item sets

Unit 4 - Classification **10 hrs**

Basics, General approach to solve classification problem, Decision Trees, Rule Based Classifiers, Nearest Neighbor Classifiers.

Unit 5 - Methods, Improving accuracy of Classification **08 hrs**

Methods, Improving accuracy of clarification methods, Evaluation criteria for classification methods, Multiclass Problem.

Text Books:

1. Pang-Ning Tan,Michael Steinbach,VipinKumar: Introduction to DataMining, Addison- Wesley, 2005.
2. G.K.Gupta:Introduction to DataMiningwithCaseStudies,3rd Edition,PHI,NewDelhi,2009

Reference Books:

1. Arun K Pujari: Data Mining Techniques University Press, 2nd Edition, 2009.
2. JiaweiHan and Micheline Kamber : Data Mining-Concepts and Techniques, II Edition, Morgan Kaufmann Publisher,2006.
3. Alex Berson and Stephen J.Smith: Data Warehousing, Data Mining, and OLAP Computing, McGrawHill Publisher, 1997.

QUESTION PAPER PATTERN

PART -I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.

The student has to attend all the 05 questions.

PART -II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.

The student has to attend any 05 full questions

Question Paper must contain:

Question 1 from Unit 1.

Question 2 from Unit 1

Question 3 from Unit 2

Question 4 from Unit 2 and 3

Question 5 from Unit 3

Question 6 from Unit 4

Question 7 from Unit 5

BCA 46 JAVA PROGRAMMING LAB

PART A

1. Write a Java program to generate first n odd numbers and pick and display prime numbers among them. Read value for n as command line argument.
2. Write a Java program to create a vector, add elements at the end, at specified location onto the vector and display the elements. Write an option driven program using switch…case.
3. Write a java program to find area of geometric figures (at least 3) using method overloading.
4. Write a Java program to find the circumference and area of the circle using interface.
5. Write a java program to perform matrix addition and multiplication using case statement
6. Write a java program to accept student information using array of objects and constructor initialisation.
7. Write a java program to accept student, employee information to perform relevant computation using hierarchical inheritance.

PART B

8. Write a java program to implement static and dynamic stack using interface using abstract class.
9. Write a java program to implement constructor overloading by passing different number of parameter of different types.
10. Define a package to contain the class sort to contain methods for various sorting techniques with time complexity (at least 3)Use this package to sort the list
11. Write a Java program to generate odd, even and Fibonacci numbers simultaneously using the concept of multi-threading.
12. Write a program to implement an applet by passing parameter to HTML
13. Write an applet program to display human face
14. Create an applet to display concentric n circles, input value for n.

PRACTICAL EXAM SCHEME

Practical Proper - 60 Marks

Viva – voce - 10 Marks

Record - 10 Marks

Part –A	One Program Max marks 30	Program writing	15 Marks
		Error free compilation or partial output	10 Marks
		Correct result with proper display	05 Marks
Part - B	One Program Max marks 30	Program writing	15 Marks
		Error free compilation or partial output	10 Marks
		Correct result with proper display	05 Marks

BCA 47 COMPUTER GRAPHICS PROGRAMMING LAB

PART A

1. Write a program to draw borders at the four corners of the screen.
2. Write a program Write a program to implement DDA line drawing algorithm
3. Write a program to implement Bresenham's line drawing algorithm
4. Write a program to implement Bresenham's line drawing algorithm for |m|<1
5. Write a program to implement Parallel line algorithm
6. Write a program to implement Mid point circle algorithm
7. Write a program to implement Ellipse generating algorithm

PART B

8. Write a program to continuously rotate an object about origin. Small angles to be used for successive rotation.
9. Write a program that applies any specifies sequence of transformations to a displayed object. The program is to be designed so that a user selects the transformation sequence and associated parameter from displayed menus, and the composite transformation is then calculated and used to transform the object. Display the original and transformed objects in different colours or different fill patterns.
10. Write a program to demonstrate clipping by defining world and viewing coordinates
11. Write a program to implement Cohen Sutherland line clipping algorithm
12. Write a program to implement Sutherland - Hodgeman polygon clipping algorithm

PRACTICAL EXAM SCHEME

Practical Proper - 60 Marks

Viva – voce - 10 Marks

Record - 10 Marks

Part –A	One Program Max marks 30	Program writing	15 Marks
		Error free compilation or partial output	05 Marks
		Correct result with proper display	05 Marks
Part - B	One Program Max marks 30	Program writing	20 Marks
		Error free compilation or partial output	10 Marks
		Correct result with proper display	05 Marks

FIFTH SEMESTER BCA
BCA 51 ADVANCED PROGRAMMING IN JAVA

Number of teaching hours – 48

Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 - Review of Java Concepts and AWT, Graphics Programming 10 hrs

Review of Java Concepts .AWT and AWT Classes, Window fundamentals – Component, Container, Panel, Window, Frame, Canvas. Working with frame window. Graphics Programming: Graphics class, methods, drawing objects, line graphs, polygon classes, working with colors and fonts. Advanced graphics operations using Java2D. Designing simple User Interfaces (UIs) using AWT, Layout Manages.

Unit 2 - Swing, Event Handling and Event Handling: 10 hrs

Event Handling: Basics of Event Handling, the delegation event model, AWT event hierarchy and event classes, Event Listener Interfaces, Adapter Classes, Event queue. Swing: Meaning, need difference between AWT and swing. The Model-View-Controller (MVC) design patterns, Creating simple UIs using swing, and handling basic events.

Unit 3 - Java Beans, Java Archives (JAR) 10 hrs

Meaning and need of Java Beans, Advantages, Bean writing process, Bean properties. Java Archives (JARs): Meaning, need, the JAR utility, Creating JAR files.

Unit 4 - File Management and JDBC 10 hrs

File, creating a file, writing to a file, opening a file, reading from a file, file management, checking existence of a file, deleting a file. JDBC: Meaning, need, concept and structure of JDBC, relation with ODBC, JDBC driver types and their meaning, the JDBC process – loading the driver, connecting to the DBMS, creating and executing SQL statement, Connection object, Statement object, Prepared Statement object, Callable Statement, Result Set, JDBC Exceptions.

Unit 5 -Fundamental concepts of Collections, Generics and Network programming 08 hrs

Collections: Meaning, need, Collection interfaces, Concrete Collections – Array List, Hash set, Map. Generics**:** Meaning, need, benefits, generics usage, basics of generic types, type parameter naming conventions, type wildcards, using type wildcards, generic methods, bound types, writing simple generic container, implementing the container, implementing the constructors, implementing generic methods. Network programming**:** Meaning of Client, Server, Socket, port. Creating a client socket, creating a server socket, writing simple server and client.

Reference books:

1. The Complete Reference – Java 2: Herbert Schildt, 5th Edition, Tata McGraw-Hill
2. Thinking in Java: Bruce Eckel
3. Core Java 2: Volume I – Fundamentals: Cay S. Horstmann, Gary Cornell, Pearson Education Asia.
4. Core Java 2: Volume II – Advanced Features: Cay S. Horstmann, Gary Cornell, Pearson Education Asia.

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1
Question 2 from Unit 2
Question 3 from Unit 2
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 52 Data Communication

Number of Teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 - Introduction to Data Communication 08 hrs

Communication model & Data Communication networking -types. Data Transmission- Transmission terminology, Analog & Digital data transmission, Transmission impairments – attenuation, delay distortion & noise.

Unit 2: Data Transmission media 10 hrs

Guided Transmission- types- Twisted pair, coaxial cable & optical fiber – physical description, application & characteristics. Unguided Transmission- wireless transmission: types- Terrestrial type, Satellite, Broadcast radio – physical description, application & characteristics.

Unit 3: Data encoding 10 hrs

Basics, types and description of different signals, Digital data & digital signals: NRZ, multilevel binary, Bi phase techniques. Digital data & Analog signals: Encoding techniques- ASK, FSK, PSK Analog data & Digital signals: PCM & delta modulation Analog data & Analog signals: Modulation- AM & FM Spread spectrum: Frequency hoping, direct sequence Asynchronous & synchronous transmission: Line configurations- full duplex & half duplex.

Unit 4 - Data link control & medium access sub 10 hrs

Flow control: Stop and wait & sliding window flow control. Error detection: Parity check, CRC Error control: Stop and wait ARQ, Go Back-N ARQ High-level data link control: basics, Characteristics, frame structure, operation Medium access sub layer- the channel allocation problem. Multiple access Protocol-ALOHA, carriers sense multiple access protocol, collision free protocol.

Unit 5 - Multiplexing and Switching 10 hrs

Frequency division multiplexing- characteristics, anlog carrier systems, Time division multiplexing- characterstics, link control. Digital carrier system, ISDN user network interface. Circuit switching networks- switching concept, space division & time division switching- Pocket switching networks-principles, switching technique, and packet size. Comparison of Circuit switching & Pocket switching

Reference books:

1. Data and Computer Communications – William Stallings.
2. Computer Networks – Andrew S. Tanenbaum.
3. Data Communication – Ulysis D Black.
4. Data Communication and Networking – Behrouz A. Forouzan.
5. Internetworking with TCP/ IP – Douglas E comer, PHI

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 53 Web programming with J2EE Concepts and PHP

Number of teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 – Introduction 08hrs

Internet, WWW, Web Browsers and Web Servers, URLs, HTTP, Evolution of the Web, Peak into the History of the Web, Internet Applications, Important Components of the Web, Web Search Engines, Application Servers.HTML and DHTML Concepts : Programming structure, different basic tags , Images, Hyper text Links. Lists, Tables, Forms, Frames. Cascading Style Sheets**:** Introduction, Levels of style sheets, Style specification formats, Selector forms, Property value forms, Font properties, List properties, Color, Alignment of text, The box model, Background images, The and tags.

Unit 2 – The JavaScript 10 hrs

Overview of JavaScript, Execution Environment, Object orientation and JavaScript, Syntactic characteristics, Primitives, operations, and expressions, Arrays, Functions, Pattern matching using regular expressions, Examples. Events and Event Handling,

Unit 3 – Client – Server Systems 10 hrs

Meaning of client and server, Client-Server architecture, benefits, concept of ports and sockets. Protocol – Meaning, definition, examples, meaning of stateless and state (state full) protocols. HTTP protocol – meaning, http protocol request and response header formats, status codes. Client-Server communication scenario.

Unit 4 – JEE Technology Concepts 10 hrs

Multi-tier architecture for application development – Meaning, need, advantages. Meaning of enterprise application and web application, various tiers in enterprise application – client tier, web tier, business tier, enterprise information system tier. Introduction to JEE concepts – Need, advantages, characteristics of JEE technology, the concepts of containers, components and services – meaning of web container, application client container, EJB container.

Unit 5 – Basics of PHP and Java Server Pages Programming Concepts 10hrs

Introduction to JSP - language structure, advantages, characteristics, comparison between Java and Java Server Pages. Various aspects of Java Server Pages programs, writing and executing JSP programs. Writing dynamic programs using JSP. Database programming through JSP. Basics of PHP : Introduction ,variables ,functions, sessions, date, mysql integrations with php, file uploading.

Reference books:

1. The Complete Reference – J2EE – Jim Keogh
2. J2EE – Kevin Mukhar, James L. Weaver, James P Crume, Ron Phillips
3. learning php and mysql 4th Edition Robin Nixon.
4. Begining php-5 and Mysql Cristian Darie.

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.

The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.

The student has to attend any 05 full questions

Question Paper must contain:

Question 1 from Unit 1.

Question 2 from Unit 1

Question 3 from Unit 2

Question 4 from Unit 3

Question 5 from Unit 4

Question 6 from Unit 5

Question 7 from Unit 5

BCA 54 OPERATING SYSTEM

Number of teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 – Introduction 10 hrs

Definition of Operating System, need. Early systems – Simple monitors, Batch Systems. Multiprogramming, Time Sharing, Real time, Parallel and Distributed systems. Special Purpose Systems – Real Time Embedded Systems, Multimedia Systems, Handheld Systems. Computing Environments – Traditional, Client Server, Peer-to-Peer and Web based. Open Source Operating Systems.

Unit 2 – Process Management 10 hrs

Process concept – meaning of process, sequential and concurrent processes, process state, process control block, threads, Process scheduling – scheduling queues, schedulers, context switch. Operations on Processes – creation and termination. Inter process communication – Independent and co-operating processes. Communication in client-server systems – RPC and RMI. Process scheduling – Basic concepts

Processor - CPU I/O burst cycle, CPU Scheduler, Preemptive scheduling, dispatcher. Scheduling criteria, Scheduling algorithm – First-Come-First-Served (FCFS), Shortest Job First (SJF), Priority Scheduling, Round Robin. Multi-level queue scheduling (Concepts only), multi-level feedback queue scheduling (Concepts only). Multiple processor scheduling, Real time scheduling.

Unit 3 – Deadlocks 10 hrs

Definition with example, System model, Dead lock characterization – Necessary Conditions, Resource Allocation Graph, Dead lock prevention, Avoidance and detection, Recovery from dead lock.

Unit 4 – Memory Management 10 hrs

Logical and Physical address space, Swapping, Contiguous allocation, Paging, Segmentation, Virtual memory - demand paging and its performance, Page replacement algorithms, Allocation of frames, Thrashing.

Unit 5 – Disk and File Management 08 hrs

Secondary Storage Structure and Disk Management: Disk structure & scheduling methods, Disk management, disk reliability. File concepts, Access methods, Directory structure, Protection and consistency semantics, File system structure, Allocation methods, free space management.

References:

1. Abraham Silberschatz and Peter Baer Galvin, Operating System Concepts, Fifth edition, Addison - wesley 1989.
2. Milan Milonkovic, Operating System Concepts & Design, II Edition, McGRaw Hill 1992.
3. Stallings, Operating Systems, Pearson Edition.
4. Tanenbaum, Operating System Concepts, Pearson Education
5. Nutt : Operating System, 3/e Pearson Education 2004

QUESTION PAPER PATTERN

PART -I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART- II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1
Question 2 from Unit 2
Question 3 from Unit 2
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 55 SOFTWARE ENGINEERING

Number of teaching hours – 48
Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 – Introduction **10hrs**

Definition of software, software problems (industrial strength software, software is expensive, late and unreliable maintenance and rework), software engineering challengers (scale, quality and productivity, attributes), software engineering approach (phased development process, managing process, components.

Unit 2 – Software processes **10hrs**

Introduction to software process (processes and process modules, component of software process), characteristics of software process (predictability, support testability and maintainability, support change, early defect removal, process improvement and feedback), software process models (waterfall, prototype, iterativ enhancement model, spiral, comparison of process models).

Unit 3 – Software Planning **10hrs**

Introduction to planning, effort estimation (uncertainties, building efforts, bottom-up, COCOMO model), project scheduling and staffing (overall, detailed scheduling, team structure), risk management (concepts, assessment), project monitoring plan (measurements, project monitoring and tracking).

Unit 4 – Analysis and Design **10hrs**

Software requirements (needs and requirement process), problem analysis (informal approach, data flow modeling, object oriented modeling, prototyping), requirement specification (characteristics of SRS, components of SRS, specification language, structure of requirement document), validation. Design: Function oriented design: design principles, module level concept (coupling, cohesion), structure design methodology (DFD, first level factoring).

Unit 5 -Coding and Testing **08 hrs**

Coding: programming principles and guidelines (common coding errors, structured programming, information hiding, some programming practices, coding standards), refactoring (basic concepts with examples, common refactoring), verification (code inspections, static analysis, proving correctness, unit testing).Testing: testing fundamentals, black box and white box testing, comparison between black box and white box testing, testing process (levels of testing, test plan).

Reference books:

1.An integrated approach to software engineering-Pankaj Jalote.
2.Roger Pressman, Software Engineering- A Practitioner's Approach TMH
3.Ian Sommerville, Software Engineering, Pearson Publications Ltd.

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions

Question Paper must contain:
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 2
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 5
Question 7 from Unit 5

BCA 56 WEB PROGRAMMING LAB WITH J2EE CONCEPTS AND PHP

Part – A

1. Create a webpage using html to display college information with appropriate images and list of departments.
2. Create a webpage using html to display the below mentioned table (use appropriate colors):

Name		**Place**
Rama	R	Bhadravathi
Kumar	B	Shimoga
Rajesh	S	Thirthahalli
Ramakrishna	RK	Bhadravathi

3. Create a webpage with two images which alternately changes on mouse over using CSS.
4. Create a webpage to display system date in the given format: Ex: 01 January 2016
5. Create a webpage to demonstrate the use of external Cascading Style Sheets
6. Create a webpage to demonstrate the use of span and div tags in DHTML.
7. Create a webpage with two textboxes and command buttons to perform arithmetic operations and display the result in appropriate dialog boxes using JavaScript.
8. Create a webpage to convert a given text from uppercase to lowercase using JavaScript.

Part – B

9. Write a JSP application to read the details of a student and store the same on to the MS Access database.
10. Write a JSP application to evaluate the salary details of an employee and store the same in the MS Access database table.
11. Write a multilayered JSP program to evaluate the result of a student. Consider student name, register number, marks obtained in 5 subjects as input and read them by writing a proper user interface JSP. Evaluate the total marks, percentage marks and grade by writing a process JSP. While evaluating the grade verify whether the student has cleared all the papers. Display the output with proper marks list format by using <TABLE> tag.

College Name
Marks List
Name of the Student :
Register Number :

Subjects	Max. Marks	Min. Marks	Marks Obtained
1. Subject1	100	40	--
2. Subject2	100	40	--
3. Subject3	100	40	--
4. Subject4	100	40	--
5. Subject5	100	40	--
Total Marks	500	200	--
Percentage Marks:	-- %		
Grade:	----		

12. Write a multilayered JSP application to accept and store student information. Accept student name, register number, course, combination, semester, marks obtained in five subjects as input through a proper user interface page. Design course, combination and semester as combo boxes. Store the accepted details in the MS Access table.
13. Write a multilayered JSP application to read and store employee information. Read employee name, employee identification number, Department, Designation, Basic Salary, TA, DA, HRA, PF, LIC (in percentage) as input through a proper user interface page. Also calculate TA Amount, DA Amount, HRA Amount, PF Amount, LIC Amount, Total Allowances, Total Deductions, Gross Salary and Net Salary components of the employee. Along with the employee information store the salary details in the MS Access table.
14. Write a program to connect the mysql-database and display connection status using PHP.
15. Write a program to upload and display an image using PHP.

PRACTICAL EXAM SCHEME

Practical Proper - 60 Marks

Viva – voce - 10 Marks

Record 10 Marks

Part –A	One Program Max marks 25	Program writing	15 Marks
		Error free compilation or partial output	05 Marks
		Correct result with proper display	05 Marks
Part - B	One Program Max marks 35	Program writing	20 Marks
		Error free compilation or partial output	10 Marks
		Correct result with proper display	05 Marks

BCA 57 ADVANCED JAVA PROGRAMMING LAB

Part A

1. Write an Applet program to design a user interface to key-in the details of an employee.
2. Write an applet to add, remove, select an item in a list
3. Write a applet display select geometric figure from a list.
4. Write a program to implement mouse events
5. Write a program to implement keyboard events
6. Write a Java program (console) to store the typed text to a file.
7. Write a Java program to display the content of a file.
8. Write a Java program to edit the content of a file.

Part B

9. Write a Java program with JDBC to store the details of a person on to an Oracle database table.
10. Write a Java program with JDBC to access and display the details of a person stored in an Oracle database table.
11. Write a Java program with JDBC to access and delete the details of a given person stored in an Oracle database table.
12. Write a Java GUI program to accept the details of an employee and store the same on to an Oracle database table.
13. Write a Java GUI program to access and display the details of a given employee stored in Oracle database table.
14. Write a Java program to design a simple Client and Server components. Pass simple text (static) from client to the server and a receipt acknowledgement (static) back to the client.
15. Write a Java program to demonstrate the use of generics.

PRACTICAL EXAM SCHEME

Practical Proper - 60 Marks

Viva – voce - 10 Marks

Record 10 Marks

Part –A	One Program Max marks 25	Program writing	15 Marks
		Error free compilation or partial output	05 Marks
		Correct result with proper display	05 Marks
Part - B	One Program Max marks 35	Program writing	20 Marks
		Error free compilation or partial output	10 Marks
		Correct result with proper display	05 Marks

SIXTH SEMESTER BCA
BCA 61 COMPUTER NETWORKS

Number of teaching hours – 48

Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 - Basics **10 hrs**

Uses of computer networks, network hardware- broadcast networks, point – to -point networks, network software-protocol hierarchies, design issues, interface & services, connection oriented & connection less services, service primitives

Unit 2: Reference models **10 hrs**

OSI reference model- description of each layer. TCP/IP reference model, comparison of the two models, Critique of the OSI model and protocols, Critique of the TCP/IP model and protocols, Example networks-ARPANET,ATM.

Unit 3: The network layer **10 hrs**

Design issues, routing algorithms- the optimality principle, shortest path routing, distance vector routing, and link state routing. Congestion control algorithms- general principle, Congestion prevention policies, traffic shaping. The network layer in the internet - the IP protocol, IP address, and subnet. Internet control protocol.

Unit 4: The transport layer **10 hrs**

The transport service- services provided to the upper layer, quality service, and transport service primitives. Elements of transport protocol - addressing, establishing a connection, releasing a connection. A simple transport protocol- the example service primitives, the example transport entity. The Internet transport protocol (TCP & UDP)- the service model, the TCP segment header, the TCP connection management. UDP - header.

Unit 5: The Application layer **08 hrs**

Network security - traditional cryptography, two fundamental cryptographic principles, secret key & public key algorithms. DNS - Name space, SNMP - model. Electronic mail, architecture and services, www.

Reference books:

1. Data and Computer Communications – William Stallings.
2. Computer Networks – Andrew S. Tanenbaum.
3. Data Communication – Ulysis D Black.
4. Data Communication and Networking – Behrouz A. Forouzan.
5. Internetworking with TCP/ IP – Douglas E comer, PHI

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.
The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks .Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.
The student has to attend any 05 full questions
Question Paper must contain:
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 2 and 3
Question 4 from Unit 3
Question 5 from Unit 4
Question 6 from Unit 4
Question 7 from Unit 5

BCA 62 DOT NET PROGRAMMING

Number of teaching hours – 48

Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 - Introduction to C# & .NET platform and Building C# Applications 08hrs

Introduction to C# and .NET platform : .NET solution, Building blocks of the .NET platform(CLR, CTS, CLS), Role of .NET base class libraries, .NET Aware programming languages, role of common intermediate languages & type metadata and assembly manifests, A tour of the .NET namespaces.

Building C# Applications : Role of the command line complier(csc.exe), Building a C# application using csc.exe, the command line debugger(cordbg.exe), using the visual studio .NET IDE & its debugging, C# ”pre-processor” directives.

Unit 2 - C# language fundament mentals 10hrs

Anatomy of a basic C# class, creating objects: constructor basics, Default assignments & variables scope, variables initialization syntax, basic inputs & output with the console class, understand static methods, arrays & string manipulations, Encapsulation Services, Class Properties , Read and Write only Properties, Static Properties, Inheritance Is As keyword Usage, Controlling Base Class Creation With Base, Sealed Classes, Delegation , Polymorphism, The Virtual and Override Keywords ,Abstract Classes, Abstract Methods

Unit 3 - Exception & object life time and Interface and Collections 10hrs

Exception & object life time :The Basics of Object Life Time, The Role Of Application Roots, Understanding Object Generations, The Role Of .NET Exception Handling ,Throwing a Generic Exception ,Catching Exceptions, Properties of Exception, Multiple Exception (Concepts Only),The Finally Block

Interface & Collections : Definition, Implementing an Interface in C#, Interface members at object level, Interface as Parameters, Interface as Return Values, Arrays of Interface Types, Interface Hierarchies, Interface as polymorphic agents, Exploring the system. collections Namespaces.

Unit 4 - Introducing windows forms 10hrs

Overview of the system. windows. Forms Namespaces, An Anatomy of a Form, A Simple Form Program, Function with Control Class, The Functionality Of the Form Class, Component class, control class, Programming with windows forms controls : Working with Button types, Check Boxes, Radio Buttons, Group Boxes, List Boxes, Calender control, assigning tool tips for controls.

Unit 5 - Data access with ADO.NET **10hrs**

The Two Faces Of ADO.NET, Understanding ADO.NET Data Providers, Understanding The Connected Layer of ADO.NET, Working with Connection Object, Inserting, Updating and Deleting Records

References Book:

1 Pro C# with .NET 3.0 ------ Andrew Troelsen

2 C# Programming ---------- E Balaguruswamy

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.

The student has to attend all the 05 questions.

PART II 75 Marks There shall be 07 questions carrying equal 15 Marks.

Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.

The student has to attend any 05 full questions

Question Paper must contain:

Question 1 from Unit 1.

Question 2 from Unit 1

Question 3 from Unit 2

Question 4 from Unit 3

Question 5 from Unit 3

Question 6 from Unit 4

Question 7 from Unit 5

BCA 63 UNIX Operating System

Number of teaching hours – 48

Theory Examination- 80 Max marks. Internal Assessment- 20 Max marks

Unit 1 - Introduction 08 hrs

The Unix operating system, , A brief Session, The Unix Architecture, Features of UNIX, POSIX and Single UNIX specification, Locating commands, Internal and External commands, Command Structure, Flexibility of command Usage, Man Browsing the Manual Pages ON-line, Understanding the man Documentation. General-Purpose Utilities: Cal command, date command, echo, printf, bc, script, passwd, who, uname.

Unit 2 - The File System 10 hrs

The file, The Parent –Child Relationship, The HOME Variable, pwd, cd, mkdir, rmdir, Absolute Pathname, Relative Pathname, ls, The Unix File system. Handling Ordinary Files: Cat, cp, rm, mv, more, The lp subsystem: Printing a File, File, wc, od, cmp, comm, diff, dos2unix and unix2dos, compressing and archiving files, gzip, and gunzip, tar, zip and unzip.

Basic File Attributes: Listing file attributes, listing directory attributes, File Ownership, File Permissions, changing file permissions, Directory Permissions, Changing File Ownership.

Unit 3 - The Vi Editor 10 hrs

Vi basics, Input Mode, Saving Text and Quitting, Navigation, Editing Text, Undoing Last Editing Instructions(U and U), Repeating the last command(.), Searching for a Pattern(/ and ?), Substitution.

Unit 4 - The process 10 hrs

Process basics, process status, system process, Mechanism of process creations, Internal and external commands, process states and zombies, running jobs in background, nice, killing process with signals, job control, at and batch, cron, timing process.

Simple filters: The sample database, pr, head, tail,cut, paste, sort, uniq, tr, displaying a word-count list. Filters using regular expressions: grep, basic regular expressions, extended regular expressions.

Unit 5 - The Shell 08 hrs

The shell's Interpretive Cycle, Shell Offering, Pattern Matching, Escaping and Quoting, Redirection, /dev/null and /dev/tty, Pipes, tee, Command Substitution, Shell variables. Essential shell programming: Shell scripts, read, using command line arguments, exit and exit status of command, the logical operators && and ||- conditional execution, the if conditional, using test and to evaluate expressions, the case conditional, expr, $0: calling a script by different names, while, for, set and shift, the here document (<<), trap, debugging shell scripts with set –x, sample validation and data entry scripts.

References :

1. Sumitabha Das, UNIX System V.4, Concepts and Applications, TMH

QUESTION PAPER PATTERN

PART I 05 Marks

There shall be 05 questions from all the Units and each carrying 01 Marks.

The student has to attend all the 05 questions.

PART II 75 Marks

There shall be 07 questions carrying equal 15 Marks. Each question must contain sub-questions-(a),(b),(c) and marks of a sub- question should not be more than 05 Marks.

The student has to attend any 05 full questions

Question Paper must contain:

Question 1 from Unit 1.

Question 2 from Unit 2

Question 3 from Unit 2

Question 4 from Unit 3

Question 5 from Unit 4

Question 6 from Unit 4

Question 7 from Unit 5

BCA 64 UNIX LAB

PART A

1. Write a shell script to count the number of characters in a given string.
2. Write a shell script program to perform all arithmetic operation on floating point
3. Write a shell script program to check whether the given no. is positive or negative.
4. Write a shell script program to find area of a square, rectangle, circle and triangle.
5. Write a shell script program to reverse a number.
6. Write a shell script program to find sum of digit of a no.
7. Write a shell script program to add, subtract, multiply the two given numbers passed as command ling arguments.
8. Write a shell script program to read data from command line argument and print 1st and 2nd command line argument and print how many no. of argument user has given.

Part – B

1. Write a shell script program to read pattern and file name and search whether the given pattern is present in a file or not, with suitable validation.
2. Write a shell script program to check whether the given file is present in a directory and check what are all the permission given for the owner.
3. Write a shell script program to read filename from command line argument and check whether the file is regular file or directory or by both.
4. Write a shell script program to read 2 filename and check which 1 is newer and which 1 is older.
5. Write a shell script program to find the number of directory files and ordinary files in the current directory.
6. Write a shell script program to perform the following any 1 operation based on your own
    a. choice.
    b. show first 5 line data
    c. show last 3 line data
    d. sort the data
    e. find out word count

7. Write a shell script program to perform the following any 1 operation on your own choice.
    a. list the file
    b. process the user
    c. today's date
    d. user of the system
    e. exit

PRACTICAL EXAM SCHEME

Practical Proper - 60 Marks

Viva – voce - 10 Marks

Record 10 Marks

Part –A	One Program Max marks 30	Program writing	15 Marks
		Error free compilation or partial output	10 Marks
		Correct result with proper display	05 Marks
Part - B	One Program Max marks 30	Program writing	15 Marks
		Error free compilation or partial output	10 Marks
		Correct result with proper display	05 Marks

BCA 65 PROJECT LAB

The objective of the project is to motivate them to work in emerging/latest technologies, help the students to develop ability, to apply theoretical and practical tools/techniques to solve real life problems related to industry, academic institutions and research laboratories.

The project is of 3 hours/week for one (semester VI) semester duration and a student is expected to do planning, analyzing, designing, coding and implementing the project. The initiation of project should be with the project proposal. The synopsis approval will be given by the project guides.

The project proposal should include the following:

- Title
- Objectives
- Input and output
- Details of modules and process logic
- Limitations of the project
- Tools/platforms, Languages to be used
- Scope of future application

For the project work, the guide(internal) evaluate the work for 20 marks based on the performance of the candidates during the development of he project and the external examiner will evaluate the project work as follows:

- Project Report - 20 marks
- Project Demo -30 Marks
- Viva-Voce - 30 marks

The Project work should be either an individual one or a group of not more than five members.

FIRST SEMESTER BSc

Computer Science -I

BCS-1 Computers Fundamentals and C Programming

Theory Examination- 50 Max marks. Number of Teaching hours –48
Internal Assessment- 10 Max marks

Unit 1- Introduction to Computer Systems: 15hrs

Definition of a Computer, History of Computers,Generations of Computers, types of computer – based on size and working principle, Block diagram of a Computer with functional units(explanation), Parts of a computer system,Information processing Cycle.Definition of software and hardware,types of programming languages, assembler,compiler, interpreter, linker, loader (Definitions only),number system – decimal, binary,octal and hexadecimal number,interconversion of decimal to binary and vice-versa.ASCII codes. Algorithm-definition, Characteristics, notations. Flowchart-definition, Symbols used in writing the flow-chart Writing an algorithm and flow-chart of simple problems.

Unit 2- Introduction to Computer Systems: 06hrs

Introduction to C, featuresC , basic C program structure, character set, tokens, keywords andidentifiers. Constants, variables, data types, variable declaration, symbolic constant definition.

Unit 3- Operators and Expressions: 06hrs

C operators- arithmetic, relational, logical, bitwise, assignment, increment and decrement, conditional (?:) and special operators, Arithmetic expressions, precedence of operators andassociatively. Type conversions, mathematical functions.Definition of macro and pre-processor directives, Managing I/O operation – reading andwriting a character, formatted and unformatted/O functions.

Unit 4- Control Structures: 10hrs

conditional control statements- if, if-else,nestedif,switch , go to statement, while, do-while and for statements. Unconditional control statements- break, continue and return statements(definition and explanation with syntax, flowchart and examples)

Unit 5- Arrays, Strings and Functions: 10hrs

Definitions of an array, types-one and two dimensional array,(definition, declaration, initialization with examples).***Strings–***definition, declaration and initialization of string variable, string handling functions- strcmp,strcpy,strrev,strlen,strlwr,strupr(explanation with syntax and examples) Functions – definition, need, syntax for function declaration, function prototype, category of functions, nesting offunctions, function with arrays, scope of variables , parameter passing mechanism- call by value and call by reference. Recursion and Recursive function(definitions only)

Reference :

1. Fundamentals of Computers, V. Rajaraman.
2. Computer Concepts and C Programming, P.B. Kotur
3. Let us C ,YashwanthKanetkar
4. ANSI C, Balagurusamy

QUESTION PAPER PATTERN

PART -I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks

There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks

There shall be 05 questions each carrying 05 Marks. Each question may contain sub questions-(a) and (b), The student has to attend only 03 questions.

Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 4
Question 5 from Unit 5

PART- IV: 20 Marks

There shall be 03 questionsand each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1 & Unit 3.
Question 2 from Unit 4
Question 3 from Unit 5

PRACTICAL: C- PROGRAMMING LAB

1. Find the biggest of three numbers.
2. Arithmetic operations using switch statement.
3. Find the Fibonacci series between M and N.
4. Prime numbers between M and N
5. Binary to Decimal conversion
6. Sorting an unsorted array
7. Searching an element in an array.
8. Addition of two matrices
9. Multiplication of two matrices
10. Norm and trace of the matrix.
11. Count the numbers of vowels in a given string.
12. Find the factorial of a number using function.

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
  - ✓ Program Flowchart/Algorithm 05 Marks
  - ✓ Program Writing 15 Marks
  - ✓ Correct output with proper display 10 Marks (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

SECOND SEMESTER BSc

Computer Science -II

BCS-2 Data Structures using C

Number of Teachinghours – 48

Theory Examination- 50 Max marks.
Internal Assessment- 10 Max marks

Unit 1– Introduction to Data Structures, Structure and Union 08hrs

Pointers–Definition, Declaration, Examples and usage. Static / dynamic memory allocation. Structure–Definition, declaration, accessing structure members. Union – Definition, declaration, Differences between structures and union . Definition of Data Structure and types with examples.

Unit 2- Stack 6hrs

Definition and example, operations, representation of stack in C, applications of stack, evaluation of postfix expression, conversion from infix to postfix. Recursion –Tower of Hanoi, Factorial, GCD.

Unit 3- Queues and lists 10hrs

Definition and example, operations on queue, types of queue, sequential representation, disadvantages of ordinary queue, circular queue and priority queue(concepts only).Linked list–Definitions and types of lists ,operations on SLL, stack and queue implementation using linked list, circular anddoubly linked list (concepts only).

Unit 4- Trees 10hrs

Tree definition, representation, types of tree, Tree terminologies with an example, Binary tree,linked list representation of binary tree, tree traversals,binary search tree(definition only) and its applications.

Unit 5- Searching and sorting 10hrs

Searching technique- sequential, Binary search, interpolation, binary tree searching definition of Sorting definition and its types –radix sort, quick sort, shell sort,heapsort,binary tree sort.

References:

1. Systematic approach to data structure Padmareddy
2. Programming in ANSI C - E. Balagursamy
3. Datastructures and programming design using C - Robert Kruse PIII publications
4. Datastructures and applications - Trembly and Sorenson

QUESTION PAPER PATTERN

PART- I: 05 Marks
There shall be 05 questions each carrying 01 Marks from all units

PART -II: 10 Marks
There shall be 05 questions each carrying 02 Marks from all units

PART -III: 15 Marks
There shall be 05 questions each carrying 05 Marks.
Each question may contain sub-questions-(a) and (b),
The student has to attend only 03 questions.
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 4
Question 5 from Unit 5

PART- IV:20 Marks
There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 2 & Unit 5.
Question 2 from Unit 3
Question 3 from Unit 4

PRACTICAL DATA STRUCUTRES LAB

1. Implementation of stack
2. Evaluation of postfix expression
3. Conversion of infix to postfix
4.Tower of Hanoi
5. Implementation of queue
6. Implementation of stack/queue using linked list
7. Binary tree traversals
8. Quick sort
9. Heap sort
10.Tree sort
11.Shell sort
12. Binary search

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
  - ✓ Program Writing 20 Marks
  - ✓ Correct output with proper display 10 Marks (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

THIRD SEMESTER B Sc

Computer Science -III

BCS-3 Object Oriented Programming with C++

Number of teaching hours – 48

Theory Examination- 50 Max marks.
Internal Assessment- 10 Max marks

Unit 1: Introduction to C++ and OOPS: 12hrs

Object Oriented Programming paradigm, Basic concepts of Object Oriented Programming- Classes, Objects, Data Abstraction and Encapsulation, Polymorphism, Inheritance, Dynamic Binding, Message passing, Benefits of OOP, Object Oriented languages, applications of OOP.C++ features, Comparisonof C++ with C, Structure of a C++ program, input and output statements,Keywords, symbolic constants, type compatibility, declaration of variables, reference variables,operators in C++, control structures.

Unit 2 : Classes Objects and Member Functions: 15hrs

Limitations of structures in C, specifying a class, creating objects, memory allocation for objects,static data members, arrays within a class, local classes. Defining member functions, call byreference, return by reference, inline functions, default arguments, making an outside functioninline, nesting of member functions, private member functions, function overloading, static member functions, const member functions, pointer to members, friend and virtual functions.

Unit 3 : Constructors and Destructors: 06hrs

Introduction, constructors, parameterized constructors, multiple constructors in a class, constructors with default arguments, dynamic initialization of objects, copy constructor, dynamicconstructors, constructing two dimensional arrays, const objects, destructors.

Unit 4 : Operator overloading: 05hrs

Introduction, definition, overloading unary operators, overloading binary operators, overloadingoperators using friends, string manipulations using operators, rules for operator overloading, typeconversions.

Unit 5 : Inheritance and Templates: 10hrs

Inheritance definition, defining derived classes, types-single inheritance, making a private member inheritable,multilevel inheritance, multiple inheritance, hierarchical inheritance, hybrid inheritance, virtual base classes.Template definition, class templates, class templates with multiple parameters, function templates,function templates with parameters.

Reference Books:

1. Object Oriented Programming with C++ - E balaguruswamy
2. Object Oriented Programming in Turbo C++ - Robert Lafore
3. C++ The complete Language – BjarneSchildt

QUESTION PAPER PATTERN

PART- I: 05 Marks
There shall be 05 questions each carrying 01 Marks from all units

PART- II: 10 Marks
There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks
There shall be 05 questions each carrying 05 Marks.
Each question may contain sub-questions-(a) and (b),
The student has to attend only 03 questions.
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 4
Question 5 from Unit 5

PART IV:20 Marks
There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1 & Unit 2.
Question 2 from Unit 3 & Unit 4.
Question 3 from Unit 5

PRACTICAL: C++ LAB

1. Write a c++ program to find the result of a student using class concept
2. Define a class employee having data members name, basic salary, net salary with the member function getdata(), showdata(). Calculate the net salary assuming appropriate % for all allowance and deductions using class concept
3. Define a class to represent product details it includes data member pname, pcode, price, pquality include member function a) to get product detail b) to display the product details and total price using class concept
4. Write a c++ program to print Fibonacci series using constructor
5. Write a c++ program to find biggest of two numbers and three numbers using function overloading
6. write a c++ program to calculate area of triangle, rectangle and circle using function overloading
7. write a c++ program to calculate family income using friend function
8. write a c++ program to add two complex numbers using operator overloading
9. write a c++ program to concatenate two string using operator overloading
10. write a c++ program to implement multiple inheritance by creating classes: Father , Mother and Son
11. write a c++ program to swap two numbers using function template
12. write a c++ program to sort an array using function template

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
  - ✓ Program Writing 20 Marks
  - ✓ Correct output with proper display 10 Marks
    (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

FOURTH SEMESTER BSc

Computer Science -IV

BCS-4: Database Management System

Number of Teaching hours – 48

Theory Examination- 50 Max marks.
Internal Assessment- 10 Max marks

Unit 1: Introduction to DBMS **10hrs**

Meaning of data and information. Meaning of persistent data, definitions for DBMS, database, database system, examples, database system applications. database management system vs. file management system, views of data, data independence, data models, database languages, database users and administrators, database system structure, application architecture, advantages of using DBMS, classification of DBMS, meaning of schema and instance.

Unit 2: E-R Model **10hrs**

Using high-level, conceptual data models for database design, basic-concepts, constraints, keys, an example database application, E-R diagram, types of entities, entity sets, attributes, types of attributes, weak entity sets, cardinality ratios (mapping cardinality), specialization, generalization.

Unit 3: Relational Model **10hrs**

Structure of relational Databases, Relational algebra - select, project. union, set difference, rename, division operations, Modification of the database, queries using relational algebra. Extended relational algebra operations.

Unit 4: SQL **10hrs**

Background, basic structure, set operation, aggregate functions, NULL values, nested sub queries, Views, complex queries, Modification of the database, joined relations, Data Definition Language**,** domain constraints, referential integrity in SQLAssertions, authorization, privileges in SQL.

Unit 5: Relational Database Design: **08hrs**

Pitfalls in relational data base design, Normalization for relational databases. Normal forms based on primary keys, General definitions of first, second and third normal forms, Functional Dependency (concept and example) decomposition, Boyce-Codd Normal Form -

definition and example, fourth Normal form - Multi valued Dependencies - definition and example.

Reference Books:

1. Korth, Sudarshan “Database System concepts”, Mcgraw Hill-IV Edition.
2. Navathe, Silberchatz and Elmasri “fundamentals of database Systems”-Addison Wesley-2004
3. C.J. Date “Introduction to Database systems” Addison-wesley.
4. Bipin C Desai “Introduction to Data base system” Galgotia publications

QUESTION PAPER PATTERN

PART- I: 05 Marks

There shall be 05 questions each carrying 01 Marks from all units

PART- II: 10 Marks
There shall be 05 questions each carrying 02 Marks from all units

PART -III: 15 Marks

There shall be 05 questions each carrying 05 Marks.
Each question may contain sub-questions-(a) and (b),
The student has to attend only 03 questions.
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 4
Question 5 from Unit 5

PART- IV:20 Marks

There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1.
Question 2 from Unit 2 & Unit 3
Question 3 from Unit 4 &Unit 5

PRACTICAL: SQL LAB

I. Use the default emp and depttables to write SQL statements for the following queries

1. Find the employee details in ascending order of their name and descending order of their salary
2. Find names of all employees whose name starts with ‘s’ and having atleast 6 characters in it
3. Find the name of all managers and number of employees under them
4. Find the details of all employees in the research department
5. Find the minimum, maximum and average salary of each department
6. Find department name having least number of employees
7. Find the department name having highest annual payroll
8. Add an employee under the manager smith
9. Find the employees who are not getting commission

II. Createtables as below

Student(name string, regno string primary key, dob date, doj date ,course string foreign key)

Markscard(regno foreign key, sem string, sub1 number, sub2 number, sub3 number, tot number, avge number, result string)

Write SQL statements for the following queries.

1. List the names of students studying in BCA course in the order of their joining
2. Find the name of student who has scored highest marks in every sem of each course
3. Count the number of students in each course
4. Find the course having second highest number of students
5. Find the course having least students in I semester
6. Raise the marks of sub3 in III sem BCA students by 5% if the student has failed in that subject
7. Display the details of student ‘xxx’ in every semester.
8. Find the names of al juniors of ‘yyy’ in course ‘c1’
9. Find all students studying with ‘xxx’ and elder to him (compare DOB)

III. Dept(deptno integer pkey, dname string not null, loc string not null)
Emp(eno integer pkey, ename string, deptnofkey, desgn string not null, bsal number>0)

Salary(enofkey,da,hra,gross,it,pf,net,comm)

DESGN ARE manager,clerk,salesman

Comm=5% of basic if desgn=salesman otherwise null

Da=15% bsalhra = 7% of bsal gross=bsal+da+hra

It =0 if gross<15000

= 10% of gross if gross between 15000 and 30000

=20% of gross if gross between 30000 and 50000

= 30% of gross otherwise

pf = 10% of gross or 1000 whichever is less

Write SQL statements for

1. Count the number of employees in every designation
2. List the employees of every department in descending order of their net salary
3. List the name and salary of highest salary payer in every department
4. List the name of employee paying highest IT
5. List the total IT paid by each department
6. List the departments in every location
7. Raise the basic salary by 10% for the managers of every department.
8. Find the number of employees having at least 10 years of experience in every department.
9. Count the number of employees who are not getting commission in every department

PRACTICAL EXAM SCHEME

Practical Proper - 30 Marks

Viva – voce - 05 Marks

Record - 05 Marks

Table Creation	Table creation & data insertion	10 marks
	4 SQL queries	20 marks
SQL queries	Queries writing 3 marks (each)	
	Execution 2 marks (each)	

(NOTE: Examiner has to ask 6 queries from a cycle in which student should answer 4 queries in the given cycle)

FIFTH SEMESTER BSc

Computer Science -V

BCS-5 JAVA Programming

Number of teaching hours – 48

Theory Examination- 50 Max marks.
Internal Assessment- 10 Max marks

1. Introduction to Java and Java Program Structure 15hrs

History of Java, Java features, Difference between C/C++ and Java, Java program structure, Java tokens, Statements, JVM, Introduction to packages in Java, Applets, Operators & Expressions, Data types, Constants and Variables, Type conversions, Mathematical functions; Control Statements: Decision making and Branching with while, do-while, for and labeled loops; Arrays, Vectors & Strings: Initialization, Declaration of 1D, 2D arrays, String arrays, String methods, Vectors, Wrapper classes.

2. Overview 10hrs

Class, Objects, Constructor, Method overloading, Static members; Inheritance: Single, Multilevel, Hierarchical, Visibility modes, Method overriding, Final variable, Abstract methods and classes; Interface: Defining, Extending and implementing assigning interface variables

3. Packagesand multithreading 10hrs

Java API Packages, using system packages, naming convention, accessing and using a package, adding a class to packages, hiding classes. Multithreaded programming: Creating a thread, extending the thread class, stopping and blocking a thread, life cycle of a thread, using thread methods, thread exceptions, thread priority, synchronization, implementing the runnable interface.

4. Exceptions and Debugging: 08hrs

Meaning of errors and exceptions, Dealing with errors, Classifications of exceptions, syntax of handling exceptions, advertising the exceptions, throwing and re-throwing exceptions, creating Exception classes, multiple catch statements, finally clause, tips for using exceptions, Debugging techniques – tricks for debugging, Assertions, Java Debugger (JDB).

5. Applets and Graphics: 05hrs

Applets basics, applets and application, Life cycle, Life cycle of Applet programming-passing parameter to applets, paint and repaint methods, Graphics class, Line, Rectangle, Circle, Ellipse, Arcs and Polygon. Using control loops in applets, drawing bar charts.

Reference Books:

1. Java, The Complete Reference – Patrick Naughton and Schildt
2. Programming in Java – Joseph L Weber
3. Java Programming – E Balagurusamy

QUESTION PAPER PATTERN

PART- I: 05 Marks
There shall be 05 questions each carrying 01 Marks from all units

PART- II: 10 Marks
There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks
There shall be 05 questions each carrying 05 Marks.
Each question may contain sub-questions-(a) and (b),
The student has to attend only 03 questions.
Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 4
Question 5 from Unit 5

PART- IV:20 Marks
There shall be 03 questions and each carrying 10 Marks.
The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1 & Unit 2
Question 2 from Unit 3 & Unit 4
Question 3 from Unit 5

PRACTICAL: JAVA PROGRAMMING LAB

1. Write a Java program to generate first n odd numbers and pick and display prime numbers among them. Read value for n as command line argument.
2. Write a Java program to create a vector, add elements at the end, at specified location onto the vector and display the elements. Write an option driven program using switch…case.
3. Write a java program to find area of geometric figures (atleast 3) using method overloading.
4. Write a Java program to find the circumference and area of the circle using interface.
5. Write a java program to sort the alphabets in the given string.
6. Write a java program to accept student information using array of objects and constructor initialisation.
7. Write a java program to implement constructor overloading by passing different number of parameter of different types.
8. Define a package to contain the class sort to contain methods for various sorting techniques with time complexity (at least 2)Use this package to sort the list
9. Write a Java program to demonstrate multi-threading.
10. Write a program to implement an applet by passing parameter to HTML
11. Write an applet program to display human face
12. Create an applet to display concentric n circles, input value for n.

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
  - ✓ Program Writing 20 Marks
  - ✓ Correct output with proper display 10 Marks
    (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

FIFTH SEMESTER BSc

Computer Science -VI

BCS-6: Operating System and UNIX

Number of teaching hours – 48

Theory Examination- 50 Max marks.
Internal Assessment- 10 Max marks

Unit 1.Introduction to Operating systems, CPU Scheduling and Memory management 10hrs

Introduction, types and functions of operating systems. Scheduling concepts, algorithms, performance criteria, FCFS, Shortest job first, priority scheduling, Pre-emptive algorithm – round robin. Function, single contiguous allocation, multiprogramming, partitioned allocation. Paged memory management.

Unit 2.Dead lock and File system 05hrs

Deadlock problem, deadlock characteristics, deadlock prevention and avoidance.File concept access methods, directory structures, protection and consistency semantics

Unit 3.Introduction to UNIX, The File System 15hrs

The Unix operating system, A brief Session, The Unix Architecture, Features of UNIX, Locating commands, Internal and External commands. General-Purpose Utilities: man, cal, date, echo, printf, bc, script, passwd, who, uname. The file, The Parent –Child Relationship, The HOME Variable, pwd, cd, mkdir, rmdir, Absolute Pathname, Relative Pathname, ls, The Unix File system. Handling Ordinary Files: cat, cp, rm, mv, more, lp subsystem: Printing a File, File, wc, od, cmp, comm, diff, dos2unix and unix2dos, compressing and archiving files, gzip, and gunzip, tar, zip and unzip.

Unit 3: Basic File Attributes and Vi Editor 08hrs

Listing file attributes, File Ownership, File Permissions, changing file permissions, Changing File Ownership Vi basics, Input Mode, Saving Text and Quitting, Navigation, Editing Text, Undoing Last Editing Instructions(U and U), Repeating the last command(.), Searching for a Pattern(/ and ?), Substitution.

Unit 5:The Shell: 10hrs

Brief introduction, The shell's Interpretive Cycle, Shell variables. Essential shell programming: Shell scripts, read, using command line arguments, the logical operators && and ||- conditional execution, the if conditional, using test and [] to evaluate expressions, the case conditional, expr, while, for, set and shift, file test operator. Pattern matching :grep

Refernces :

1.Sumitabha Das, UNIX System V.4, Concepts and Applications, TMH
2.Operating systems concepts, Korth

QUESTION PAPER PATTERN

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PART -II: 10 Marks
There shall be 05 questions each carrying 02 Marks from all units

PART- III: 15 Marks
There shall be 05 questions each carrying 05 Marks.
Each question may contain sub-questions-(a) and (b),
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Question 1 from Unit 1.
Question 2 from Unit 2
Question 3 from Unit 3
Question 4 from Unit 4
Question 5 from Unit 5

PART- IV:20 Marks
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(Each question should have at least two sub questions)
Question 1 from Unit 1 & Unit 2
Question 2 from Unit 3 & Unit 4
Question 3 from Unit 5

PRACTICAL: UNIX PROGRAMMING LAB

1) Write a shell script program to perform all arithmetic operation on floating point.
2) Write a shell script program to check whether the given number is positive or negative.
3) Write a shell script program to reverse a number.
4) Write a shell script program to find sum of digit of a number.
5) To Find the sum of the series (sum= 1 + ½ + ... +1/n)
6) Write a shell script to perform the following any one operation based on your own choice.
    a. Show first 5 line data
    b. Show last 3 line data
    c. Sort the data
    d. Find out word count
7) Add, subtract and multiply the two given number passed as command line argument.
8) Write a shell script to count number of characters in a given string
9) Write a shell script program to read pattern and file name and search whether the given pattern in a file or not.
10) Write a shell script to read filename from command line argument check whether the file is regular file or directory or by both.
11) Find the number of directory file and ordinary files in the current
12) To read two file names and check which one is newer and which one is older.

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
    - ✓ Program Writing 20 Marks
    - ✓ Correct output with proper display 10 Marks
      (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

SIXTH SEMESTER BSc

Computer Science -VII

BCS-7 ADVANCED PROGRAMMING IN JAVA

Number of teaching hours – 48

Theory Examination- 50 Max marks.
Internal Assessment- 10 Max marks

Unit 1: Review of Java Concepts and AWT, Graphics Programming 10hrs

Review of Java Concepts .AWT and AWT Classes, Window fundamentals – Component, Container, Panel, Window, Frame, Canvas. Working with frame window. Graphics Programming: Graphics class, methods, drawing objects, line graphs, polygon classes, working with colours and fonts. Advanced graphics operations using Java2D.Designing simple User Interfaces (UIs) using AWT, Layout Manages.

Unit 2: Swings and event handling 10hrs

Event Handling: Basics of Event Handling, the delegation event model, AWT event hierarchy and event classes, Event Listener Interfaces, Adapter Classes, Event queue. Swing: Meaning, need difference between AWT and swing. The Model-View-Controller (MVC) design patterns, Creating simple UIs using swing, and handling basic events.

Unit 3: Java Beans, Java Archives (JAR) 08hrs

Meaning and need of Java Beans, Advantages, Bean writing process, Bean properties.Java Archives (JARs): Meaning, need, the JAR utility, Creating JAR files.

Unit 4: File Management and JDBC 10hrs

File, creating a file, writing to a file, opening a file, reading from a file, file management, checking existence of a file, deleting a file.JDBC: Meaning, need, concept and structure of JDBC, relation with ODBC, JDBC driver types and their meaning, the JDBC process – loading the driver, connecting to the DBMS, creating and executing SQL statement, Connection object, Statement object, Prepared Statement object, Callable Statement, Result Set, JDBC Exceptions.

Unit 5: Fundamental concepts of Collections, Generics and Network programming 10hrs

Collections: Meaning, need, Collection interfaces, Concrete Collections – Array List, Hash set, Map. Generics: Meaning, need, benefits, generics usage, basics of generic types, type parameter naming conventions, type wildcards, using type wildcards, generic methods, bound types, writing simple generic container, implementing the container, implementing the constructors, implementing generic methods. Network programming: Meaning of Client, Server, Socket, port. Creating a client socket, creating a server socket, writing simple server and client.

References:

1.Complete Reference – Java 2:Herbert Schildt, 5th / 7th Edition, Tata McGraw-Hill

2.Thinking in Java: Bruce Eckel

3. Core Java 2: Volume I – Fundamentals: Cay S. Horstmann, Gary Cornell, Pearson Education Asia.

4.Core Java 2: Volume II – Advanced Features: Cay S. Horstmann, Gary Cornell, Pearson Education Asia.

QUESTION PAPER PATTERN

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Question 3 from Unit 3
Question 4 from Unit 4
Question 5 from Unit 5

PART IV:20 Marks
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The student has to attend only 02 questions.
(Each question should have at least two sub questions)
Question 1 from Unit 1 and Unit 2.
Question 2 from Unit 3 & Unit 4
Question 3 from Unit 5

PRACTICAL: ADVANCED JAVA PROGRAMMING LAB

1. Write an applet to add, remove, select an item in a list
2. Write an applet to display selected geometric figure from a list.
3. Write a program to implement mouse events
4. Write a program to implement keyboard events
5. Write a Java program (console) to store the typed text to a file.
6. Write a Java program to display the content of a file.
7. Write a Java program with JDBC to store the details of a person on to an Oracle database table.
8. Write a Java program with JDBC to access and display the details of a person stored in an Oracle database table.
9. Write a Java program with JDBC to access and delete the details of a given person stored in an Oracle database table.
10. Write a Java GUI program to accept the details of an employee and store the same on to an Oracle database table.
11. Write a Java program to design a simple Client and Server components. Pass simple text (static) from client to the server and a receipt acknowledgement (static) back to the client.
12. Write a Java program to demonstrate the use of generics.

PRACTICAL EXAM SCHEME

- Practical Proper - 30 Marks
  - ✓ Program Writing 20 Marks
  - ✓ Correct output with proper display 10 Marks
    (Partial output – 05 marks)
- Viva – voce - 05 Marks
- Record - 05 Marks

SIXTH SEMESTER BSc

Computer Science -VIII
BCS-8 :SOFTWARE ENGINEERING & COMPUTER NETWORKS

Number of Teaching hours – 48

Theory Examination- 50 Max marks.
Internal Assessment- 10 Max marks

Unit 1. Introduction to Software Engineering and Software process 10hrs

Software, Software Engineering, phases in softwaredevelopment, role of management and Software metrics. Software process, process models- waterfall model, prototyping model, iterativeenhancement model and spiral model.

Unit 2. Software design 07hrs

Design objectives, design principles, module level concepts, structured designmethodology, introduction to detailed design,SRS.

Unit 3. Coding and Testing

Programming practices, top down&bottom upapproaches,structuredprogramming,programming style. Testing fundamentals, brief introduction to functional testing and structural testing.Difference between black box testing and white box testing.

Unit 4 Introduction to Computer networks Network Hardware 10hrs

Definition and goals of computer network. Types of Networks- Broadcast, point- to -point , LAN, WAN, MAN, network topologies, wireless network example, Internet and its applications. 10 hrs

Unit 5 Network Software, Reference models and Transmission Media 13hrs

Network Architecture, Design issues of network , connection oriented andconnectionless services. OSI / ISO model, TCP / IP model, Novelnetware,ARPANET. Transmission Media-magnetic media, twisted pair, coaxial cable, fibre optics cable

References:

1. An integrated approach to Software Engineering :PankajJalote.
2. Software Engineering a practitioners approach : Roger Pressman.
3. Computer networks : Andrew S Tanenbaum.

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PRACTICAL: PROJECT LAB

PROJECT LAB EXAM SCHEME

The objective of the project is to motivate them to work in emerging/latest technologies, help the students to develop ability, to apply theoretical and practical tools/techniques to solve real life problems related to industry, academic institutions and research laboratories. The project is of 3 hours/week for one (semester VI) semester duration and a student is expected to do planning, analyzing, designing, coding and implementing the project. The initiation of project should be with the project proposal. The synopsis approval will be given by the project guides.
The Project work should be either an individual lone or a group of not more than five members.

The project proposal should include the following:

- Title
- Objectives
- Input and output
- Details of modules and process logic
- Limitations of the project
- Tools/platforms, Languages to be used
- Scope of future application

The examiner will evaluate the project work as follows:

- Project Report - 10 Marks
- Project Demo - 10 Marks
- Viva-Voce - 20 Marks