Annexure - 3

Master of Commerce, M. Com (Regular)

Course Matrix (2020-21)

Course Code	Semester and Course	Teach-ing hours	Cre-dits	Maximum Marks			Exami-nation Dura-tion
				Conti-nuous Assess-ment	Seme-ster-end Exami-nation	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		10	40	50	1½
EL202	Personal Financial Planning	2	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		25	75	100	3
SC302	Business Ethics and Corporate Governance	3	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		25	75	100	3
SC302E	Group B - Taxation: Indirect Taxation – I (GST)	4	4	25	75	100	3
SC303E	Group C - Finance: Risk Management and Financial Derivatives	4	+ 4 = 8	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		10	40	50	1½
EL302	Micro Finance	2	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		25	75	100	3
SC402E	Group B - Taxation : Indirect Taxation – II (GST and Customs)	4	4 + 4 = 8	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.

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

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Semester - I
Course – SC103: Credit Management in Banks

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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*.

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Course Inputs

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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

<div align="center">Semester – II</div>

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*.

<div align="center">**Course Inputs**</div>

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

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 & Professional 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.

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.

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

Course – HC401: International Business

Weekly Teaching Hours: 4

Credits: 4

Examination Duration: 3 hours

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.

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

<div align="center">Semester-IV</div>

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*.

<div align="center">**Course Inputs**</div>

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.

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

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.

<p align="center">Semester – III</p>

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*.

<p align="center">**Course Inputs**</p>

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 | Teach-ing hours | Cre-dits | Maximum Marks | | | Exami-nation Dura-tion |
				Conti-nuous Assess-ment	Seme-ster-end Exami-nation	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

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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

<div align="center">Semester - I</div>

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*.

<div align="center">**Course Inputs**</div>

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 ($2 \times n$) and ($m \times 2$) 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.

<div align="center">Semester - II</div>

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.

<div align="center">Course Inputs</div>

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

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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.

ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ

ವಿಶ್ವ ವಿದ್ಯಾನಿಲಯ ಕಾರ್ಯಾಲಯ, ಕುವೆಂಪು ಜ್ಞಾನಮೋತ್ಸವ ಭವನ, ಜ್ಞಾನ ಸಹ್ಯಾದ್ರಿ,
ಶಂಕರಘಟ್ಟ - 577 451. ಶಿವಮೊಗ್ಗ ಜಿಲ್ಲೆ.
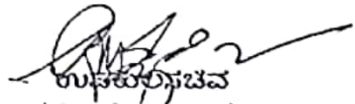
ಸಂಖ್ಯೆ:ಕುವಿ:ಶೈವಿ: ಎಸಿ-1:   :2013-14/787/972   ದಿನಾಂಕ:16-05-2013

ಸುತ್ತೋಲೆ

ವಿಷಯ : ಸ್ನಾತಕ ಬಿ.ಬಿ.ಎಂ. ಪದವಿ ಪಠ್ಯಕ್ರಮವನ್ನು ಪರಿಚಲಿಸುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ : 1. ಶಿಕ್ಷಣ ಮಂಡಲಿ ಸಭೆಯ ಅನುಮೋದನೆ ದಿನಾಂಕ:25-03-2013.
         2. ಡೀನರು, ಸ್ನಾತಕೋತ್ತರ ಆಡಳಿತ ನಿರ್ವಾಹಣಾಶಾಸ್ತ್ರ ಅಧ್ಯಯನ ವಿಭಾಗ
            ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಶಂಕರಘಟ್ಟ - ಇವರ ಪತ್ರ, ಸಂ:ಡೀ:79:
            2013-14, ದಿನಾಂಕ:06-05-2013.

ವಿಶ್ವವಿದ್ಯಾನಿಲಯದ ಸ್ನಾತಕ ಬಿ.ಬಿ.ಎಂ. ಪದವಿ ಪಠ್ಯಕ್ರಮವನ್ನು ಪರಿಷ್ಕರಿಸಲಾಗಿದ್ದು,
ಸದರಿ ಪಠ್ಯಕ್ರಮಗಳನ್ನು 2013-14ನೇ ಸಾಲಿನಿಂದ ಜಾರಿಗೂಳಿಸುವುದರ ಸಂಬಂಧ
ದಿನಾಂಕ:25-03-2013ರ ಶಿಕ್ಷಣ ಮಂಡಲಿ ಸಭೆಯು ಅನುಮೋದನೆ ನೀಡಿರುತ್ತದೆ. ಸದರಿ ಪರಿಷ್ಕರಿಸಿದ
ಪಠ್ಯಕ್ರಮಗಳನ್ನು ಈ ಸುತ್ತೋಲೆಗೆ ಲಗತ್ತಿಸಲಾಗಿದ್ದು, 2013-14ನೇ ಶೈಕ್ಷಣಿಕ ಸಾಲಿನಿಂದ ಜಾರಿಗೆ
ತರಲು ಈ ಮೂಲಕ ತಿಳಿಸಲಾಗಿದೆ.

ಹೆಚ್ಚಿನ ಮಾಹಿತಿಗಾಗಿ, ಪ್ರೊ. ಆರ್. ಹಿರೇಮಣ ನಾಯ್ಕ್, ಡೀನರು, ವಾಣಿಜ್ಯ ನಿಕಾಯ ಮತ್ತು
ಪ್ರಾಧ್ಯಾಪಕರು ಸ್ನಾತಕೋತ್ತರ ಆಡಳಿತ ನಿರ್ವಾಹಣಾಶಾಸ್ತ್ರ ಅಧ್ಯಯನ ವಿಭಾಗ, ಕುವೆಂಪು
ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಶಂಕರಘಟ್ಟ - ಇವರನ್ನು ಸಂಪರ್ಕಿಸಲು ತಿಳಿಸಲಾಗಿದೆ.

ಕುಲಸಚಿವ
(ಶೈಕ್ಷಣಿಕ ವಿಭಾಗ)
ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ

ಗೆ,
ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾನಿಲಯದ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಬರುವ ಶಿವಮೊಗ್ಗ/ಚಿಕ್ಕಮಗಳೂರು ಜಿಲ್ಲೆಗಳ ಎಲ್ಲಾ
ಬಿ.ಬಿ.ಎಂ. ಪದವಿ ಕಾಲೇಜುಗಳ ಪ್ರಾಂಶುಪಾಲರುಗಳಿಗೆ.

ಪ್ರತಿ:
   1. ಕುಲಸಚಿವರು(ಪರೀಕ್ಷಾಂಗ), ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಜ್ಞಾನ ಸಹ್ಯಾದ್ರಿ, ಶಂಕರಘಟ್ಟ.
   2. ಅಧ್ಯಕ್ಷರು, ಸ್ನಾತಕೋತ್ತರ ಆಡಳಿತ ನಿರ್ವಾಹಣಾಶಾಸ್ತ್ರ ಅಧ್ಯಯನ ವಿಭಾಗ, ಕುವೆಂಪು
      ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಶಂಕರಘಟ್ಟ
   3. ಡೀನರು,ವಾಣಿಜ್ಯ ನಿಕಾಯ, ಕುವೆಂಪು ವಿಶ್ವವಿದ್ಯಾನಿಲಯ, ಜ್ಞಾನ ಸಹ್ಯಾದ್ರಿ,, ಶಂಕರಘಟ್ಟ.
   4. ಕಛೇರಿ ಪ್ರತಿ.

Revised BBM Syllabus 2013-14
Bachelor of Business Management (BBM) Degree
Course structure

Sl. No	Code	Subjects	Page Number	Teaching hours per week	Internal marks	Final exam marks	Total Marks
		I semester					
1	BM101	Communicative English-I		4	20	80	100
2	BM102	Communicative Kannada/Hindi/Sanskrit/Urdu -I		4	20	80	100
3	BM103	Basics of Accounting		4	20	80	100
4	BM104	Market Behaviour and Cost Analysis		4	20	80	100
5	BM105	Management Process		4	20	80	100
6	BM106	Business Prospectives		4	20	80	100
		II semester					
7	BM201	Communicative English -II		4	20	80	100
8	BM202	Communicative Kannada/Hindi/Sanskrit/Urdu-II		4	20	80	100
9	BM203	Financial Accounting		4	20	80	100
10	BM204	Financial Market Operations		4	20	80	100
11	BM205	Marketing Management		4	20	80	100
12	BM206	Services Management		4	20	80	100
13	BM207	Production and Operations Management		4	20	80	100
		III semester					
14	BM301	Communicative English-III		4	20	80	100
15	BM302	Communicative Kannada/Hindi/Sanskrit/Urdu-III		4	20	80	100
16	BM303	Corporate Accounting		4	20	80	100
17	BM304	Business Regulations		4	20	80	100
18	BM305	Computer Application in Business		4	20	80	100
19	BM306	Banking Operations and Management		4	20	80	100
20	BM307	Environmental Science		4	20	80	100
		IV semester					
21	BM401	Communicative English-IV		4	20	80	100
22	BM402	Communicative Kannada/Hindi/Sanskrit/Urdu -IV		4	20	80	100
23	BM403	Human Resource Management		4	20	80	100
24	BM404	Quantitative Method for Business		4	20	80	100
25	BM405	Insurance Management		4	20	80	100
26	BM406	Financial Management		4	20	80	100
27	BM407	Indian Constitution		4	20	80	100
		V semester					
28	BM501	Cost Accounting		4	20	80	100
29	BM502	Technique for Business decision –I		4	20	80	100
30	BM503	Small Business Management		4	20	80	100
31	BM504	Business Taxation –I		4	20	80	100
32	BM505	Business Research Methods		4	20	80	100

33	BM506	Elective Paper –I		4	20	80	100
34	BM507	Elective Paper –II		4	20	80	100
		VI semester					
35	BM601	Management Accounting		4	20	80	100
36	BM602	Technique for Business Decision –II		4	20	80	100
37	BM603	Business Taxation –II		4	20	80	100
38	BM604	Organizational Behaviour		4	20	80	100
39	BM605	Elective Paper –III		4	20	80	100
40	BM606	Elective Paper –IV		4	20	80	100
41	BM607	Project Report /Auditing. (PPA)		4	20	80	100

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,   **Chairman**
Shimogga

02   **Dr. Prabhakar C.J**
Assistant Professor,   **Member**
Dept. of Computer Science,
Kuvempu University.

03   **Shri. Ravikumar M**
Assistant Professor,
Dept. of Computer Science,   **Member**
Kuvempu University.

04   **Dr. Suresha M**
Assistant Professor,
Dept. of Computer Science,   **Member**
Kuvempu University.

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	FOURTH	Weekly hours	Internal marks	External marks	total
Paper code	SUBJECT				
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	FIFTH	Weekly hours	Internal marks	External marks	total
Paper code	SUBJECT				
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	SIXTH	Weekly hours	Internal marks	External marks	total
Paper code	SUBJECT				
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

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

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. 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. 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<span> and <div> 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		Program writing	15 Marks
	One Program	Error free compilation or partial output	05 Marks
	Max marks 25	Correct result with proper display	05 Marks
Part - B		Program writing	20 Marks
	One Program	Error free compilation or partial output	10 Marks
	Max marks 35	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		Program writing	15 Marks
	One Program	Error free compilation or partial output	10 Marks
	Max marks 30	Correct result with proper display	05 Marks
Part - B		Program writing	15 Marks
	One Program	Error free compilation or partial output	10 Marks
	Max marks 30	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.

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

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

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: 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

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

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 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.

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 and Unit 2.
 Question 2 from Unit 3 & Unit 4
 Question 3 from 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