SHIV NADAR UNIVERSITY
CHENNAI

Rajiv Gandhi Salai, Kalavakkam – 603 110

School of Commerce and Management

DEPARTMENT OF COMMERCE
B.Com./ B.Com. (Hons)

CURRICULUM & SYLLABUS

REGULATIONS 2021

CURRICULUM

B.Com./ B.Com. (Hons)

Course Name	Credits
SEMESTER I	
Financial Accounting - Principles and Practice - I	5
Commercial Law	4
Microeconomics	3
Business Communication	4
Business Mathematics	5
SEMESTER II	
Financial Accounting - Principles and Practice - II	4
Cost Accounting	5
Company Law	4
Computer Applications in Business	4
Macroeconomics	3
Probability and Statistics	4
SEMESTER III	
Environment Management and Sustainability	3
Financial Accounting - III	5
Indian Economy	3
Corporate Finance	6
Statistics for Business – II	5
SEMESTER IV	
Direct and Indirect Taxes	6
Economics of Money – Banking and Financial Markets (Honours)	3
Personal Finance (General Elective)	3
Indian Political System: Structure, Policy, and Institutions (General Elective)	3
Advanced Costing (General Elective)	3
Computerised Accounts with Tally Software (General Elective)	3
Data Analysis using VBA and SQL	4
Extra Academic Activity	2
Financial Strategy	5
SEMESTER V	
Communication, Teamwork and Leadership	4
Management Accounting and Performance Evaluation	5
Introduction to Derivatives (Honours Elective)	3
Marketing Management (General Elective)	3
Principles of Banking (General Elective)	3
Data Analytics Programming (Specialization Elective)	3
Financial Reporting and Analysis	5
Financial Modeling (Specialization Elective)	3
Financial Markets (Specialization Elective)	3
Optimization Methods (Specialization Elective)	3

Principles of Strategic Management (Specialization Elective)	3
Operations Management (Specialization Elective)	3
Industry Internship	1
SEMESTER VI	
Public Finance and Policy	3
Governance, Ethics and Values	3
Advanced Income Tax Laws	4
Auditing & Assurance	3
Data Analysis and Data Mining (Specialization Elective)	3
Investment Management (Specialization Elective)	3
Entrepreneurship (Specialization Elective)	3
Data Visualization (Specialization Elective)	3
Business Valuation (Specialization Elective)	3
Human Resource Management (Specialization Elective)	3
Sustainable Finance (General Elective)	3
Project Evaluation and Management (General Elective)	3
Business Analysis with Advanced Excel (General Elective)	3
Supply Chain Management (Honours Elective)	3

B. Com. Degree Program

Full Syllabus

Semester I

FINANCIAL ACCOUNTING – PRINCIPLES AND PRACTICE - I

Course Objective

This introductory course teaches the basics of accounting including concepts, conventions, and standards. The students will become familiar with the accounting process and methods, accounting treatment of special transaction like consignment, joint venture, and the mechanics of preparing the financial statements of sole proprietorship and partnership.

Detailed Contents of Syllabus

Unit 1: Theoretical Framework: Meaning and Scope of accounting, Concepts, Principles and Conventions, Capital and revenue expenditure, Capital and revenue receipts, Contingent assets and contingent liabilities Accounting Policies, Accounting as a Measurement Discipline - Valuation Principles, Accounting Estimates, Accounting Standards - Concepts and Objectives, Indian Accounting Standards - Concepts and Objectives, IFRS.

Unit 2: Accounting Process, Recording and Bank Reconciliation: Voucher and Transactions: Source documents and Vouchers, Rules of Debit and Credit. Recording of Transactions: Books of Original Entry- Journal, Special Purpose books: Cash Book: Simple, cash book with bank column and petty cashbook, Purchase book, Sales book, Purchases return book, Sales return book, Bank Reconciliation Statement: Need and preparation, Books of Accounts, Preparation of Trial Balance, Rectification of Errors, preparation of bank reconciliation statement.

Unit 3: Depreciation Accounting and Inventory Valuation: Accounting for Plant Property and Equipment & Depreciation: Meaning of Depreciation, Depletion and amortization, Objective and Methods of depreciation (Straight line, Diminishing Balance), Change of Method, Inventory Valuation: Meaning, Significance of Inventory Valuation, Inventory Record System Periodic and Perpetual, Methods of Inventory Valuation-FIFO, LIFO, and Weighted Average Applicable accounting standards.

Unit 4: Accounting for Special Transactions: Bills of exchange and promissory notes, Accommodation bills; sale of goods on approval or return basis Consignment accounts Features of consignment business, Difference between sale and consignment, accounting treatment for consignment transactions and events in the books of consignor and consignee., Average Due Date, Account Current.

Unit 5: Preparation of Financial Statements- Sole Proprietorship: of financial statements, Closing Adjustment Entries, Trading Account, Profit and Loss Account and Balance Sheet of Manufacturing and Non-manufacturing entities.

Course Outcome

After completion of the course, student will be able to:

- Understand and appreciate the role of accounting concepts, conventions, and standards.
- Describe the process of accounting.
- Make a critical understanding of the preparation of accounts of special transactions.
- Prepare the financial statements of a non-manufacturing entity.

Suggested Readings

Books

Robert N Anthony, David Hawkins, Kenneth A. Merchant, Accounting: Text and Cases, McGrawHill Education

Charles T. Horngren and Donna Philbrick, Introduction to Financial Accounting, Pearson Education

Weygandt , Kimmel, Kieso Accounting Principles, 12ed, ISV Paperback

Shukla M C, T.S. Grewal and S.C. Gupta. Advanced Accounts. Vol.-I. S. Chand & Co., New Delhi.

Tulsian, P.C. Financial Accounting, Pearson Education.

Goldwin, Alderman and Sanyal, Financial Accounting, Cengage Learning.

Maheshwari S N, and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi.

Monga J R, Financial Accounting: Concepts and Applications. Mayur Paper Backs, New Delhi

Study materials etc

Compendium of Statements and Standards of Accounting, The Institute of Chartered Accountants of India, New Delhi

Study material of the ICAI

COMMERCIAL LAW

Course Objective

The objective of the course is to teach the students the key provisions of relevant business **laws including the Indian Contract Act, 1872, Sale of Goods Act, 1930, Limited Liability** Partnership Act, 2008, the Negotiable Instruments Act,1881 and the basics of Indian Companies Act, 2013.

Detailed contents of the syllabus

Unit 1: Indian Contract Act, 1872: Sec 1 to 75- Contract - Essentials of a valid contract- Classification of contracts - Offer - Legal rules of an offer - Acceptance - Legal rules as to acceptance - Communication of offer, Acceptance and Revocation - Consideration - Legal Rules as to Consideration - Capacity to Contract - Free Consent - Coercion - Undue Influence Fraud - Misrepresentation – Mistake. Performance, Breach and Consequences of Breach of Contract.

Unit 2: Bailment and Contract of Agency: Bailment and Pledge: Requisites of bailment - Classification of Bailment - Duties and Rights of Bailor and Bailee - Law relating to Lien - Types of Lien - Termination of Bailment - Pledge -Essentials of Pledge - Pledge versus Bailment - Rights and Duties of Pawnor and Pawnee. Essentials of Agency - Rules of Agency - Creation of Agency - Classification of Agents - Duties and Rights of Agent - Duties and Rights of Principal - Sub-agent - Personal Liability of Agent -Termination of Agency. General Clauses Act and Interpretation of statutes.

Unit 3: The Sale of Goods Act, 1930: Definitions - Essentials of a Contract of Sale - Sale Vs Agreement to Sell -Sale Vs Hire Purchase Agreement - Classification of Goods - Conditions and Warranties - Express and Implied Conditions and Warranties - Delivery of Goods - Rules as to Delivery of Goods - Rights and Duties of the Buyer - Unpaid Seller - Rights of an Unpaid Seller against the goods.

Unit 4: The Indian Partnership Act, 1932 and The Limited Liability Partnership (LLP) Act, 2008: (8 Lectures) Definitions - Origin - LLP in India - Salient features of LLP - Difference between LLP and Partnership - LLP Versus Company - LLP agreement - Nature of LLP - Partners and designated partners and their relations - Incorporation document - Incorporation - Registered office of LLP - Advantages and Disadvantages of LLP.

Unit 5: The Negotiable Instruments Act, 1881: Meaning of Negotiable Instruments, Characteristics, Classification of Instruments, Different provisions relating to Negotiation, Negotiability, Assignability, Right and Obligation of parties, presentment of Instruments, Rules of Compensation

Course Outcome

After completion of the course, student will be able to:

- Appreciate the important provisions of the Indian Contract Act, 1872 relating to offer and acceptance and special contracts.
- Grasp the significance of the provisions of the Indian Contract Act, 1872 as relating to bailment and contract of agency and the Negotiable Instruments Act,1881
- Have a good understanding of the provisions of Sale of Goods Act, 1930
- Know the main provisions of Limited Liability Partnership Act, 2008

Suggested Readings

Singh, Avtar. The Principles of Mercantile Law. Eastern Book Company, Lucknow.
Chadha, P.R. Business Law. Galgotia Publishing Company, New Delhi.
Maheshwari & Maheshwari. Business Law. National Publishing House, New Delhi.
Majumdar, A.K., and Kapoor, G.K. Company Law and Practice. Taxmann, New Delhi.
Ramaiya. A Guide to Companies Act. LexisNexis Butterworth Wadhwa.
Tulsian, P.C. Business Law. Tata McGraw Hill, New Delhi.
Sharma, J.P. An Easy Approach to Corporate Laws. Ane Books Pvt. Ltd., New Delhi.
Singh, Harpal. Indian Company Law. Galgotia Publishing, Delhi.

MICROECONOMICS

Course Objective

The purpose of the course is for students to develop an understanding of the concepts and theories in Microeconomics and apply such concepts and theories to simple problem solving.

Detailed contents of syllabus

Unit 1: Introduction: Nature and scope of economics - Methodology in economics - Choice as an economic problem - basic postulates - Role of price mechanism - Demand and supply - Basic framework - applications - Market equilibrium.

Unit 2: Consumer's Behaviour: Utility: Cardinal and ordinal approaches - Indifference curve - Consumer's equilibrium (Hicks and Slutsky) - Giffen goods - Compensated demand - Elasticity of demand - Price, income and cross - Consumer's surplus - Engel curve.

Unit 3: Theory of Production and Costs: Production decisions - Production function - Iso-quant - Factor substitution - law of variable proportions - returns to scale - economies of scale - Different concepts of cost and their interrelation - Equilibrium of the firm - Expansion path - Empirical evidence on costs.

Unit 4: Factor Pricing: Marginal productivity theory of distribution - Theories of wage determination - Wages and collective bargaining - Wage differentials - Rent - Scarcity rent - Differential rent - Quasi rent - Interest - Classical and Keynesian theories - Profits - Innovation, risk and uncertainty theories.

Unit 5: Market Structure: Market forms - Perfect and imperfect markets - Equilibrium of a firm - Perfect competition, monopoly, and price discrimination - Measure of monopoly power - Monopolistic competition - Duopoly, Oligopoly - Taxation and equilibrium of a firm - Notion of controlled and administered prices.

Course Outcome

After completion of the course, student will be able to:

- Develop a detailed understanding on the basics of economics including the role of price mechanism and market equilibrium.
- Gain an understanding of the consumer behaviour, demand and supply and the market structures.
- Develop the knowledge of how price movement occurs in the market.
- Explain the theory of the firm.
- Get a fair understanding of the different types of market structure.

BUSINESS COMMUNICATION

Course Objective

The course aims at enhancing reading comprehension and writing skills of the students. Nuances of drafting business letters and reports. Written and oral presentation of cases, articles and reports will also be taught.

Detailed Contents of Syllabus

Unit 1: Introduction: Nature of Communication, Process of Communication, Types of Communication (verbal & Non-Verbal), Importance of Communication, Different forms of Communication Barriers to Communication Causes, Linguistic Barriers, Psychological Barriers, Interpersonal Barriers, Cultural Barriers, Physical Barriers, Organizational Barriers.

Unit 2: Reading, Comprehension and Vocabulary: Short and simple passages from the prescribed books These texts are to be used to enhance reading and comprehension skills of learners through various textual tasks, identifying central ideas, supplying alternative titles, attempting short comprehension questions, Vocabulary enhancement.

Unit 3: Writing: The structure of a paragraph; write a short, guided composition. These skill is to be practised through activities such as supplying topic sentences to given paragraphs, completing given paragraphs, expressing given facts or information from tables and expressing it in paragraphs, reordering jumbled sentences, and then re-writing them as connected paragraphs, using suitable linking devices etc Writing from different points of view of the same event / situation Business reports, Types, Characteristics, Importance, Elements of structure, Process of writing, Order of writing, the final draft, check lists for reports.

Unit 4: Business Correspondence: Letter Writing, presentation, inviting quotations, sending quotations, placing orders, inviting tenders, Sales letters, claim & adjustment letters and social correspondence, Memorandum, inter office Memo, Notices, Agenda, Minutes, Job application letter, preparing the Resume.

Unit 5: Presentation and Speaking: Importance, Characteristics, Presentation Plan, Power point presentation, Visual aids. Speaking: Public Speaking (debates, extempore, just a minute) Listening: Listening to eminent voices of one's choice (in or outside the class, followed by a discussion in the class).

Course Outcome

After completion of the course, student will be able to:

- Appreciate the significance vocabulary.
- Understand the basics of writing.
- Write business letters, Draft business reports and other correspondence.
- Prepare and make presentations.
- Summarize key ideas in a passage.

Suggested Readings

Raymond V. Lesikar, Marie E. Flatley, Kathryn Rentz, Paula Lentz, and Neerja Pande, *Business Communication: Connecting in a Digital World (SIE)*, McGraw Hill Education

Singha K K, Business Communication, Taxman's

Bovee, and Thill, *Business Communication Essentials, Pearson Education*

Dona Young, *Foundations of Business Communication: An Integrative Approach*, McGraw Hill Education

Madhukar R K, Business Communication, Vikas publications

Herta A Murphy, Herbert W Hildebrandt, Jane P. Thomas, *Effective Business Communication (SIE)*, McGraw Hill Education

Locker and Kaczmarek, *Business Communication: Building Critical Skills*, McGraw Hill Education

Shirley Taylor, *Communication for Business, Pearson Education*

Manohar, 'Oral Communication: Speech Patterns' A Foundation English Course for Undergraduates: Reader I, Delhi: Oxford University Press

Manohar, A Foundation English Course for Undergraduates: Workbook I, Delhi: Oxford University Press

Department of English, University of Delhi, Everyday English: Pearson, 2005

Shirley Taylor, Communication for Business, Pearson Education

BUSINESS MATHEMATICS

Course Objective

The purpose of this course is to enable the students to learn basics of mathematics as applicable to business and finance, including time value of money and differential and integral calculus.

Detailed Contents of Syllabus

Unit 1: Indices, Logarithms, Matrices and Linear Inequalities: - Laws of Indices - Exponents and Logarithms - Anti-Logarithms Equations and Matrices: Equations: Simultaneous linear equations up to three variables, Quadratic and Cubic equations in one variable - Matrices: Algebra of Matrices, Inverse of a Matrix, and determinants, solving system of equations by Cramer's Rule (involving not more than three variables).

Unit 2: Time value of Money: Simple Interest - Compound interest - Depreciation - Effective Rate of Interest -Present Value - Net Present Value - Future Value - Perpetuity - Annuities - Sinking Funds - Valuation of Bonds - Calculations of Returns Nominal Rate of Return - Effective Rate of Return - Compound Annual Growth Rate (CAGR).

Unit 3: Permutations and Combinations: Basic concepts of Permutations and Combinations: Introduction, Factorial, Permutations results, Circular Permutations, Permutations with restrictions, Combinations with standard results Sequence and Series: Introduction Sequences, Series, Arithmetic and Geometric progression, Relationship between AM and GM and Sum of n terms of special series

Unit 4: Differential Calculus: Function, Mathematical Models: A Catalog of Essential Functions, New Functions from Old Functions, Limits and Rates of Change, The Limit of a Function Calculating Limits Using the Limit Laws ,Continuity, Derivatives , Derivatives and Rates of Change , The Derivative as a Function, Differentiation Formulas Derivatives of Trigonometric Functions, The Chain Rule, Implicit Differentiation, Rates of Change in the Natural and Social Sciences, Related Rates Linear Approximations and Differentials, Inverse Functions, Exponential Functions and Their Derivatives Logarithmic Functions, Derivatives of Logarithmic Functions Exponential Growth and Decay Indeterminate Forms and L'Hospital's Rule, Applications of Differentiation-Maximum and Minimum Values, The Mean Value Theorem How Derivatives Affect the Shape of a Graph Limits at Infinity; Horizontal Asymptotes
Summary of Curve Sketching Graphing with Calculus and Calculators Optimization Problems, Newton's Method

Unit 5: Integral Calculus: Antiderivatives, Integrals- Areas and Distances the Definite Integral the Fundamental Theorem of Calculus Indefinite Integrals and the Net Change Theorem The Substitution Rule

Course Outcome

After completion of the course, student will be able to:

- Compute ratio and proportion.
- Compute time value of money and CAGR.
- Gain knowledge of permutations and combinations.
- Know how to use differential calculus in economic and business decisions.
- Gain an understanding of integral calculus.

Suggested Readings

Anthony, M., and Biggs, N. Mathematics for Economics and Finance. Cambridge University Press.
Sydsaeter and P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia, Delhi.
Mizrahi and Sullivan, John. Mathematics for Business and Social Sciences. Wiley and Sons.
Ayres, Frank Jr. Theory and Problems of Mathematics of Finance. Schaum's Outlines Series. McGraw Hill Publishing.
Dowling, E.T. Mathematics for Economics, Schaum's Outlines Series. McGraw Hill Publishing
Narayan, Shanti and Mittal P.K. Differential Calculus – S Chand
Narayan, Shanti and Mittal P.K. Integral Calculus – S Chand
Prasad, Bindra., and Mittal, P.K. Fundamentals of Business Mathematics. Har-Anand Publications
Soni, R.S. Business Mathematics. Pitambar Publishing House
Vohra, N.D. Quantitative Techniques in Management. Tata McGraw Hill Publishing Company

Semester II

FINANCIAL ACCOUNTING- PRINCIPLES AND PRACTICE II

Course Objective

The second part of the mechanics of preparing the financial statements of a firm and a body corporate.

Detailed Contents of Syllabus

Unit 1: Accounting for Partnership: Introduction to Partnership Accounts, Treatment of Goodwill in Partnership Accounts, Admission, Retirement and Death of a partner Introduction to LLPs and Distinction of LLPs from Partnership, Financial Statements of partnerships and LLP.

Unit 2: Dissolution of partnership firms: piecemeal distribution of assets; Amalgamation of partnership firms; Conversion of partnership firm into a company and Sale to a company; Issues related to accounting in Limited Liability Partnership.

Unit 3: Special Types of Accounting: Accounting for branches: Concept of dependent branches; accounting aspects; debtors' system, stock and debtors system, branch final accounts system and whole sale basis system. Independent branches: concept-accounting treatment: important adjustment entries and preparation of consolidated profit and loss account and balance sheet, Departmental Accounting: Concept, Type of departments, Basis of allocation of departmental expenses, Methods of departmental accounting, Hire - purchase and Instalment sale transactions. Accounts from incomplete records
Joint Venture: Accounting procedures: Joint Bank Account, Records Maintained by Coventurer of (a) all transactions (b) only his own transactions. (Memorandum joint venture account).

Unit 4: Introduction to Company Accounts: Definition of shares and debentures, Issue of shares and debentures, forfeiture of shares, re-issue of forfeited shares Statement of Profit and Loss and Balance Sheet as per Schedule III to the Companies Act, 2013.

Unit 5: Introduction to Computerized Accounts: Computerized Accounting System: Computerized accounts by using any popular accounting software: Creating a company; Configure and Features settings; Creating Accounting Ledgers and Groups, Creating Stock Items and Groups; Vouchers Entry. Generating Reports – Cash Book, Ledger Accounts, Trail Balance, Profit and Loss Account, Balance Sheet, Funds Flow Statement, Cash Flow Statement, Selecting and Shutting a Company; Backup and Restore of Data of a Company.

Course Outcome

After completion of the course, student will be able to:

- Understand the fundamentals of partnership accounts including dissolution.
- Account for branch, departmental and Hire-Purchase accounting.
- Gain an understanding of issue of shares and debentures of a company.
- Understand the basics of computerized accounts,

Suggested Readings

Books

Weygandt , Kimmel, Kieso Accounting Principles, 12ed, ISV Paperback Robert N Anthony, David Hawkins, Kenneth A. Merchant, Accounting: Text and Cases, McGrawHill Education

Charles T. Horngren and Donna Philbrick, Introduction to Financial Accounting, Pearson Education

Goldwin, Alderman and Sanyal, Financial Accounting, Cengage Learning.
Shukla M C, T.S. Grewal and S.C. Gupta. Advanced Accounts. Vol.-I. S. Chand & Co., New Delhi.
Tulsian, P.C. Financial Accounting, Pearson Education.
Maheshwari S N, and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi.

Study materials etc

Compendium of Statements and Standards of Accounting, The Institute of Chartered Accountants of India, New Delhi
Study material of the ICAI

COST ACCOUNTING

Course Objective

The objective of the course is to develop an understanding of the basic concepts and applications to establish the cost associated with the production of products and provision of services and apply the same to determine prices. In addition, the course aims at developing an understanding of cost accounting statements and the ability to able to apply cost information for cost ascertainment, planning, control, and decision making.

Detailed Contents of syllabus

Unit 1: Overview of Cost and Management Accounting: Objectives and Scope of Cost and Management Accounting **-** Users of Cost and Management accounting information, Functions, and role of management accounting. Installation of Costing System Relationship of Cost Accounting, Financial Accounting, Management Accounting and Financial Management - Cost terms and Concepts Cost Reduction and Cost Control Elements of Costs Cost behavior pattern, Separating the components of fixed, variable, semi-variable and step costs. Methods of Costing, Techniques of Costing - Cost Accounting with use of Information Technology.

Unit 2:Allowances,of Cost and preparation of Cost Sheets: Functional classification and ascertainment of cost Preparation of Cost Sheets for Manufacturing sector and for Service sector Ascertainment of Cost and Cost Accounting System - **Material Cost:** Procurement procedures- Store procedures and documentation in respect of receipts and issue of stock, Stock verification, Valuation of material receipts, Inventory control Techniques of fixing level of stocks- minimum, maximum, re- order point, safety stock, determination of optimum stock level, Determination of Optimum Order quantity- Economic Order Quantity (EOQ), Techniques of Inventory control- ABC Analysis, Fast, Slowmoving and Non-moving (FSN), High, Medium, Low (HML), Vital, Essential, Desirable (VED), Just-in-Time (JIT)- Stock taking and perpetual inventory system, use of control ratios, Inventory Accounting Consumption- Identification with products of cost centres, Basis for consumption entries in financial accounting, monitoring consumption **- Employee Cost:** Attendance and Payroll procedures - Elements of wages- Basic pay, Dearness Allowance, Overtime, Bonus, Holiday and leave wages, Allowances and perquisites. Employee Cost Control Employee Turnover- Methods of calculating employee turnover, causes of employee turnover, effects of employee turnover. Utilisation of Human Resource, Direct and indirect employee Cost, charging of employee cost, Identifying employee hours with work orders or batches or capital jobs. Remuneration systems and incentive schemes Time Rate System, Piece Rate System, Differential piece rate system, Calculation of wages, Effective Wages - **Direct Expenses** Direct Expenses Nature of Direct or Chargeable expenses. Sub-contracting- Control on material movements, Identification with the main product or service.

Unit 3 Overheads: Functional analysis. Behavioural analysis- Fixed, Variable and Semi-Variable.

Allocation and Apportionment of overheads using Absorption Costing Method - Factory Overheads- Primary and secondary distribution, Administration Overheads- Method of allocation to cost centres or products, Selling& Distribution Overheads- Analysis and absorption of the expenses in products/ customers, - Concepts of Activity Based Costing (ABC) and Recording and Accounting of Costs**:** Non-integrated Cost Accounting system- Ledger under non-integral system Integrated (Cost and Financial) Accounting system- Ledgers under integral system. Difference between the non-integrated and Integrated Accounting system. Reconciliation of profit as per Cost and Financial Accounts (under NonIntegrated Accounting System).

Unit 4 Methods of Costing: Job Costing**:** Job cost cards and databases, collecting direct costs of each job,attributing overheads to jobs, Application of job costing. Batch Costing**:** Determination of optimum batch quantity, Ascertainment of cost for a batch, Preparation of batch cost sheet, Treatment of spoiled and defective work. Contract Costing Ascertainment of cost of a contract, Progress payment, Retention money, Escalation clause, cost plus contract, Value of work certified, Cost of Work not certified. Determination Value of work certified, cost of work not certified, Notional or estimated profit from a contact. Process / Operation Costing Process cost recording, Process loss, abnormal gains and losses, Equivalent units of production, process profit, Valuation of work in process. Joint Products-Apportionment of joint costs, Methods of apportioning joint cost over joint products, By-products-Methods of apportioning joint costs over by-products, treatment of By-product cost. Costing of Service Sectors Determination of Costs and Prices of services of following sectors/ Industries: Transport, Toll roads, Hospitals, Canteen/ Restaurants, Hotels/ Lodges, Educational Institutions, Financial Institutions/ Banks, Insurance, IT sector and other services.

Unit 5 Cost Control and Analysis: Standard Costing: Setting up of Standards, Types Standards,

Standard Costing as a method of performance measurement. Calculation of Cost Variances- Material Cost Variance, employee Cost Variance, Variable Overheads Variance, and Fixed Overhead Variance. Marginal Costing: Basic concepts of marginal costing, relevant and irrelevant costs for short term decision making, Contribution margin, Break-even analysis, Break –even and profit volume charts, Contribution to sales ratio, Margin of Safety, Angle of Incidence, Cost-Volume-Profit Analysis (CVP), Multi-product break-even analysis.

Course Outcome

After completion of the course, student will be able to:

- Get a significant understanding of the cost concepts, element of cost.
- Demonstrate the capability to prepare cost sheets with proper understanding of the various elements of costs.
- Compute overhead cost.
- Develop cost statement under various methods of costing.
- Calculate and analyse variances.

Suggested Readings

Books

Charles T. Horngren, Srikant M. Datar, Madhav V. Rajan**,** Cost Accounting: A Managerial Emphasis, Pearson Education

Drury, Colin. Management and Cost Accounting. Cengage Learning Arora, M.N.

Cost Accounting – Principles and Practice. Vikas Publishing House, New Delhi.

Study Material

Study material of ICWAI.

COMPANY LAW

Course Objective

The objective of the course is to teach the students the provisions of Indian Companies Act, 2013 and rules and procedures framed thereunder.

Detailed contents of syllabus

Unit 1 The Companies Act, 2013: Introduction - characteristics of a company - common seal - lifting of corporate veil - types of companies including private and public company- government company-foreign company-one-person company-small company-associate company-dormant company-producer company - association not for profit - illegal association - formation of company- promoters and their legal position-pre incorporation contract and provisional contracts - on-line registration of a company. Documents: Memorandum of association and its alteration-articles of association and its alteration doctrine of constructive notice and indoor management.

Unit 2: Management and administration: Maintenance of registers, Provisions relating to meetings, resolutions and minutes – Minutes Declaration and payment of dividend – Books of accounts– financial statement – National Financial reporting Authority – Board of Directors report – corporate social responsibility **Audit and auditors**: appointment – first auditors – casual vacancy – removal and resignation – eligibility, qualifications and disqualifications – remuneration – powers and duties – auditors report – powers of central government.

Unit 3 Board of Director and Meetings : Classification of directors- additional- alternate and adhoc director - women directors-independent director- small shareholders' director - director identity number (DIN) - appointment-who can appoint a director- disqualifications- removal of directors - legal position powers and duties - key managerial personnel-managing director-manager - meetings of shareholders and board - types of meeting convening and conduct of meetings - requisites of a valid meeting - postal ballot - meeting through video conferencing - e-voting - committees of board of directors - audit committee - nomination and remuneration committee- stakeholders relationship committee- corporate social responsibility committee; prohibition of insider trading. Committees, Governance related provisions.

Unit 4 Prospectus and allotment of securities: Public offer and placement – prospectus – Contents – public offer of securities in dematerialized form - shelf prospectus – re-herring prospectus abridged prospectus – deemed prospectus - book building – offer of sale of shares – securities to be dealt with in stock exchanges – allotment of securities – misstatement in prospectus – civil and criminal liability – class action suite – punishment for fraud – private placement – **Share capital and debentures:** share capital – meaning – types – shares with differential rights – calls in advance – issue of shares at premium or at discount – application of share premium account – prohibition of issue of shares at a discount – sweat equity shares – issue and redemption of preference shares – transfer and transmission of securities - alteration of share capital – issue of bonus shares – reduction of share capital – buy back of securities – debentures: meaning – issue.

Unit 5 Acceptance of deposits by companies and Other Provisions: Concept of deposit – depositor – eligible company – prohibitive provisions and exempted companies – acceptance of deposits from members – provisions – punishment for the contravention of section 73 or 76 – repayment of deposits – Registration of charges: definition and types of charge – duty to register charges – application for registration of charges – deemed notice of charge - powers of the Registrar – intimation of appointment of Receiver or manager – punishment for contravention -

Learning Outcome

After completion of the course, student will be able to:

- Gain knowledge of the provisions of the Indian Companies Act, 2013 and rules.
- Assess legal requirements of business actions by companies.
- Get a significant knowledge on the aspects pertaining to the appointment, qualifications, and disqualifications etc of directors.
- Make arrangement for conduct of a meeting of a company.
- Prepare a draft prospectus.

Suggested Readings

Books

Avtar Singh. Company Law. Eastern Book Company

Datta, Company Law; Lexis Nexis, Butterworths Wadhwa

Ramaiya. Guide to the Companies Act; Lexis Nexis, Butterworths Wadhwa

Garg, R.C. Chawla, Vijay Gupta. Company Law; Kalyani Publishers

Majumdar, Dr. G.K. Kapoor, Sanjay Dhamija. Company Law and Practice; Taxman

Kannal, S., & Sowrirajan, V.S. Company Law Procedure. Taxman

Sharma, J.P. An Easy Approach to Corporate Laws. Ane Books Pvt. Ltd., New Delhi Singh, Harpal. Indian Company Law. Galgotia Publishing, Delhi.

Bare Act

COMPUTER APPLICATIONS IN BUSINESS

Course Objective

The purpose of the course is to impart knowledge on the basic concepts of information system and data base and the working of the automated business process, and the architecture for E-Commerce and M-Commerce. This course also teaches the use of business productivity software.

Detailed contents of the syllabus

Unit 1: Introduction to information systems and database concepts: Information System - Define - Differentiate Data, Information and Knowledge - Role of Information Systems - Information Technology - Business Processes- Digitalization –Strategic Information Systems - IS and Competitive Advantage - Types of IS – Transaction Processing Systems - Management Information Systems- Decision Support Systems -Executive Support System - Enterprise Resource Planning - Database Fundamentals - Traditional File Approach– DBMS - RDBMS- Designing Databases – Normalization - ER Diagram–SQL Query - Big Data - Data Warehouses and Data Mart. - Knowledge Management - Concept and Definition - Knowledge Management Value Chain - Types of Knowledge Management Systems - Intelligent Techniques.

Unit 2: Automated Business Processes: Introduction to Enterprise Business Processes, Benefits, Risks and Controls; Diagrammatic representation of business processes using Flowcharts; Risks and controls for specific business processes: Procure to pay (P2P), Order to cash, Inventory Cycle, Hire to Retire, Supply Chain Management, Fixed Assets etc - Applicable regulatory and compliance requirements including computer related offences, privacy, cybercrime, Sensitive Personal Data Information of Information Technology Act, 2000.

Unit 3: Financial and Accounting Systems: Integrated (ERP) and non-integrated systems with related risks and controls; Business process modules and their integration with Financial and Accounting systems - Reporting Systems and MIS, Data Analytics and Business Intelligence - Business Reporting and fundamentals of XBRL (Extensible Business Reporting Language) - Applicable regulatory and compliance requirements Core banking Systems.

Unit 4: E-commerce, M-commerce, and Emerging Technologies: Components and Architecture of ECommerce and M Commerce with related risks and controls - Business process flow with its related risks and controls -Applicable regulatory and compliance requirements - Emerging technologies with its related risks and controls - Cyber-crimes - case laws - Core Banking Systems: Components and Architecture of CBS and related risks and controls -

Unit 5: Business Productivity Software Types of business productivity software, skill development in select software including Microsoft Office.

Learning Outcome

After completion of the course, student will be able to:

- Describe and distinguish the various types of business information systems and their roles in running a business organization.
- Grasp the significance of the fundamental concepts of database and design simple database using E-R diagram and normalization concepts.
- Analyse and apply various methodologies, tools, and techniques to analyze and design business information systems.
- Enjoy the new information technologies available to businesses today and its applications.
- Develop expertise in using business software MS-Office

Suggested Readings

Ellen F. Monk, Joseph A. Brady, and Emilio I. Mendelsohn, Problem- Solving Cases in Microsoft Access & Excel, Cengage Learning

Leon, A., and Leon, M. Fundamentals of Information Technology. Leon. Vikas (4) Software manuals

Kenneth E. Kendal and Julie E. Kendall, Systems Analysis and Design, Pearson Publication

Ralph M.Stair and George W. Reynolds, Fundamentals of Information Systems, Cengage Learning, New York

Keri E. Pearlson, Carol S. Saunders and Dennis F. Galletta, Managing and Using Information Systems: A Strategic Approach, 6th Edition, John Wiley & Sons

Rajaraman, V. Introduction lo Information Technology, Prentice Hall of India.

MACROECONOMICS

Course Objective

The purpose of the course is to introduce the students the basic concepts of the macroeconomics and critical derivation of aggregate demand and supply and simple Keynesian model. They will also study about inflation and unemployment and theories of economic growth.

Detailed Contents of syllabus

Unit 1: Introduction to Macroeconomics and National Income Accounting: Basic issues studied in macroeconomics - measurement of gross domestic product - income, expenditure and the circular flow - real versus nominal GDP - price indices - national income accounting for an open economy - balance of payments: current and capital accounts.

Unit 2: The Closed Economy in the Short Run: Derivation of aggregate demand and aggregate and supply curves - interaction of aggregate demand and supply - Classical and Keynesian systems - simple Keynesian model of income determination - ISLM model - fiscal and monetary multipliers.

Unit 3: Inflation, Unemployment and Expectations: Phillips curve - adaptive and rational expectations - policy ineffectiveness debate.

Unit 4: Open Economy Models: Short-run open economy models - Mundell-Fleming model - exchange rate determination, purchasing power parity - asset market approach - Dornbusch's overshooting model - monetary approach to balance of payments - international financial markets.

Unit 5: Economic Growth: Harrod-Domar model - Solow model - golden rule - technological progress and elements of endogenous growth. Consumption: Keynesian consumption function - Fisher ‘s theory of optimal intertemporal choice - lifecycle and permanent income hypotheses - rational expectations and random-walk of consumption expenditure. Investment: determinants of business fixed investment; residential investment and inventory investment - Demand for money.

Learning Outcome

After completion of the course, student will be able to:

- Understand various concepts and theories in macro-economics and apply such concepts and theories in simple problem solving.
- Understand how aggregate demand and supply works and understand the Keynesian system.
- Appreciate the policy implications of inflation and unemployment.
- Critically evaluate the functioning of open economy models
- Grasp the significance of different models of economic growth.

Suggested Readings

Gregory N Mankiw, Principles of Macroeconomics, Cengage Ackley, G, Macroeconomics: Theory

And Policy, Macmillan Publishing Company, Andrew B. Abel and Ben S. Bernanke, Macroeconomics,

Pearson Education, Inc Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill Errol D‘Souza,

Macroeconomics, Pearson Education, New York. Olivier Blanchard, Macroeconomics, Pearson Education, Inc. Richard T. Froyen, Macroeconomics, Pearson Education Asia Paul Krugman and Robin Wells, Macroeconomics, Macmillan.

PROBABILITY AND STATISTICS

Course Objective

This course teaches the students fundamentals of statistics covering statistical description data, measures of central tendency, dispersion, theoretical distributions of random variables and probability.

Detailed Contents of Syllabus

Unit 1: Statistical description of Data: Statistical Representation of Data, Diagrammatic representation of data, Frequency distribution, Graphical representation of Frequency Distribution -Histogram, Frequency Polygon, Ogive, Pie-chart

Unit 2: Measures of Central tendency and Dispersion: Measures of Central Tendency and Dispersion: Mean, Median, Mode, Mean Deviation, Quartiles and Quartile Deviation, Standard Deviation, Coefficient of Variation, Coefficient of Quartile Deviation.

Unit 3: Probability Theory: Introduction - Definition of probability - terminology used in probability theory, rules of probability, conditional probability, Independent and dependent events - mutually exclusive events - Total and Compound Probability - solving problems on probability.

Unit 4: Random Variables: Introduction - Discrete and Continuous random variables - Mathematical Expectation - Variance - Properties - Moments - Skewness - Kurtosis.

Unit 5: Theoretical Distributions: Binomial Distribution - Poisson distribution - Normal Distribution - Normal Approximation to the Binomial - Central limit theorem.

Course Outcome

After completion of the course, student will be able to:

- Know how to represent data through charts, diagrams, and graphs.
- Know how to compute various measures of central tendency and dispersion.
- Gain knowledge of the use of probability.

Semester III

ENVIRONMENTAL MANAGEMENT AND SUSTAINABILITY

Course Objective

This course updates the students' knowledge of environmental eco systems and biodiversity. Major issues like pollution, impact of human population on environment and sustainability practices will be discussed in detail.

Detailed Contents of Syllabus

Unit 1: Introduction and Natural Resources: Multidisciplinary nature of environmental studies Renewable and non-renewable resources: Natural resources and associated problems. Forest, water mineral, food, Energy, land resources overutilization, Role of an individual in conservation of natural resources. Equitable use of resources for sustainable lifestyles.

Unit 2: Ecosystems: Concept of an ecosystem. Structure and function of an ecosystem. Producers, consumers and decomposers. Energy flow in the ecosystem. Ecological succession. Food chains, food webs and ecological pyramids. Introduction, types, characteristic features, structure and function of the following ecosystem: - Forest ecosystem Grassland Ecosystem Desert Ecosystem Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) - Biodiversity and its conservation Definition: genetic, species and ecosystem diversity. Biogeographical classification of India Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values Biodiversity at global, National and local levels. India as a mega-diversity nation Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts. Endangered and endemic species of India Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.

Unit 3: Environmental Pollution: Definition - Cause, effects and control measures - Air pollution - Water Pollution Soil Pollution Marine Pollution Noise Pollution Thermal Pollution Nuclear Hazards Solid Waste Management: Causes, effects and control measures of urban and industrial wastes. Role of an individual in prevention of pollution. Pollution case studies. Disaster management: floods, earthquake, cyclone and landslides.

Unit 4: Sustainability, Social Issues and the Environment: From Unsustainable to Sustainable Development Urban problems related to energy Water conservation, rain water harvesting, watershed management Resettlement and rehabilitation of people; its problems and concerns. Environmental ethics: Issues and possible solutions. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case Studies. Wasteland reclamation. Consumerism and waste products. Environment Protection Act. Air (Prevention and Control of Pollution) Act. Water (Prevention and control of Pollution) Act Wildlife Protection Act Forest Conservation Act Issues involved in enforcement of environmental legislation - Public awareness.

Unit 5 Human Population and the Environment: Population growth, variation among nations. Population explosion – Family Welfare Programme. Environment and human health. Human Rights. Value Education. HIV/AIDS. Women and Child Welfare. Role of Information Technology in Environment and human health.

Learning Outcome

After completion of the course, student will be able to:

- Define the structure and functions of ecosystem.
- Explain the benefits of biodiversity conservation.
- Perceive the environment legislations in India for sustainable development.
- Summarize the sources, effects and control measures of various types of Pollutants
- Appreciate the impact of human population on the environment

Suggested Readings

Agarwal, K.C, Environmental Biology, Nidi Publ. Ltd. Bikaner.
Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad, India,
Clark R.S., Marine Pollution, Clanderson Press Oxford (TB)
Compliances and Standards, Vol I and II, Enviro Media (R)
Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T, Environmental Encyclopedia, Jaico Publishing House, Mumabai,
Hawkins R.E., Encyclopedia of Indian Natural History, Bombay Natural History Society, Bombay (R) Jadhav, H & Bhosale, V.M, Environmental Protection and Laws. Himalaya Pub. House, Delhi.
Kanagasabai, C.S, Environmental Studies. Rasee publishers. Madurai
Mckinney, M.L. & School, R.M, Environmental Science systems & Solutions, Web enhanced edition
Odum, E.P, Fundamentals of Ecology. W.B. Saunders Co. USA
Sapru R.K, Environment Management in India, Vol. I & Vol. II Ashish publishers house, New Delhi.
Townsend C., Harper J, and Michael Begon, Essentials of Ecology, Blackwell Science (TB)
Trivedi R.K., Handbook of Environmental Laws, Rules Guidelines, Yogendra, N. and Srivastava, N, Environmental Pollution, Ashish Publishing House. New Delhi.

FINANCIAL ACCOUNTING III

Course Objective

The main objective of the course is to teach the students the basic framework relating to accounting standards. In addition, detailed accounting standards and their applications will be taught. Students will be taught the mode of preparing the financial statements of a body corporate and accounts for special transactions including special aspects of company accounts

Detailed Contents of Syllabus

Unit 1: Framework and Application and overview of Accounting Standards: Process of formulation of Accounting Standards including Ind-AS (IFRS converged standards) and IFRSs; convergence vs adoption; objective and concepts of carve outs. Framework for Preparation and Presentation of Financial Statements (as per Accounting Standards). All major Accounting standards issued by ICAI.

Unit 2: Company Accounts: Preparation of financial statements - Statement of Profit and Loss, Balance Sheet and Cash Flow Statement; Managerial Remuneration Profit (Loss) prior to incorporation Accounting for bonus issue and right issue –Redemption of preference shares and debentures – relevant provisions of Companies Act 2013.

Unit 3: Special Aspects of Company Accounts and Consolidated Financial Statements: Employee Stock Option Plans – Concept and need; Accounting treatment; Provisions of guidance note on accounting for Share-Based Payments; Buyback of Securities and Equity Shares with differential rights; issue procedure; Provisions under Companies Act 2013; Concept of goodwill, intangible assets, valuation. Accounting for Investment; Insurance claims for loss of stock and loss of profit; Consolidated Financial Statements: Concept of consolidation and problems on Consolidated Financial Statements with single subsidiary

Unit 4: Reorganization of Companies: Accounting for amalgamation and reconstruction, Accounting involved in liquidation of companies

Unit 5: Financial Statements of Banking and Non-Banking Financial Companies: Relevant provisions of The Banking Regulation Act, 1949, Books of Accounts, Returns and Forms of Financial Statements, capital Adequacy Norms, Income recognition, Classification of Assets and Provisions, Special Transactions of banks, NBFC

Course Outcome

After completion of the course, student will be able to:

- Understand the use of accounting standards in the framework of accounting
- Get a significant grasp of the important accounting standards
- Demonstrate the ability to prepare the financial statements of a body corporate
- Prepare the accounts of special transactions
- Undertake the preparation of accounts pertaining to branches and departments

Suggested Readings

Books

Shukla M C, T.S. Grewal and S.C. Gupta. Advanced Accounts. Vol.-I & II. S. Chand & Co., New Delhi.
Tulsian, P.C. Financial Accounting, Pearson Education
Robert N Anthony, David Hawkins, Kenneth A. Merchant, Accounting: Text and Cases, McGrawHill Education
Charles T. Horngren and Donna Philbrick, Introduction to Financial Accounting, Pearson Education
Weygandt , Kimmel, Kieso Accounting Principles, 12ed, ISV Paperback
Goldwin, Alderman and Sanyal, Financial Accounting, Cengage Learning
Maheshwari S N, and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi.
Monga J R, Financial Accounting: Concepts and Applications. Mayur Paper Backs, New Delhi .

Bhushan Kumar Goyal and HN Tiwari, Financial Accounting, International Book House.

Study materials etc

Compendium of Statements and Standards of Accounting, the Institute of Chartered Accountants of India, New Delhi.
Study material of the ICAI.

INDIAN ECONOMY

Course Objective

The course aims at imparting knowledge on the structure of the Indian economy, its key sectors and indicators. Students will also gain an understanding about the major economic issues confronting the Indian economy and the economic reforms in the Indian economy besides learning about the role of RBI and its policies.

Detailed Contents of Syllabus

Unit 1: Introduction to economic system Of India: Evolution of the Indian Economy – Overview of key sectors of Indian economy, Macroeconomics overview – terms and concepts (GDP, Inflation, Price Index, Savings and Investment) – National Accounts in India – Central problems in an economy and corrective instruments used.

Unit 2: Population, Economic growth and development: Demographic trends and issues ofeducation and health. Measuring growth and development – social development indicators, Review ofFive-year Plans in India, Economic growth in India since independence – stages and turnarounds – economic growth and structural change.

Unit 3: Income inequality: Concepts and measures - Income inequality in India, the problem of Unemployment in India in an era of growth – forms of unemployment – organized and unorganized sectors – employment generation policies and programs, Poverty in India: Measurement and trends - Poverty and economic growth: Studying the imbalances - Anti-poverty policies and programs in India, Population and Human development: HDI and other indexes – Human development in India: Inequalities and Imbalances.

Unit 4: Agricultural, Industrial and Service Sectors in India: Features and Prospects in an era of Liberalization, Privatization & Globalization, Agriculture in India: Characteristic features and Prospects – Economic reforms and Indian agriculture, Industrial Sector features, problems and prospects. Services sector features, problems and prospects Overview of international trade: Exchange rate, terms of trade and gains from trade - BOP in Indian context.

Unit 5: Macro policies and their impact: Study of fiscal policies, monetary policies, trade and investment policies, role of institutions, RBI in India: Brief overview of recent monetary policies, Inflation: Causes and cures - Inflation in India.

Learning Outcome

After completion of the course, student will be able to:

- Understand the theoretical, empirical and policy issues relating to the Indian economy
- Gain knowledge of various sectors and their contribution to GDP and the economic reforms
- Gain an understanding of the macro policies of the Govt and RBI in the management of the Indian economy.

Suggested Readings

Books

Uma Kapila: India Economy Since Independence, Academic Foundation

Uma Kapila: Economic Development and Policy in India

Jean Dreze and Amartya Sen. Economic Development and Social Opportunity, Oxford University Press

Kaushik Basu and A. Maertens, (Eds). The New Oxford Companion to Economics, Oxford University Press.

Acharya, Sankar and Rakesh Mohan (eds.). India's Economy: Performance and Challenges, OUP.

Dutt, R. and K.P.M. Sundharam, Indian Economy, S. Chand & Company Ltd., New Delhi.
Dhingra, I. C, The Indian Economy: Environment and Policy, Sultan Chand & Sons, New Delhi.
Dutt, R.C, The Economic History of India Under Early British Rule, Low Price Publications. Delhi. Kumar, D. (Ed.), The Cambridge Economic History of India, Volume II, 1757-1970, Orient Longman Ltd., Hyderabad.
Misra, S.K. and V.K. Puri, Indian Economy — Its Development Experience, Himalaya Publishing House, Mumbai.
Michael P. Todaro and Stephen Smith: Economic Development, Pearson

Reports

United Nations Development Programme: Human Development Report Palgrave Macmillan Government of India: Economic Survey (latest).
Government of India: Five Year Plan (latest).
Government of India: Finance Commission Report (latest)

CORPORATE FINANCE

Course Objective

The purpose of the course is to help the students to develop an understanding of the different functions of financial management of a body corporate so that it is possible for them to apply the same in the making of decisions relating to the raising and the utilization of funds.

Detailed Contents of Syllabus

Unit 1: Introduction: Nature, scope and objective of Financial Management, Time value of money, Risk and return (including Capital Asset Pricing Model), Valuation of securities – Bonds and Equities.

Unit 2: Investment Decisions: The Capital Budgeting Process, Cash flow Estimation, Payback Period Method, Accounting Rate of Return, Net Present Value (NPV), Net Terminal Value, Internal Rate of Return (IRR), Profitability Index, Capital budgeting under Risk – Certainty Equivalent Approach and Risk-
Adjusted Discount Rate.

Unit 3: Financing Decisions: Cost of Capital and Financing Decision: Sources of long-term financing Estimation of components of cost of capital. Methods for Calculating cost of equity capital, Cost of Retained Earnings, Cost of Debt and Cost of Preference Capital, Weighted Average cost of capital (WACC) and Marginal cost of capital. Capital structure –Theories of Capital Structure (Net Income, Net Operating Income, MM Hypothesis, Traditional Approach). Operating and financial leverage; Determinants of
capital structure.

Unit 4: Dividend Decisions: Theories for Relevance and irrelevance of dividend decision for corporate valuation; Cash and stock dividends; Dividend policies in practice.

Unit 5: Working Capital Decisions: Concepts of working capital, the risk-return trade off, sources of shortterm finance, working capital estimation, cash management, receivables management, inventory management and payables management.

Learning Outcome

After completion of the course, student will be able to:

- Be conversant with the computation of time value of money, calculate risk and return
- Calculate the various investment decision making criterion such as NPV, IRR, etc
- Demonstrate the ability to analyse the effect of leverage on the value of the firm
- Analyse to know as to how dividend decisions will impact the shareholder value
- Make a forecast of working capital required by a firm

Suggested Readings

Brealey Richard, Myers, Stuart et al Principles of Corporate Finance, McGraw Hill
Brigham and Houston, Fundamentals of Financial Management, Cengage Learning
James C. Van Horne and Sanjay Dhamija, Financial Management and Policy, Pearson Education
Levy H. and M. Sarnat. Principles of Financial Management. Pearson Education
Pandey, I.M. Financial Management. Vikas Publications.
Khan and Jain. Basic Financial Management, McGraw Hill Education Banerjee, Arindam. Financial Management. Oxford University Press.

STATISTICS FOR BUSINESS II

Course Objective

This course aims at imparting knowledge to students on advanced concepts and statistical tools like correlation and regression, theory and techniques of sampling. Students will also have the opportunity to learn how to frame and test hypotheses using sampling methods. Further, students will gain an understanding of statistical tools relating to time series and index number.

Detailed Contents of Syllabus

Unit 1: Correlation and Regression: Correlation and Regression - Scatter diagram - Karl Pearson's Coefficient of Correlation Rank Correlation - Coefficient of Concurrent deviation - Probable Error and Probable Limits - Simple Linear Regression.

Unit 2: Testing of Hypothesis of Large Samples: Sampling distributions - Estimation of parameters - interval estimation - Statistical hypothesis - Large sample tests based on Normal distribution for proportion, mean.

Unit 3: Testing of Hypothesis of Small Samples: Tests based on t distribution, confidence interval - Chisquare and F distributions for mean, variance - Contingency table (test for independent) - Goodness of fit - Implementation in Excel.

Unit 4: Time Series Analysis: Introduction, Time Series Analysis , Utility of the Time Series , Components of Time Series - Long term trend or secular trend - Seasonal variations - Cyclic variations - Random variations, Methods of Measuring Trend - Free hand or graphic method - Semi-average method - Method of moving averages - Method of least squares, Mathematical Models for Time Series - Additive model - multiplicative model, Editing of Time Series, Measurement of Seasonal Variation - Seasonal average method - Seasonal variation through moving averages - Chain or link relative method - Ratio to trend method, Forecasting Methods Using Time Series - Mean forecast - Linear trend forecast - Non-linear trend forecast - Forecasting with exponential smoothing.

Unit 5: Index Numbers: Introduction, Definition of an Index Number - Relative - Classification of index numbers , Base year and current year - Chief characteristics of index numbers - Main steps in the construction of index numbers, Methods of Computation of Index Numbers - Unweighted index numbers - Weighted index numbers, Tests for Adequacy of Index Number Formulae , Cost of Living Index Numbers of Consumer Price Index - Utility of consumer price index numbers - Assumptions of cost of living index number - Steps in construction of cost of living index numbers , Methods of Constructing Consumer Price Index - Aggregate expenditure method - Family budget method - Weight average of price relatives, Limitations of Index Numbers, Utility and Importance of Index Numbers.

Learning Outcome

After completion of the course, students will be able to:

- Compute correlation and construct regression equations using the software
- Apply suitable testing of the hypothesis of large samples
- Apply suitable testing of the hypothesis of small samples
- Apply the techniques of time series analysis
- Construct index numbers of different types

Suggested Readings

1. Gupta, S.C. and Kapoor, V.K. (2007): Fundamentals of Mathematical Statistics, 11th Edn., (Reprint), Sultan Chand and Sons.
2. Anderson, Sweeney and William. Statistics for Students of Economics and Business
3. Nica, Mihai. Principles of Business Statistics: Open Text book Library: https://open.umn.edu/opentextbooks/textbooks/384
4. Crawshaw J and Chambers J, Michael, ShalabhA Concise Course in Advanced Level Statistics, Oxford University Press
5. Heumann, Christian, Schomaker, Introduction to Statisitcs and Data Science, Springer
6. Everitt B S, Statisitcs, Cambridge
7. Gupta, S.P., and Gupta, Archana, Statistical Methods. Sultan Chand and Sons, New Delhi
8. Gupta, S.C. Fundamentals of Statistics. Himalaya Publishing House.
9. Stein Robert and Foster, Dean, Statistics for Business, Decision Making and Analysis, Pearson.

Semester IV

DIRECT AND INDIRECT TAXES

Course Objective

The purpose of the course is to introduce the students the major provisions of the Income Tax Act of 1961 with emphasis on the computation of income from salaries, income from house property, income from business or profession, capital gains. Besides, the course aims at giving them a general overview of the GST.

Detailed contents of the syllabus

Unit 1: Introduction: Meaning of Tax - Income Tax Act 1961 - Previous Year, Assessment Year and other Basic concepts - Exempted incomes - Agricultural income and Non-Agricultural income - Tax treatment to Agriculture Income - Heads of incomes Gross Total Income - Tax rate for Individuals. Residential status of individuals and HUFs - Incidence of tax - problems.

Unit 2: Income from Salary and House property: Meaning of salary - Taxability of Allowances, Perquisites, Provident Fund, Leave Salary and retirement benefits - Deductions from salary income u/s 16 - Computation of income from salary. Income from House property: Basis of Charge-Exempted house property incomes- Computation of Gross Annual Value (GAV) of let out house property Net Annual Value (NAV) - Treatment of unrealized rent recovered and arrears of rent Deductions u/s 24 - Pre Construction Period Interest - Loss from self-occupied house property - Computation of total Income from house property.

Unit 3: Income from Business / Profession, Capital gains and Income from Other sources: Expenses expressly admissible and inadmissible - weighted Deduction-Deemed Profits Valuation of stock - Computation of Income from Business - Professional Receipts and Payments - Cash system and mercantile system of accounting - Computation of Income from Profession. **:** Basis of Charge-Meaning of capital Assets - Types of capital gains- Transactions not regarded as transfer - Indexed cost of acquisition- Indexed cost of Improvement- Computation of capital gain - Exempted capital gains u/s 54. Income from Other Sources -Income Chargeable-TDS - Grossing up - Treatment of gifts received - Computation of Income from other sources.

Unit 4 : Computation of Tax Liability, Procedures : Incomes not taxable, clubbing of Income, Deductions from total income, Filing of returns, Advance tax, TDS, TCS, Appeal procedures, penalties

Unit 5: Indirect taxes: concept features – history - principal indirect taxes - Goods and Services Tax (GST) Laws: An introduction including Constitutional Aspects Levy and collection of CGST and IGST Application of CGST/ IGST law, Concept of supply including composite and mixed supplies, Charge of tax, Exemption from tax - Composition levy - Basic concepts of time and value of supply - Input tax credit - Computation of GST liability – Registration - Tax invoice - Credit and Debit Note - Electronic way bill – Returns - Payment of tax including reverse charge

Learning Outcome

After completion of the course, student will be able to:

- Appreciate the basic terms used under the Income Tax Act 1961
- Understand the basic provisions of Income tax law
- Understand the methodology for computing Income tax for various class of Individuals
- Understand the basics of indirect taxes
- Get an understanding of the provisions of the GST tax laws

Suggested Readings

Books

Singhania, Vinod K., and Singhania, Monica. Students Guide to income Tax, Taxmann Publications, New Delhi

Ahuja, Girish., and Gupta, Ravi. Systematic Approach to Income Tax. Bharat Law House, Delhi

Datta, D C, Layman's Guide on GST, Taxman Publications Gaur & Narang, Income Tax Law & Practice, Kalyani Publishers.

Hariharan N, Income Tax Law & Practice, Vijay Nicole Imprints Pvt. Ltd. Chennai

Lal, B.B. Income Tax Law and Practice. Konark Publications, New Delhi Mehrotra - Income Tax Law & Accounts, Goyal, Sathiya Bhavan Publications.

Pagare, Dinkar Law and Practice of Income Tax. Sultan Chand and Sons, New Delhi.

Act, Reports etc

Income Tax Act of 1961

Journals, Income Tax Reports. Company Law Institute of India Pvt. Ltd., Chennai.

ECONOMICS OF MONEY, BANKING AND FINANCIAL MARKETS

Detailed Contents of Syllabus

Unit 1: Introduction: Money, Banking, Financial Markets:

Money and its Functions; Financial Markets, Financial Market Instruments; Financial Intermediaries; Demand for Money – Various Approaches.

Unit 2: Interest Rates

Measuring Interest Rates, Distinction between Interest Rates and Returns, Determinants of Asset Demand; Supply and Demand in Bond Market, Loanable Funds Framework; Liquidity Preference Framework; Risk and Term Structure of Interest Rates

Movie: Big Short – followed by an assignment

Unit 3: Central Banking

Central banking system; Independence of central banks, Tools of Monetary Policy; Goals and Targets of Monetary policy; Transmission Mechanism of Monetary Policy

Discussion: Latest Monetary Policy, Reserve Bank of India.

Unit 4: Monetary Policy Theory

Response to monetary policy shocks, Monetary policy at zero lower bound, Role of expectations in monetary policy, Role of credibility and a nominal anchor.

Unit 5: Financial Institutions

An Economic Analysis of Financial Structures, Transaction Costs, Asymmetric Information; Bank Balance Sheet, General Principles in Bank Management, Managing Credit Risk, Managing Interest Rate Risk, Off-balance Sheet Activities

Case Discussion: Basel Norms

Unit 6: Stock Market Pricing

Computing the Price of Common Stock, How the Markets Set Prices, Theory of Rational Expectations, The Efficient Market Hypothesis, Anomalies in Stock Market.

Books

Textbook:

Mishkin, F.S. (2013), The Economics of Money, Banking and Financial Markets, 10th edition, Pearson

Additional Reference Books:

Hubbard, G.R and O'Brien, A. P (2011), Money, Banking and Financial Systems, International Edition, Pearson Hall

Ball, L (2011) Money, Banking and Financial Markets, 2nd Edition, Worth Publishers

Mankiw, G.N and Ball, L (2010) Macroeconomics and the Financial System, Worth Publishers

Eyler, R (2009) Money and Banking: An International Text, 1st edition, Routledge

PERSONAL FINANCE

Course Objective

Upon completion of the course students will acquire an understanding of the concepts and applications associated with achieving personal financial goals, and the analysis of personal financial statements. Students will understand that how financial planning can be used for personal financial decision making and to manage pure risks that may put hinderance in achieving the financial goals.

Detailed Contents of Syllabus

Unit 1: Establishing client- planner relationships:

a. Explain issues and concepts related to overall Financial Planning process, as appropriate to the client.
b. Explain services provided, the process of planning, documentation required.
c. Clarify client's and planner's responsibilities.

Unit 2: Gathering client data and determining goals and expectations: Obtain information from client through interview/ questionnaire about financial resources and obligations.

a. Determine client's personal and financial goals, needs and priorities.
b. Assess client's values, attitudes and expectations.
c. Determine client's time horizons.
d. Determine client's risk tolerance level.
e. Collect applicable client records and documents.

Unit 3: Determining the client's financial status by analyzing and evaluating the client's information:

A. General

a. Current financial status (e.g., assets, liabilities, cash flow, debt management)
b. Capital needs
c. Attitudes and expectations
d. Risk tolerance
e. Risk management
f. Risk exposure

B. General Needs

a. Emergency funds
b. Children's education
c. Children's marriage
d. Buying real assets like home, car, durables, etc.
e. Future lifestyle needs

C. Special needs

a. Divorce / remarriage considerations
b. Charitable planning
c. Adult dependent needs
d. Disabled child needs
e. Education needs
f. Terminal illness planning
g. Entrepreneurial needs planning

D. Risk management

a. Life insurance needs and current coverage
b. Disability insurance needs and current coverage
c. Medical insurance needs and current coverage
d. Long – term care insurance needs and current coverage
e. Homeowners insurance needs and current coverage
f. Auto insurance needs and current coverage
g. Commercial insurance needs and current coverage
h. Other liability insurance needs and current coverage (e.g., umbrella, professional, errors and omissions, directors and officers)

E. Retirement

a. Current retirement plan tax exposures
b. Current retirement plans
c. Retirement strategies

F. Personal tax planning

a. Income from salary
b. Important tax deductions available to individual tax payers

G. Investments

a. Current investments
b. Current investment strategies and policies

Unit 4: Estate Planning:

a. Estate planning documents
b. Estate planning strategies

Unit 5: Project:

Developing and preparing a client-specific Financial Plan tailored to meet the goals and objectives of client, commensurate with client's value, temperament, and risk tolerance#.

Learning Outcome

After completion of the course, student will be able to:

- Understanding of financial planning process.
- Understand the different components of financial planning, viz. Insurance Planning, Investment Planning, Retirement Planning, Tax Planning, and Estate Planning
- Prepare a comprehensive financial plan using MS Excel.

Suggested Readings

Sid Mittra, Anadi P Sahu, and Robert Crane, Practising Financial planning for Professionals, Practitioner's Version (10th ed.) Rochester Hills Publishing

Michael A. Dalton and James F. Dalton, Personal Financial Planning Cases and Applications, 5th Edition, Dalton Publishing

Lisa Holton (Ed) The Encyclopaedia of Financial Planning by Financial Planning Association, FPA Press.

INDIAN POLITICAL SYSTEM: STRUCTURE, POLICY AND INSTITUTIONS

Course Objective

This course offers a structured and basic understanding of the political system and institutions of democracy in India. It gives students a clear idea of the premise of Indian democracy that is based on division of power through the operation of various institutions. The course discusses how checks and balances in the power structure of Indian state operate by focusing on the structures such as legislature, executive and judiciary with examples from law-making, policy deliberations and grounded case studies. This course equips the students with a basic understanding of how power is divided between union and states, state and local governments, parliament, cabinet and other constitutional bodies and institutions.

Detailed Contents of Syllabus

Unit 1: The State: State structure post-independence, Concepts, Difference between state and society, state and government, state and politics, analysing the operation of state 1947-67, state in the 1970s with special reference to emergency and democracy, state in the 1980s with special reference to reform and identity politics, developmental state, neoliberal state in the 1990s and beyond, Political Society and electoral churning.

Unit 2: Federalism and Local Government: The federal process: three phases of development, Design of institutions-strength and weakness; multi-level typologies of power sharing-vertical, horizontal, transversal, centre, state, local; Fiscal federalism, Centre-State relations; Regionalization, and nationalization; democratic decentralization, 73^{rd} and 74^{th} Amendments, Local governments and social justice.

Unit 3: Constitutionalism and Judiciary: Indian constitution and Constituent Assemble Debate, Preamble, Democratic constitutionalism, Differences, and similarities with constitutions of other liberal democracies, Fundamental Rights, Directive Principles of State Policies, Citizenship, Politicization of Judiciary, Growth of PIL, Protected Rights, Judicial Review, Court as Policy Evolution forum, Specific cases as case studies, Reach and overreach.

Unit 4 Parliament and Cabinet: Parliament origin, structure, membership, practice, Role of the speaker, Coalition government, Authoritative government, Prime Minister, President, Council of Ministers.

Unit 5 Party System Fragmentation of party system, Congress system, Bi-polarization of state party, Party seats, Seat shares, Vote shares, Lok Sabha, Rajya Sabha elections, Coalition politics, Electoral alliance reconsolidation, Organization and functioning of parties, national parties, regional parties, identity politics, pressure groups.

Course Outcome

After completion of the course, student will be able to:

- Understand and appreciate the core compositions and processes of political institutions in India.
- Substantiate their understanding through recent examples from Indian politics and case studies.
- Make a critical intervention by comparing structural differences between other liberal democracies and India.
- Understand law, policymaking and constitutional processes.
- Apply these basic understanding of Indian political systems in any competitive examination and/or as they emerge as professionals working in any sector in India.

Suggested Readings

Books

- The Oxford Companion To Politics in India, Nirja Gopal Jayal & Pratap Bhanu Mehta (OUP 2010)
- Political theory and the modern state, David Held, (Polity Press, 1989)
- Substance of Politics, A. Appadurai, OUP, New Delhi, 2000
- Imagined Communities: reflections on the origins and spread of nationalism, Benedict Anderson (Verso revised edition, 2006)
- Nation and its fragments: colonial and postcolonial histories, Partha Chatterjee, (Princeton University Press, 1994)
- The Indian Constitution: Cornerstone of a Nation, Granville Austin, New Delhi: Oxford University Press, 1996
- Politics of India Since Independence, P. Brass, Hyderabad, Orient Longman, 1990
- Indian Government and Politics, S. Kaushik (ed.), Delhi University, Directorate of Hindi Implementation, 1990
- Politics in India, R. Kothari, New Delhi, Orient Longman, 1970

ADVANCED COSTING

Course Objective

The objective of the course is to develop an understanding of the advanced cost accounting concepts and applications associated with the manufacturing and provision of services. In addition, the course aims at developing an understanding of cost accounting practices across various industries and the ability to apply cost information for cost ascertainment, planning, control and decision making.

Detailed Contents of syllabus

Unit 1: Advanced issues relating to Cost Elements: Materials: Inventory system; turnover of material; stock audit; ABC analysis; Material productivity. Labour – Advanced specific incentive plans;profit-sharing and labour co-partnership; treatment of profits; labour productivity, treatment of chargeable expenses. Overheads – Comments on specific items of factory, office and selling and distribution overheads; distribution of inter-department service factory overheads; distribution of officeoverheads and distribution of selling and distribution overheads.

Unit 2 Methods of Costing and Recording of Costs: Specific problems in Job Costing, Batch Costing Contract Costing Process / Operation Costing Process cost recording, Process loss, abnormal gains and losses, Equivalent units of production, process profit, Valuation of work in process. Joint Products- Apportionment of joint costs, Methods of apportioning joint cost over joint products, By-products- Recording and Accounting of Costs: Major issues in Cost recording and reconciliation Presentation of cost information – diagrammatic and graphic presentation. Costing reports – Requisites; steps; types; review.

Unit 3. Costing of Service Sectors: Determination of Costs and Prices of services of following sectors/ Industries: Transport, Toll roads, Hospitals, Canteen/ Restaurants, Hotels/ Lodges, Educational Institutions, Financial Institutions/ Banks, Insurance, IT sector and other services

Unit 4 Cost Control and Analysis:
Standard Costing Standard Costing – Application; Overhead and sales variance: revision variance; Control of variances; Accounting procedure Setting up of Standards.
Marginal Costing: Basic concepts of marginal costing, Contribution margin, Break-even analysis, Break –even and profit volume charts, Contribution to sales ratio, Margin of Safety, Angle of Incidence, Cost-Volume-Profit Analysis (CVP), Multi- product break- even analysis, Consideration of Limiting factor (key factor) - Short term decision making using the above concepts (basic / fundamental level).
Budgetary Control: Preparation of Cash Budget; flexible budget and master budget; Cost ratios; Zero base budgeting; performance budgeting.

Unit 5 Activity Based Costing, Cost Reduction and Cost Audit: Activity Based Costing: Meaning and importance; characteristics; steps involved; ideal system; usage; problems. Cost reduction – Meaning and special features; cost control versus cost reduction; organisation; cost reduction Programme; value analysis; cost audit – functions and scope; cost audit and management audit: advantage; techniques;' Cost audit report

Course Outcome

After completion of the course, student will be able to:

- Get a significant understanding of the cost concepts, element of cost.
- Develop cost statement under various methods of costing.
- Calculate and analyse variances.
- Use appropriate cost information for managerial decision making.

Suggested Readings

Books

Charles T. Horngren, Srikant M. Datar, Madhav V. Rajan , *Cost Accounting: A Managerial Emphasis*, Pearson Education
Drury, Colin. *Management and Cost Accounting.* Cengage Learning
Arora, M.N. *Cost Accounting – Principles and Practice*. Vikas Publishing House, New Delhi
Jain, S.P. and K.L. Narang. *Cost Accounting: Principles and Methods*. Kalyani Publishers
Jawahar Lal, *Cost Accounting.* McGraw Hill Education
Maheshwari, S.N. and S.N. Mittal. *Cost Accounting: Theory and Problems,* Shri Mahavir Book Depot, New Delhi.

Study Material

Study material of ICAI and ICWAI

COMPUTERISED ACCOUNTS WITH TALLY SOFTWARE

Course Objective

The objective of the course is to provide the students with a deep understanding of the intricacies of accounting for business operations in the daily work environment using Tally Prime.

Detailed Contents of Syllabus

Unit 1: Introduction to Tally Prime: Maintaining Chart of Accounts- Recording and Maintaining Accounting TransactionsBanking- Generating Financial statements and MIS Reports-Data Security-Company Data Management

Unit 2: Inventory & Reports: Storage and classification of inventory- Accounts receivable and payable managementPurchases and sales order management- Tracking additional cost of purchase- Cost and
Profit centre management-Budgets and scenarios- Temporary Inclusion of Reversing Journal Voucher in the Reports generating and Printing reports.

Unit 3: Goods and Services Tax: Introduction to GST- Registration-Invoicing-Debit Note/Credit Note/Supplementary Invoice/GST e-invoicing-Hierarchy of Calculating Tax in Transactions-E-Way Bill Report in Tally-Input Tax Credit Set Off against Liability-GST Tax Payment-Generating GST Returns for Regular Dealer in Tally-Filing GST Returns in Tally-Composition Dealer under GST Regime.

Unit 4: Tax Deducted at source: Configuration of TDS at Different Levels-Recording TDS Compliant Transactions in TallyPrime-TDS Exceptions-TDS Statutory Masters-TDS Payment to Department-TDS Report-Changes in TDS rates from 1st April 202.

Unit 5: Management of Business Data: Exporting of data in available formats-Export and Import of Data-Open Database Connectivity (ODBC)- Printing of Company Logo on Vouchers, Invoices & Reports

Unit 6: Books Closing and Moving to Next Financial Year: Changing Current Period and continue voucher entry in the same company data- Company data handling through Export and Import of data-Company data handling through Export and Import of data-Split Company Data-Create a new company and maintain books of accounts for the new financial year-creating group company Data-Comprehensive Final Accounts reports of Two Companies

Learning Outcome

After completion of the course, the student will be able to:

CO1- Operate Tally Prime features with reference to recording and maintaining Accounting, Banking &
inventory transactions.

CO2- Generate Financial Statements, Budgets, and MIS reports using Tally Prime features.

CO3 -Carry out Goods and service Taxes and Taxes deducted at source transactions using Tally Prime
features.

CO4- Carry out Export, import of Data, and printing of vouchers and invoices using Tally Prime features.

Suggested Readings

Tally Publications Pvt Ltd , Tally Essential Level 1, 2, 3 & Tally Professional Part 1 &2.

Ragesh Patel, Learning Tally Prime Book,(2021), H K software

DATA ANALYSIS USING VBA AND SQL

Course Objective

The course aims at familiarizing the students with the use of information life cycle and the use of information action value chain besides teaching them various aspects of foundational tools, macro recording, programming in VBA and the working with SQL.

Detailed contents of syllabus

Unit 1: Information life cycle: Information-Action Value chain - source systems for data capture - storage and retrieval using traditional and emergent technologies - data quality, data governance, data privacy, Relational databases - Entity relationship theory and conceptual design - Relational database theory and logical design - relational data model terminology - integrity rules - CREATE TABLE statement structure data tables, unique keys and relationships between tables

Unit 2 Foundational tools, Macro recording, VBA procedures, and debugging - different data types and the scope of variables - how to troubleshoot your code when it's not working - how to record basic macros using both absolute and relative referencing modes - User-Defined VBA Functions - basic VBA expression entry, user-defined functions, convert functions to Add-Ins , borrow Excel's built-in functions, troubleshooting VBA functions, modular design of procedures, objects, properties, methods, and events, reference and move information to VBA from Excel and vice versa

Unit 3 VBA Programming structures: Common programming structures in VBA (sequence, selection, and repetition) that form the foundation for advanced programming procedures, automating of Excel tools like goal seeker using VBA

Unit 4 SQL -Structured Query Language: Basic SQL commands, Retrieving Data - Updating Data - Inserting Data -Deleting Data Sorting and Filtering Data, combine and stack data from different tables, operators and syntax, CUBE, ROLLUP, and GROUPING SETS operators

Unit 5 SQL for Data analysis II: Advanced Filtering - Summarizing Data - Grouping Data using Subqueries - Joining Tables - Managing Tables - Using Views - Stored Procedures - Using Cursors - Using Transactions, SQL Analytic functions, Materialized view processing and design

Learning Outcome

After completion of the course, student will be able to:

- Record, write, edit, test and run VBA macros with confidence
- Automate repetitive Excel business tasks and streamline workflow
- Understand the use of commands for SQL
- Demonstrate data analysis techniques using SQL

Suggested Readings

Williams H.E, Tahaghoshi, Seyed MM. Learning MySQL: Get a Handle on Your Data, O’Reilly DuBois, Paul. MySQL: MySQL_5 (Developer's Library), O’Reilly
Vaswani, Vikram. My SQL: The Complete Reference McGraw Hill

EXTRA ACADEMIC ACTIVITY

A student shall earn 1 credit in semester I under this course category. The credit may be earned by a student by involving in a variety of student-related activities which may include NSS, NCC, cultural activity, socio-economic activity, etc

FINANCIAL STRATEGY

Course Objective

This course teaches financial policy and strategy and covers the various approaches to security valuation, mergers and acquisitions, in addition to portfolio management, derivative pricing and foreign exchange risk management.

Detailed Contents of Syllabus

Unit 1: Financial Policy and Corporate Strategy: Strategic decisionmaking framework Interface of Financial Policy and strategic management Balancing financial goals vis-à-vis sustainable growth. Indian Financial System Introduction to Financial Market Role of Financial Market in Economic Development

Unit 2: Security Valuation: Theory of Valuation Return Concepts Equity Risk Premium Required Return on Equity Discount Rate Selection in Relation to Cash Flows Approaches to Valuation of Equity Shares Valuation of Preference Shares Valuation of Debentures/ Bonds.

Unit 3: Corporate Valuation. Mergers, Acquisitions: Conceptual Framework, Methods of Valuation, asset based earnings based, cash flow based, CAPM, APT, Beta estimation, Relative valuation, equity valuation, enterprise valuation, EVA,MVA, SVA , Mergers acquisitions Conceptual Framework, Rationale, Forms Mergers and Acquisitions Financial Framework Takeover Defensive Tactics Reverse Merger Divestitures Partial Sell off Demerger Equity Carve outs Ownership Restructuring Going Private Management/Leveraged Buyouts Cross Border Mergers.

Unit 4: Introduction to Derivatives analysis and valuation: Forwards, futures, swaps Features ofput and call options, determinants of option price, binomial and Black Scholes model of option valuation, real option of timing, growth and abandonment. **Start-up Finance:** Introduction including Pitch Presentation – Sources of Funding - Start up India Initiative Small & Medium Enterprises**:** Introduction - Market Size, Employment Generation and Contribution to GDP - Financing: Expansionof SMEs – Listing SMEs.

Unit 5: Foreign Exchange Exposure and Risk Management: Exchange rate determination Foreign currency market Management of transaction, translation and economic exposures Hedging currency risk Foreign exchange derivatives - Forward, futures, options and swaps.

Learning Outcome

After completion of the course, student will be able to:

- Analyse strategic decision making as interfaced with financial policy
- Arrive at equity and bond valuation
- Calculate corporate valuations as required for amalgamation and merger
- Carry out derivatives analysis and valuation
- Determine foreign exchange rate

Suggested Readings

Brealey Richard, Myers, Stuart et al Principles of Corporate Finance, McGraw Hill
Brigham and Houston, Fundamentals of Financial Management, Cengage Learning
James C. Van Horne and Sanjay Dhamija, Financial Management and Policy, Pearson Education
Samuel C. Weaver, Strategic Financial Management: Application of corporate finance,
Tony Grundy, Exploring Strategic Financial Management, Prentice Hall Levy H. and M. Sarnat . Principles of Financial Management. Pearson Education Pandey, I.M. Financial Management. Vikas Publications. Singh, J.K. Financial Management- text and Problems. Dhanpat Rai and Company, Delhi. Banerjee, Arindam. Financial Management. Oxford University Press

Semester V

COMMUNICATION, TEAMWORK AND LEADERSHIP

Course Objective

The purpose of the course is to teach the students the basics of effective communication skills. In addition, it also aims at giving an opportunity to students to learn about emotional intelligence in managing human relationships and a grasp of the importance of team work in effective human management through leadership and values.

Detailed Contents of Syllabus

Unit 1: Effective Communication: Basic communication skills: empathy, active listening, assertiveness, rapport. Models of verbal and non-verbal communication. Steps to building a successful presentation. Structuring a story. Keys to high-impact slides. Ways to combat anxiety: cognitive and relaxation techniques. Oral expression techniques. Vocal expression Gestures, coherence. • Facial expression and eye contact emotion-reason-emotion triangle • Improvising discourse: condemnatory, laudatory, exhortative, etc. • Persuasion and rhetorical strategies.

Unit 2: Emotional Intelligence: Components of emotional intelligence. The world of emotions: multiple functions Self-esteem: self-awareness. Our feelings regarding our interests, values, and ways of thought. The ability to overcome obstacles: "Resilience as an affective strength." Managing relationships: how to confront a crisis. Improving our social relationships: empathy and assertiveness. Leading minds: the intelligences in relation to leaders and creators.

Unit 3: Teamwork: The evolution from group to team: development stages. How to determine roles in a team? Traditional vs. virtuoso teams. General concepts and success factors to generate confidencein work teams: communication, support, respect, justice, predictable behavior, and competencies. Forming effective and balanced teams. Strengthening teams within the organization. How to create a friendly and collaborative environment? Strategies to develop the team's mission, vision, values, and objectives. Shared objectives vs. personal motivation. Distinguishing purpose and tasks in the team. How to encourage participation. Focus and values:
how to create team identity. creating high-performing teams.

Unit 4: Leadership Models: Traditional, legal, and legitimate leader Formal and informal. Individual, executive, and institutional. Categories: autocratic, democratic, charismatic, paternalistic, authentic, spiritual, dictatorial, etc. Classifying leadership.

Unit 5: Leadership and Values: Value-based management. The foundation of values. Freedom and decision making. Conflicting ideas. Will and motivation. Personal leadership, self-knowledge, and self-control. the leader as a team-builder. Serving the organization. Ability to plan future actions and transmit that vision to others. Take the initiative, conflict resolution.

Learning Outcome

After completion of the course, student will be able to:

- Appreciate the importance of effective communication
- Associate emotional intelligence with building social relationships
- Learn how to perform well during teamwork and how to understand the specific role of leadership in these tasks
- Discuss the various models of leadership

Suggested Readings

Gold, Jeffrey, Thorpe, Richard & Mumford, Alan. Leadership and management development. (Chartered Institute of Personnel and Development)

Bass, Bernard M., Bass & Stogdill's Handbook of Leadership: Theory, Research, and Managerial Applications. New York: Free Press

Beck, John D. W., The Leader's Window: Mastering the Four Styles of Leadership to Build High-Performing Teams. New York: Wiley

Bennis, Warren G., On Becoming a Leader Reading, MA: Addison-Wesley

Bennis, Warren G., Beyond Leadership: Balancing Economics, Ethics, and Ecology. Cambridge, MA: Blackwell Business

Beebe, S. A., & Masterson, J. T, Communicating in small groups: Principles and practices, Boston, MA: Pearson.

Frey, L.R, New directions in group communication. Thousand Oaks, CA: Sage

Harvard Business Review on Building Better Teams,

John C. Maxwell. The 17 Indisputable Laws of Teamwork: Embrace Them and Empower Your Team

Katzenbach, J. R. & Smith, D. K, the wisdom of teams: Creating a high-performance organization. New York, NY: Harper Business.

Rothwell, J. D, In mixed company: Communicating in small groups and teams, Boston, MA: Wadsworth Cengage Learning.

Ron Williams and Karl Weber**.** Learning to Lead: The Journey to Leading Yourself, Leading Others, and Leading an Organization

Richard Lepsinger and Darleen DeRosa Virtual Team Success: A Practical Guide for Working and Leading from a Distance

MANAGEMENT ACCOUNTING AND PERFORMANCE EVALUATION

Course Objective

The objective of the course is to prepare the students to apply various cost management techniques for planning and controlling performance vis-a-vis strategic objectives. In addition, the course also aims at developing skills of analysis, synthesis and evaluation in cost management and control to address challenges and issues which might affect or influence the performance of organisations.

Detailed Contents of syllabus

Unit 1: Strategic Cost Management: Concept of Strategic Cost Management, Limitations of Traditional Cost Management Introduction/Characteristics of the Modern Business Environment Cost of Quality, Total Quality Management, Business Excellence Model, Throughput Accounting and Theory of Constraints - Supply Chain Management (SCM) Gain Sharing Arrangements Outsourcing Cost
Management Techniques Cost Control/Waste Control, Cost Reduction Target Costing Value Analysis/ Value Engineering Pareto Analysis Life Cycle Costing Environmental Management Accounting.

Unit 2: Costs for Decision Making: Decision Making using CVP Analysis, Relevant Cost concepts, Activity based costing Pricing Strategies/Decisions Theory & Principles of Product Pricing, New Product, Finished Products & Pricing of Services, Sensitivity Analysis in Pricing Decisions, Pricing Decision under Special Circumstances, Pricing Strategies.

Unit 3: Performance Measurement and Evaluation: Responsibility Accounting, Linking Critical Success Factors (CSFs) to Key Performance Indicators (KPIs) and Corporate Strategy; Performance Measurement Models - The Balanced Scorecard, The Performance Pyramid, The Performance Prism and The Building Block Model; Divisional Performance Measures; Benchmarking Scheme Performance Measurement in the Not-for-Profit Sector, Preparation of Performance Reports.

Unit 4: Divisional Transfer Pricing: Meaning, Purpose and Principles of Transfer Pricing, Methods of Transfer Pricing - The Behavioural Consequences arising from Divisional Structures, International Transfer Pricing, Operating Profit Analysis, Advanced Activity Based Costing, Activity Based Management (ABM), Activity Based Budgeting (ABB).

Unit 5: Managerial Control: Budgetary Control, The Concept of Feedback and Feed Forward Control, Behavioural Aspects of Budgeting - Imposed Style, Participative Budget, Behavioural Aspects of Budgetary Control, Standard Costing Analysis of Advanced Variances, Integration of Standard Costing with Marginal Cost Accounting, Reconciliation of Profit, Variance Investigation Techniques, Interpretation of Variances, Possible Interdependence Between Variances and Reporting Behavioural Aspects of Standard Costing, Limitation of Standard Costing (including its use in the contemporary business environment).

Learning Outcome

After completion of the course, student will be able to:

- Analyze costs for strategic decisions
- Use CVP analysis for decision making purposes
- Use popular measures to evaluate the performance
- Evaluate divisional transfer pricing decisions
- Understand and apply budgeting and performance evaluation measures

Suggested Readings

Anthony A. Atkinson, Robert S. Kaplan, Ella Mae Matsumura, S. Mark Young. Management Accounting. Dorling Kindersley (India) Pvt. Ltd.

Charles T. Horngren, Gary L. Sundem, Dave Burgstahler, Jeff O. Schatzberg. Introduction to Management Accounting; Pearson Education.

Ronald W. Hilton and David E. Platt. Managerial Accounting: Creating Value in a Global Business Environment, Mc Graw Hill Education.

Goel, Rajiv, Management Accounting. International Book House,

Jhamb H V, Fundamentals of Management Accounting, Ane Books Pvt. Ltd

Khan, M.Y. and Jain, P.K. Management Accounting. McGraw Hill Education

Maheshwari, S.N. and S.N. Mittal, M a n a g e m e n t Accounting. Shree Mahavir Book Depot, New Delhi.

Arora, M.N. Management Accounting. Vikas Publishing House, New Delhi.

INTRODUCTION TO DERIVATIVES

Course Objective

Upon completion of the course students will be able to have a basic understanding of the special characteristics of derivatives markets including forwards, futures, swaps, options and others, and their relationship to the underlying cash securities. Students will be able to understand the usage of these instruments to address a wide range of trading and investment objectives and understand and control the risks of financial derivatives and derivatives portfolios.

Detailed Contents of Syllabus

Unit 1 Introduction

- Derivatives: Basics and Need of Market, Indian and International markets overview
- Derivative trade and settlement procedure
- Futures Markets
- Forward and Futures Pricing and Hedging strategies

Unit 2: Options

- Options and Options Markets
- Option Pricing Bounds and Fundamentals of Option Pricing
- Binomial Option Pricing and Black Scholes Option Pricing Models

Unit 3: Option Strategies

- Strategies of Options Hedging
- Sensitivity Analysis (the "Greeks")

Unit 4: Interest Rate Derivatives and Swaps

- Interest Rate Derivatives – Pricing and Hedging
- Swaps – Kinds, Pricing, Uses

Unit 5: Volatility

- Volatility – Introduction, VIX, Uses of volatility in market strategies
- Risk Management and VaR

Course Outcome

After completion of the course, student will be able to:

- Understand the functioning of Indian and international derivatives market.
- Understand the processes and procedures of Indian derivatives market
- Use the derivative contracts available in the market for hedging and speculation purposes.
- Apply the understanding of the markets and instruments for the purpose of risk management.

Suggested Readings

Books

- Options, Futures and Other Derivatives- J C Hull, Pearson Education, New Delhi
- Options & Futures- David A Dubufsky, Oxford Publishers, New Delhi
- Options, Futures and Swaps- R W Kolb, Blackwell Publishers, USA

MARKETING MANAGEMENT

Course Objective

The objective of the course is for the students to learn the basic concepts of marketing and marketing functions including branding, consumer behaviour and 4 Ps of marketing, viz., product, price, promotion and physical distribution.

Detailed Contents of Syllabus

Unit 1: Marketing: Definition - Importance - Scope - Approaches to the study of marketing- Marketing Concepts-Functions of marketing- Functions of exchange, Functions of physical treatment, facilitating functions -Marketing Mix Marketing is science as well as an art.

Unit 2: Branding: Strategic marketing, segmentation and targeting, brand positioning, experiential marketing, - Bases of market segmentation - Consumer behaviour -Fundamentals - Factors influencing consumer behaviour - Electronic marketing - Significance of Electronic marketing- Meaning- Objectives- Advantages

Unit 3: Product: Features - Classification of products - Stages involved in Development of New Product - Product Life cycle - Product line and mix - Product differentiation; Branding; Packaging; Labeling.

Unit 4: Promotion: Promotion mix- Sales promotion - Objectives- Advertising - Kinds - advertising media - Personal selling kinds - Functions - Qualities of a good salesman - Personal Selling Vs. Sales promotion - Market research- Meaning, Objectives and Advantages.

Unit 5: Pricing and Channels of distribution: Understanding price sensitivity, measuring price elasticity, analytical foundations, psychological aspects of pricing, economic value to customer. Channels of Distribution: Definition- Functions- Importance - Types of Channels- Wholesalers- Services to Manufacturers and Retailers- Retailers- Types- Services- Direct Marketing- Meaning- Mass Marketing Vs Direct Marketing- Advantages and Limitations.

Learning Outcome

After completion of the course, student will be able to:

- Explain the marketing concept, functions of marketing and marketing mix.
- Develop a new product and to apply the pricing strategies.
- Determine the channels of distribution for marketing products.
- Apply the various promotional strategies in marketing.
- Segment the market and apply the modern marketing techniques.

Suggested Readings

Books

Kotler, Philip, Gary Armstrong, Prafulla Agnihotri and Ehsanul Haque. Principles of Marketing, Pearson Education.

Michael, J. Etzel, Bruce J. Walker, William J Stanton and Ajay Pandit. Marketing: Concepts and Cases. (Special Indian Edition)., McGraw Hill Education

William D. Perreault, and McCarthy, E. Jerome., Basic Marketing. Pearson Education

Stanton William, Fundamentals of Marketing, McGraw Hill Education

Iacobucci and Kapoor, Marketing Management: A South Asian Perspective. Cengage Learning.

Majaro, Simon. *The Essence of Marketing*. Pearson Education, New Delhi.

Chhabra, T.N., and S. K. Grover. Marketing Management, Dhanpat Rai & Company.

Dhruv Grewal and Michael Levy, Marketing, McGraw Hill Education.

Neeru Kapoor, Principles of Marketing, PHI Learning Rajendra Maheshwari, Principles of Marketing, International Book House

Act

The Consumer Protection Act 1986.

PRINCIPLES OF BANKING

Course Objective

To enable the students to acquire basic understanding of the structure, organization and functioning of the Financial System in India, particularly commercial banks. The course also aims at educating the students to appreciate the existing regulatory framework.

Detailed Contents of Syllabus

Unit 1: Indian Financial System: An Overview - Indian Banking Structure Functions, Scheduled Commercial Banks - Types and functions, Local Area Banks, Regional Rural Banks, Cooperative Banks: Types, Payment Banks and Small Finance Banks, NBFCs – types, Development Financial Institutions, Money Markets and Capital Markets

Unit 2: Banking Operations and Regulation: Retail Banking, Wholesale and International Banking. Role and Functions of Capital Market, Regulators – SEBI, IRDAI, PFRDA etc. Functions of Banks - Banker-Customer Relationship - Banker's Special Relationship - Payment and Collection of cheques and other Negotiable Instruments - Opening of Accounts – KYC. Principles of Lending, Working Capital Assessment and credit monitoring- Priority sector advances - Agricultural Finance - Micro, small & medium enterprises in India - Government sponsored schemes, Micro Finance Intuitions, ancillary services.

Unit 3: Credit Management in Banks: Self- Help Groups (SHGs): Credit cards, Home loans, Personal loans, Consumer loans - Types of collaterals and their characteristics - Non-Performing Assets, Financial Inclusion. Factoring, Forfeiting Services, Trade Receivables Discounting System (TReDS) and Off-Balance Items - Credit Information Bureau (India) Limited (CIBIL), Fair Practices Code for Debt Collection.

Unit 4: Payment systems and electronic banking: NEFT, RTGS, Pre-paid instruments, Recent Developments in the Indian Financial System

Unit 5: Risk Management and BASEL III: an overview, laws relating to banking sector – overview, Banking Regulation Act, RBI Act, NI Act, FEMA.

Course Outcome

After completion of the course, student will be able to:

- The students will understand the structure of the Indian banking system, it's functions and regulations related to the banking system.
- The students will learn about various types of loans proposed by banks to various prospective borrowers with different risk profiles.
- The students will have knowledge on credit monitoring process, its importance and the in-depth analysis in risk management.
- The students will gain knowledge on how to evaluate the performance of banks.
- The students will have an understanding on the recent developments in banking -special services, e banking, payment systems etc.

Suggested Readings

Books:

1. IIBF, Principles & Practices of Banking 2021 Paperback-1, 5ed, 2021
2. Vasanth Desai, Principles of Bank Management, Himalaya Publishing House, New Delhi.
3. Alka Sharma Parmod, Jagroop Singh, Principles & Practices of Banking & Insurance, Kalyani Publication (2018)
4. Maheswari SN, and Paul RR, Banking Theory and Practice, Kalyani Publishers, New Delhi

Study material:

ICSI- Professional Programme, Banking Law and Practice,

DATA ANALYTICS PROGRAMMING

Course Objective

The main purpose of the course is for students to understand the structure of programming and learn the basics of programming and coding concepts in python programming.

Detailed Contents of Syllabus

Unit 1 Introduction to programming: Declarative and imperative knowledge, flow of control, algorithms, fixed program and stored program computers, termination conditions, interpretation, compilation, syntax, and types of errors

Unit 2 Core elements of a program: Introduction to coding concepts IDLE, types of objects, operators, overloading, commands, variables, assignment, input, straight line and branching programs, looping constructs, Turing completeness, conditionals, nesting.

Unit 3 Python Programming: Features- Commands for common tasks and control- Essential Python programming concepts & language mechanics Built in Capabilities of Python- Data structures: tuples, lists, and sets Built in Capabilities of Python- Functions, Namespaces, Scope, Local functions, writing more reusable generic functions - Generators- Errors & Exception Handling- Working with files.Numerical Python- N-dimensional array objects Numerical Python-Vectorized array operations- File management using arrays,

Unit 4 Python pandas: Data structures: Series and Data Frame - Applying functions and methods Working with Data in Python- Working with CSV, EXCEL files- Working with Web APIs- Filtering out missing data, Filling in the missing data, removing duplicates- Perform transformations based on mappings- Binning continuous variables Random sampling and random reordering of rows- Dummy variables- String and text processing- Regular expressions Categorical type Data Visualization using Python- Matplotlib Library- Plots & Subplots

Unit 5 Files, Modules, and Packages: Files and exception: text files, reading and writing files, format operator; command line arguments, errors and exceptions, handling exceptions, modules, packages; Illustrative programs: word count, copy file.

Learning Outcome

- After completion of the course, student will be able to:
- Learn basics of programming.
- Appreciate the basic concepts and core elements underlying programming.
- Write small programs in Python language.
- Work with data in Python.
- .Understand files, modules and packages.

Suggested Readings

Charles Dierbach . Introduction to Computer Science using Python: A Computational Problem-Solving Focus, Wiley India Edition

Guido van Rossum and Fred L. Drake Jr, -An Introduction to Python- Revised and updated for Python 3.2, Network Theory Ltd

John V Guttag . Introduction to Computation and Programming Using Python ", MIT Press

Jones, Brian and Beazley, David: Python Cookbook: Recipes for Mastering Python, O'Reilly

Kenneth A. Lambert, Fundamentals of Python: First Programs Learning

Lutz M Learning Python: Powerful Object-Oriented Programming, O'Reilly

Paul Gries, Jennifer Campbell and Jason Montojo. Practical Programming: An Introduction to Computer Science using Python.

Python: An Inter-Disciplinary Approach, Pearson India Education Services
Raj, Mohit. Python for Developers Bpb publications
Timothy A. Budd. Exploring Python Mc-Graw Hill Education (India)
Zelle, John M. Python Programming: An Introduction to Computer Science Franklin Beedle & Associates

FINANCIAL REPORTING AND ANALYSIS

Course Objective

The purpose of the course is to teach the application of accounting standards and guidance notes in preparing accounts related to partnership firms and companies. Students will also gain knowledge on the accounting methods relating to reorganization of companies, the methods of valuation of goodwill and the preparation of consolidated financial statements

Detailed Contents of Syllabus

Unit-1: Introduction Concept and Objectives of Financial Reporting: Users of financial reports, Conceptual Framework for financial reporting, Understanding financial statements of a Joint Stock Company : Balance sheet, Statement of Profit and Loss, Cash Flow statement, Statement of changes in Equity, Notes to the accounts, Significant accounting policies, Accounting Standards, Converged Indian Accounting Standards (Ind AS) relevant to the financial statements**:**

Unit-2: Disclosures: Disclosures under Companies Act, 2013, Accounting Standards, Securities Exchange Board of India (SEBI) – in annual reports and company website.

Unit-3: Techniques for Analysis of Financial Statements: Comparative financial statements, Common Size Financial Statements, Ratio Analysis, Cash Flow Analysis, Trend Analysis.

Unit-4: Analysis of Financial Statements: **Project :**A Case Study Intra-firm and inter-firm comparison of any three listed companies from any sector/industry for a period of five years using the spread sheet, Use of Ratio analysis, Industry Averages, Growth rates, CAGR, Z-score etc. in the analysis.

Unit-5: Emerging Trends in Reporting: Accounting for E-commerce business, Integrated Reporting – Meaning, Purpose, Salient features of framework, the Capitals and Value creation Value Added Statement, CSR reporting.

Course Outcome

After completion of the course, student will be able to:

- Get a significant grasp of the relevant accounting standards
- Demonstrate the ability to prepare accounts relating to amalgamation, dissolution and conversion of partnership firms
- Understand the methods of reorganization of companies
- Prepare the financial statements of banks and npn-banking financial companies
- Prepare the consolidated financial statements of a body corporate

Suggested Readings

Books

- Gupta, Ambrish, Financial Accounting for Management: An Analytical Perspective, Pearson Education, Delhi.
- Subramanyam K.R. Financial Statement Analysis. Mcgraw Hill
- Narayanaswamy R. Financial Accounting: A Managerial Perspective. Prentice Hall India • Lal, Jawahar & Sucheta, Gauba, Financial Reporting and Analysis. Himalaya Publishing House, Mumbai.
- Sapra, Ritu, Kaur, Kamaldeep & Chawla Kanika. Financial Reporting and Analysis. Wisdom Publications, Delhi.

Study materials etc

Compendium of Statements and Standards of Accounting, The Institute of Chartered Accountants of India, New Delhi.
Study material of the ICAI

FINANCIAL MODELLING

Course Objective

The purpose of the course is to teach students how to build a company's financial model so as to project future financial performance. The students will also be able to perform sensitivity analysis and scenario modeling and also model securities valuation.

Detailed Contents of Syllabus

Unit 1: Introduction to models: Definition of models, dependent and independent variables, constructing relationships between variables, identifying key variables and sensitivities, Modelling principles; Auditing models, Error Trapping.

Unit 2: Review of Advanced Spreadsheet Techniques: Review of Advanced Spreadsheet Techniques: Pivot table, pivot chart, drill through PowerPivot, Power View, Power Map, BI: Data Analysis Expressions (DAX) Macros, Spreadsheet form, active X controls data visualization and presentation. Creation of dynamic dashboard based on key requirements, principles on dashboard design.

Unit 3 Construction of a 3 statement model : Construction of a spreadsheet model for 3 statements, Balance Sheet, Profit and Loss Account and Cashflow: Analysis of historical data Organizing the lay out reflecting assumptions, objectives, outcomes, sensitivities, create a basic 3 statement model, evaluate a small business opportunity, conduct what-if analysis, identify key variables using sensitivity analysis, valuation using DCF methods Linking cashflow models to projected financial statements.

Unit 4: Forecasting and Scenario Modelling: Creating, validating, and using regression models to fit the trends of historical data; estimating the accuracy of forecasts; handling the risks inherent in forecasts; Analytical methods to model variable uncertainty, , Sensitivity analysis, optimization techniques using Solver, incorporating key risk elements in the model Modelling large multiple variables and high- risk variables using probability distributions, simulations.

Unit 5: Valuation of Securities : Valuation of Securities: Building models to determine the value of shares of common stocks from their expected future cash flows and an investor's expected rate of return; Define value, as related to stocks, and explain the methods used to calculate it. Models for determining the value of bonds.

Learning Outcome

After completion of the course, student will be able to:

- Build models using dependent and independent variables
- Build spreadsheet models for financial valuation
- Perform sensitivity and scenario analysis on the model
- Value securities using risk-return analysis
- Use advanced spreadsheet techniques

Suggested Readings

Michael Rees, Financial Modelling in Practice - A Concise Guide for Intermediate and Advanced Level, Wiley Finance

Sengupta, Chandan. Financial Modelling using Excel and VBA. John Wiley and Sons

John S. Tjia. Building Financial Models (McGraw-Hill Finance & Investing)

Danielle Stein Fairhurst, Using Excel for Business and Financial Modelling: A Practical Guide, Wiley Finance
Beninga, Simon. Financial Mode;ling, MIT Press
Joachim Häcker and Dietmar Ernst, Financial Modeling: An Introductory Guide to Excel and VBA Applications in Finance. Global Financial Markets
Isaac Gottlieb, Next Generation Excel: Modelling in Excel for Analysts and MBAs. Wiley Finance
Thomas S. Y. Ho and Sang Bin Lee, the Oxford Guide to Financial Modelling. Oxford University Press Shmuel Oluwa, Hands-On Financial Modelling with Microsoft Excel 2019: Build practical models for forecasting, valuation, trading, and growth analysis using Excel 2019 Packt
Eric Soubeiga, Mastering Financial Modelling: A Professional's Guide to Building Financial Models in Excel. McGraw Hill
Timothy Mayes. Financial Analysis with Microsoft Excel, Cengage 1 Stephen Powell and Kenneth
Baker. Management Science: The Art of Modelling. Wiley

FINANCIAL MARKETS

Course Objective

The objective of the course is to help students gain knowledge of the structure of various financial markets and financial services rendered by intermediaries and banks and their role and activities in the capital market.

Detailed Contents of Syllabus

Unit 1: Global Financial Markets: Why Study Financial Markets and Institutions? Overview of the Financial System - Introduction to Global Financial Market - Role of Financial Market in Economic Development of a country - Stake holders in Financial Market (Domestic and Global) - Indian Financial Markets.

Unit 2 :Interest Rates and Financial Institutions: Interest Rates Meaning and Role in Valuation - Changes in Interest Rates - Effect of Risk and Term Structure on Interest Rates. Reserve Bank of India. Conduct of Monetary Policy: Tools, Goals, Strategy, and Tactics central government securities: bonds, t-bills, state government bonds - Open market operations - Securities Trading Corporation of India - Primary dealers in Government Securities - Clearing Corporation of India.

Unit 3 Fixed Income markets: Money market, structure, instruments, functioning of money markets, Bond market structure, and term structure of interest rates. Long term debt securities, Corporate bonds, Zero Coupon bonds, bond features, identifying cashflows associated with a bond, valuation of bonds, Derivatives in Fixed Income markets, hedging interest rate risks, Forwards and Swaps Credit Default Swaps -Collateralized Debt Obligations (CDO) - Pricing of Credit Derivative Instruments. Credit Rating**:** Introduction - Rating Services - Objectives and types - Uses - Credit Rating Process -Credit Rating, Methodology - Rating Revisions - Credit Rating Agencies in India and abroad - Limitations with case studies Impact of various Policies of Financial Markets: Credit Policy of RBI - Fed Policy - Inflation Index, CPI, WPI, etc .

Unit 4 Equity Markets: Market Structure, functioning, primary and secondary markets, Institutions, SEBI, the features of equity securities, the cash flows associated with equity securities, Valuation of equity and preferred securities, dividend discount model, Derivatives in Equity Markets, Option pricing, Forward and Future contracts, trading venues, the mechanics of securities trading, terminology, types of orders like margin buying, short selling, settlement systems.

Unit 5 Currency Markets: **T**he underlying theories, the instruments traded, the associated risks such as transaction exposure, operating exposure, translation exposure, etc. and how those risks are addressed/redressed using several techniques including using derivative instruments such as currency options, currency futures and currency swaps. Treasury risk management policy, control and reporting requirements stop loss limits, VAR and Capital positions Developing risk framework for organization.

Learning Outcome

After completion of the course, student will be able to:

- Get a significant grasp of the role of financial markets
- Understand how the collective action of the Central Bank, the Banking System, and the public determine prices of financial and real assets.
- Understand factors influencing prices of bonds, stocks, and exchange rates
- Understand the valuation of debt and equity instruments
- Appreciate the functioning of the currency market

Suggested Readings

Mishkin, Financial Markets & Institutions Edition. Addison Wesley

Stephen Cecchetti and Kermit Schoenholtz, Money, Banking, and Financial Markets, McGraw Hill/Irwin.

Shiller, Robert J. The New Financial Order: Risk in the 21st Century. Princeton University Press Siegel, Jeremy J. Stocks for the Long Run: the definitive guide to financial market returns and long-term investment strategies, McGraw-Hill

Shashi K Gupta and Parneet Ranjgi, International Financial Markets and Foreign Exchange

Fabozzi, Frank J., Franco Modigliani, Frank J. Jones, and Michael G. Ferri, Foundations of Financial Markets and Institutions, Prentice Hall

Shiller, Robert J. Finance and the Good Society. Princeton University Press

Pathak, Bharathi. V.P, Indian Financial System, Pearson Education India Singh, Preethi: Dynamics of Indian Financial System, Ane Books Pvt. Ltd.

Khan. M.Y: Indian Financial System, Tata McGraw Hill, New Delhi

Avadhani,V.A, Investment and Security Markets in India. Himalaya Publishing House

OPTIMIZATION METHODS

Course Objective

The course aims at teaching the students the concept of optimization and the mathematical too and methods for optimization including linear programming, transportation and augment models besides network analysis and inventory and queueing model.

Detailed Contents of Syllabus

Unit 1 Mathematical preliminaries: Linear algebra and matrices - Vector space, eigen analysis - Elements of probability theory, Elementary multivariable calculus

Unit 2 Linear Programming: Formulation of linear and nonlinear programs, geometry and visualization of linear programs, Simplex method, duality, sensitivity analysis and shadow prices, slack variables, artificial variables, Discrete Linear Optimization: Formulation of DLO programs, branch and bound technique, cutting plane algorithm.

Unit 3 Transportation & Assignment Problems: Introduction to Transportation problems, various methods of Transportation problem, Variations in Transportation problem, introduction to Assignment problems, variation in Assignment problems.

Unit 4 Network Analysis: Network definition and Network diagram, probability in PERT analysis, project time cost trade off, introduction to resource smoothing and allocation.

Unit 5 inventory Model: Introduction to inventory control, deterministic inventory model, EOQ model with quantity discount. Queuing Models: Concepts relating to queuing system, base. elements of queuing model, role of Poison & exponential distribution, concepts of birth and death process. Replacement & Maintenance Models: Replacement of items, subject to deterioration of items subject to random failure group was. individual replacement policies.

Learning Outcome

After completion of the course, student will be able to:

- Formulate the problem as an optimization model.
- Obtain optimal solution using Simplex Method
- Use Transportation and Assignment models in obtaining optimality.
- Use Network technique for effective project management.
- Use inventory and queuing models.

PRINCIPLES OF STRATEGIC MANAGEMENT

Course Objective

This course helps students develop a clear understanding of the key concepts and principles of strategy formulation and competitive analysis and apply analytical tools and techniques for analyzing a company strategically. In addition, the course aims at imparting critical and strategic thinking ability and the ability to make the case for a particular set of strategic actions.

Detailed Contents of Syllabus

Unit 1 Introduction to Strategy: Meaning of strategy, Strategic Management - Mission, Goals and Objectives - Core values Intent and purpose. Mission statements - Company report analysis

Unit 2 External & Internal Analysis: Industry Structure, Analysis & Trends, PEST Analysis, 5 Forces Analysis, Blue Ocean Strategy. Competitive Landscape – Strategic Analysis- Industry and Competitive Analysis Internal Analysis Core Competence - Competitive Advantage - SWOT Analysis, McKinsey 7S analysis, Benchmarking, Theory of Constraints, Organizational Structure, Process, Culture.

Unit 3 Business Level and Corporate Level Strategies: Cost Leadership, Differentiation, Focus. Creating and Sustaining Competitive Advantage: Resource based strategic planning, first mover and late mover's advantage Value chain, value drivers, cost drivers, value capture in the value chain link, Strategic and tactical moves, Competitive moves, confrontation and collaboration, competitive dynamics and game theory, likelihood of attack and response, competitive intelligence Corporate Level Strategies Diversification, Vertical Integration, Outsourcing, Portfolio vs Synergy, Product life cycle, long tail, BCG matrix, GE matrix, industry change, industry disruption.

Unit 4 Network Level and Global Strategies: Alliances, Joint Ventures, Equity vs Non equity alliances, revenue sharing alliances, cooperative strategies, cartels and pricing alliances, agents, brand labelling, technology collaboration, R&D alliances, Competition vs Cooperation, Organizational Dependencies. Internationalization: Motivations & Patterns, Building Transnational Corporations Multinational organizations, competitive advantages of nations, global challenges and risks, emerging and developed markets, entry strategy in alien geographies, centralization and control issues, inter unit transfers, global sourcing Winner takes it all, bundling, networking advantage, platform business and multi sided markets, virality and viral coefficient, entrepreneurial disruption opportunities.

Unit 5 Strategy Implementation and Control Strategy Implementation Strategy and tactics, gap analysis and garnering required resources, implementation plan, timeline, people, organization structure, incentives and disincentives, skills, culture, Re-Positioning the Organization, Strategic Change. Strategic Control – Strategy Audit Leadership and governance.

Learning Outcome

After completion of the course, student will be able to:

- Understand the strategic decisions that organisations make and have an ability to engage in strategic planning.
- Explain the basic concepts, principles and practices associated with strategy formulation and implementation.
- Integrate and apply knowledge gained in basic courses to the formulation and implementation of strategy from holistic and multi- functional perspectives.
- Analyze and evaluate critically real life company situations and develop creative solutions, using a strategic management perspective.
- Conduct and present a credible business analysis in a team setting

Suggested Readings

Dess, Lumpkin, Eisner and McNamara Strategic Management: creating competitive advantages, McGraw-Hill Irwin
M. Ireland, R. and Hoskisson, R. Strategic Management: Competitiveness and Globalization Concepts Southwestern College Publishing.
Hax, Arnoldo C., and Nicolas S. Majluf. The Strategy Concept and Process: A Pragmatic Approach.Prentice Hall
Hill, C. W. L. & Jones, G. R, Strategic Management: An integrated approach, Houghton Mifflin. Porter, Michael E., ed. Competition in Global Industries. Boston: Harvard Business School PressFred R. David, Forest R. David Purva Kansal. Strategic Management Concepts: A Competitive Advantage Approach Pearson Paperback
Garth Saloner, Andrea Shepard, Joel Podolny . Strategic Management, Wiley
Jeffrey H. Dyer, Paul Godfrey, Robert Jensen, David Bryce. Strategic Management: Concepts andCases, Wiley Plus
Grant Robert M. Contemporary Strategic Management, Blackwell Publishing
Jeffrey H. Dyer, Paul Godfrey, Robert Jensen, David Bryce. Strategic Management: Concepts and Cases, Wiley

OPERATIONS MANAGEMENT

Course Objective

The objective of the course is to explain the key role that the operations function plays in creating the competitive strength of the firm and to enable the students to effectively assess operations strategy.

Detailed Contents of Syllabus

Unit 1:Introduction to Operations Strategy and Management: Meaning of Operations strategy - Judging the contribution of operations to strategy - Measuring the contribution of operations to strategy Operations strategy approaches Operations strategy alignment Operations strategy formulation Operations strategy implementation what is operations management? The history of operations management - The role of operations management - the process views of operations Service operations management - The strategic role of operations. Technology and operations management.

Unit 2: Designing Operations Process: Types Manufacturing process types Service process types Matching process type with volume and variety Choosing a process type Layout Types and Layout Design Line Balancing in a Manufacturing Plant Facility Design: Supply, Capacity and Location Supply network design Long-term capacity planning Facility location, Location selection techniques Process Technology Process technology for materials, information, customers Choosing process technology Product and Service Design Developing product and service design. The relationship between product/service design and process design The design process Service Design Improving Design Process Design Steps in process design Tools for process design Job and Work Design Behavioural aspects of job design Physical aspects of job design Work study.

Unit 3: Managing Operations: Operations planning and Control Optimized production technology (OPT). Capacity Management - Measuring demand. Measuring capacity Reconciling capacity and demand Evaluating alternatives and making a choice Forecasting Inventory Management Types of inventory Managing Inventory The ABC inventory classification system Inventory Models Implementing inventory systems Lean Operations The philosophy of lean operations Lean Techniques Lean in service systems Implementing lean operations.

Unit 4: Total Quality Management: Meaning and Dimensions of Quality - Measuring quality Improving quality Methodologies for quality improvement Six Sigma quality Acceptance sampling Quality Control Techniques - Quality based Strategy Total Quality Management - Total Productive Maintenance - Cost of Quality - Tools of Quality Control - Value Stream Mapping - Statistical Quality Control, Quality and Flow, Six Sigma, Control Charts, Jidoka , Problem Solving, Toyota Production System.

Unit 5: Resource Planning and Performance measurement: Enterprise Resource Planning (ERP) systems Customer Relationship Management (CRM) systems Resource Planning Materials requirements planning Manufacturing resource planning (MRP II) Distribution requirements planning (DRP) Performance Measurement and Improvement Performance measurement. How do we measure performance? Where should we improve performance? How do we improve performance?

Learning Outcome

After completion of the course, student will be able to:

- Analyze business operations using appropriate performance measures, such as productivity, throughput rate and efficiency.
- Propose business solutions for operations improvement and process design projects.
- Identify inefficiency and ineffectiveness in business operations and propose adequate minor changes or major redesigns to improve the process.)
- Understand the theory and implementations of quality control activities for different industries
- Apply the resource planning and performance measures

Suggested Readings

David Collier and James Evans, OM. South-Western Cengage Learning Jacobs, F.R. & R.B. Chase. Operations and Supply Chain Management: McGraw-Hill Irwin Cachon G and C. Terwiesch. Matching Supply with Demand: An Introduction to Operations Management, McGraw-Hill. Heizer, Render. Principles of Operations Management, Prentice Hall Stevenson, W.J. Operations Management, McGraw Hill Publication

Chopra, Sunil. Supply Chain Management: Strategy, Planning, and Operation, Pearson

Nigel Slack, Stuart Chambers, Robert Johnston, Alan Betts. Operations and Process Management Principles and Practice for Strategic Impact, Prentice Hall

Semester VI

PUBLIC FINANCE AND POLICY

Course Objective

The purpose of this course is to teach the students the concept and the scope of public finance, the theories of public finance and the policies of the Indian Government on managing public expenditure. Further, students will be taught the canons and effects of taxation and the GST and the various aspects of Federal finance as applicable to India.

Detailed Contents of syllabus

Unit 1 Meaning and Scope of Public Finance: Public Finance - Meaning and Scope - Public and Private finance - principles of Maximum Social Advantage - Public Goods, Private Goods, Mixed Goods and Merit Goods - Overview of Fiscal Functions - Tools of Normative Analysis - Pareto Efficiency, Equity and the Social Welfare.

Unit 2 Theories of public finance: Market Failure, Public Good and Externalities - Elementary Theories of Product and Factor - Taxation (Excess Burden and Incidence) - Working of monetary and fiscal policies. Public Expenditure - Meaning and Importance - Reasons for Growth of Public Expenditure - Wagner's Hypothesis, Peacock - Wiseman Hypothesis - Canons of Public expenditure - Effects of Public Expenditure

Unit 3 Indian public finance: Public Revenue**:** Sources of Public Revenue - Taxes - Classification of Taxes - Canons of Taxation - Principles of Taxation: Ability, Benefit and Cost of Service - Impact, Incidence and Shifting of Tax Burden - Effects of Taxation - Major Taxes in India - Value Added Tax in India, The Concept of Good and Services Tax (GST)

Unit 4 Indian Public Debt and policy: Expenditure, Debt and Budget**:** Meaning - Types of public debts - Debt Redemption - Budget: Meaning, Types of Budget - Revenue and Capital Budget - Revenue Expenditure and Capital Expenditure - Revenue Deficit - Fiscal Deficit - Primary Deficit - Budget Deficit - Fiscal Policy - Contra Cyclical Fiscal policy - Deficit financing - Preparation of Budget in India

Unit 5 Federal Finance: Meaning - Principles of Federalism - Finance Commission (Finance Commission Report - Latest) - Importance of Local Finance in India - State and local finances

Learning Outcome

After completion of the course, student will be able to:

- Have a holistic understanding of public expenditure and revenue theories and practice
- Analyze national budget and Indian public finances
- Have a significant grasp of Indian taxation system including the GST
- Appreciate and compare the different types of Indian public debt
- Get a thorough understanding of the working of Federal finance

Suggested Readings

Books

Jonathan Gruber, Public Finance and Public Policy, Worth Publishers

Richard Musgrave, Public finance in theory and practice, Tata Mc Graw Hill

Arye L. Hillman, Public Finance and Public Policy, Cambridge

Kaushik Basu, and A. Maertens (ed.), The Oxford Companion to Economics in India, Oxford University Press

Joseph E Stiglitz, Economics of the Public Sector, W.W. Norton Inc

Musgrave, R.A. and P.B. Musgrave, Public Finance in Theory and Practice, Mc-GrawHill
Mahesh Purohit, “Value Added Tax: Experience of India and Other Countries”, Gayatri Publications
Sury M M, Government Budgeting in India, Commonwealth Publishers

Reports

Government of India, Report of the 13th Finance Commission.
Economic Survey, Government of India (latest).
State Finances: A Study of Budgets, Reserve Bank of India (latest)

GOVERNANCE, ETHICS AND VALUES

Course Objective

The aim of the course is for the students to learn the basics of values and ethics and give them an understanding of the issues of governance of a body corporate. In addition, the course also aims at giving a fair understanding of legal and the regulatory aspects of governance and the issues and strategies relating to the implementation of corporate governance practices and the concept and the role of corporate social responsibility.

Detailed Contents of Syllabus

Unit 1: Values and ethics: Personal Integrity Ethical Naturalism Moral Foundations Cognitive Evolution Social Conscience Moral Socialization Moral Distress Social Determinants Wisdom Traditions Conscientious Capitalism Good/bad capitalism Human Capitalism Economic Inequality Innovation Ethics Technology and ethics Civic Conscience Public good.

Unit 2: Corporate governance: Difference between governance and management − Purpose of good governance Agency theory, transaction cost theory, stakeholder theory Stakeholder value approach, enlightened stakeholder approach, stakeholder approach Governance, risk and financial stability − The balancing of conflicting objectives Potential consequences of poor corporate governance − Business failure and the contribution of poor governance and ethics, corporate ethics, corporate codes of ethics, professional ethics Key issues in corporate governance − Role and composition of the board, remuneration of directors and senior executives, accounting and audit, relations with shareholders and other stakeholders Applying best practice in governance: voluntary and regulatory approaches, rules or principles, concept of 'comply or explain' Governance problems for global companies and groups Governance issues in the public sector − Governance issues in the voluntary sector – charities.

Unit 3: Legal and regulatory aspects of governance: Governance aspects of the Companies Act, including duties of directors and reporting and disclosure requirements − Statutory duties of directors, and the concepts of duty of care and skill and fiduciary duty on which these statutory duties are based - Significance of auditor independence: threats to auditor independence − Auditors and non-audit work Principles of reporting requirements for good governance: accountability, transparency − The meaning of transparency Disclosures of governance arrangements Reporting non-financial information: business review or operating and financial review − The significance of narrative reporting for better governance Relations with shareholders The equitable treatment of shareholders − The meaning of equitable treatment: examples of inequitable treatment - rights and powers of shareholders Dialogue and communications with institutional shareholders (companies) or major stakeholders Role of institutional investor organisations (or major stakeholders) - Law on insider dealing and market abuse − The nature of insider dealing: the law and inside dealing, its implications for governance aspects of Sec 49 Listing Rules.

Unit 4: Implementing corporate governance: The board of directors or governing board Role of the board and its governance responsibilities Unitary and two-tier boards Matters reserved for the board − chairman and chief executive officer Size, structure and composition of the board: board balance, independence Independent non-executive directors − Functions of the independent D Good boardroom practice − Responsibilities of the chairman and company secretary Appointments to the board: nominations committee − Contribution of the nominations committee to good governance − Induction and ongoing training − Role of the company secretary in the efficient provision of information − Directors and external professional advice Effectiveness of the board, its committees and individual board members. Performance evaluation of the board − Retirement by rotation Boardroom ethics Link to statutory duties of directors Dealings by directors in shares of their company − Link to law on insider trading, stock market rules on dealings by directors Liability of directors: directors' and officers' liability insurance − The reasons for and nature of directors' liability Personal interests of directors in transactions of their company Independent and non-independent non-executive directors: their role and effectiveness.

Unit 5: Corporate social responsibility and sustainability: The nature of corporate responsibility and corporate citizenship Corporate responsibility and stakeholders − Internal and external stakeholders − Regulatory aspects Responsibility to various stakeholder groups − Interest and influence of various stakeholder Elements of corporate social responsibility: employees, the environment, human rights, communities and social welfare, social investment, ethical conduct Reputation risk: placing a value on reputation Other risk issues − Economic − Political, legal, regulatory − Social: demographic risk, educational issues − Possible implications of these risks for the social and environmental policy of companies Corporate social responsibility: financial performance, business ethics and public relations Formulating and implementing a policy for corporate social responsibility - The nature of sustainability and long-term corporate performance Reporting to stakeholders: CSR reporting Sustainability reporting: triple bottom line reports Benchmarking with other organisations Social responsibility in the public and voluntary sectors.

Learning Outcome

After completion of the course, student will be able to:

1. Understand and critically discuss the role of corporate governance in firms where there is separation of ownership from control.
2. Appreciate the importance of corporate governance in sustainable development.
3. Develop different views of the nature and purpose of the public corporation, of the corporate share, and of corporate shareholding.
4. Solve issues of corporate governance in an environment of corporate management
5. Understand the implications of corporate's social responsivity and its sustainability

Suggested Readings

Ann B. Buchholtz, Archie B. Carroll, Business and Society, Cengage
Christine A. Mallin, Corporate Governance, Oxford University Press
Ferrell O C, John Fraedrich, Ferrell: Business Ethics and Ethical Decision Making and Case, Cengage Learning
Fernando A C, E. K. Satheesh , K. P. Muraleedharan. Corporate Governance: Principles, Policies and Practices
Griseri P, N. Seppala, Business Ethics and Corporate Social Responsibility, Andover
Institute of Directors. Set of Corporate Governance and Business Ethics Handbook, Condensed Guide for Corporate Directors
Institute of Directors India. A Handbook on Corporate Governance
Monks, R. A. G., & Minow, N, Corporate governance, Wiley-Blackwell
Werther W B Jr., D. Chandler, Strategic Corporate Social Responsibility, Thousand Oaks
Arora, Ramesh K and Tanjul Saxena (eds.), Corporate Governance: Issues and Perspectives. Janur: Mangaldeep.
Arora, Ramesh K. and Tanjul Saxena (ed.), Corporate Governance, Issues and Perspective. Jaipur: Mangaldeep Publications.
Bajaj, P. S. and Raj Agarwal, Business Ethics: An Indian Perspective. New Delhi: Biz tantra

ADVANCED INCOME TAX LAWS

Course Objective

This course covers the entire Income Tax Act and focuses on students attaining detailed knowledge of all aspects of the law, procedures, assessments and appeals.

Detailed contents of syllabus

Unit 1 Profits and gains from business or profession and Capital Gains: income changeable under this head – speculation business – computation of profits and gains from business or profession: admissible deductions – inadmissible deductions – Expenses or payments not deductible in certain circumstances - profits changeable to tax – other provisions – compulsory maintenance of accounts– presumptive taxation scheme for assesses engaged in eligible profession - Capital gains**:** capital gains on distribution of assets by companies in liquidation – capital gains on buyback of shares or other securities – transactions not regarded as transfer– withdrawal of exemptions in certain cases – mode of computation of capital gains – ascertainment of costs in specified circumstances – cost of acquisition – cost of improvement capital gains in respect of slump sales – special provision for full value of consideration in certain cases – special provision for full value of consideration for transfer of unlisted shares - fair market value of the capital assets on the date of transfer to be taken as sale consideration – advance money received – exemption of capital gains – reference to valuation Officer - tax on short term capital gains in respect of equity shares.

Unit 2: Computation of Taxable Income: Deductions from gross total income**:** General provisions – Section 80 AB – deductions in respect of payments – deduction in respect of certain incomes – deduction in respect of other income – other deductions. Aggregation of income, set off and carry forward of losses inter source and inter head adjustment – inter-source adjustments – set off and carry forward of loss from house property and business – set off and carry forward of business losses – set off and carry forward of accumulated business losses and unabsorbed depreciation in certain cases of amalgamation/demerger etc losses in speculative business – set off and carry forward of losses by specified businesses – losses under the head 'capital gains'– set off and carry forward of losses in the case of closely held companies – order of set off of losses – submission of return for losses - Clubbing of income:– income of other person's includible in assessee's total income - income of other person's includible in individual's total income - Cross transfers.

Unit 3 Assessment of various entities: Assessment of company – Tax on income distributed by specified company or a mutual fund – taxation regime for securitization trusts and its investors – scheme of taxation of real estate investment trust and infrastructure investment trust – special taxation regime for investment funds and income received from such funds – assessment of other entities – other provisions related to various entities – Charitable or religious trusts and institutions, political parties and electoral trusts**:** Income of Universities, hospitals, educational institutions, medical institutions, etc– exemption to political parties – exemption for voluntary contributions received by Electoral Trusts – Deduction, Collection and Recovery of Tax**:** Deduction at source and advance payment – direct payment – deduction of tax at source – certificate for deduction of tax at a lower rate – no deduction in certain cases – miscellaneous provisions – Tax collection at source – processing of TCS statements – PAN quoting mechanism in the TCS regime– refunds – Income Tax authorities: Appointment and control – jurisdiction – powers of income tax authorities.

Unit 4 Tax Planning: Tax planning, tax management, tax evasion, tax avoidance; corporate tax in India, Types of companies, Residential status of companies and tax incidence, Tax liability and minimum alternate tax, Tax on distributed profits Tax planning with reference to setting up of a new business; Locational aspect, nature of business, form of organization; Tax planning with reference to financial management decision; Capital structure, dividend including deemed dividend and bonus shares Tax planning with reference to employees' remuneration; Tax planning with reference to receipt of insurance compensation; Tax planning with reference to distribution of assets at the time of liquidation Tax planning with reference to business restructuring: - Amalgamation, Demerger, Slump sale, Conversion of sole proprietary concern/partnership firm into company, Conversion of company into LLP, Transfer of assets between holding and subsidiary companies.

Unit 5 International Taxation Special provisions relating to non-residents, Source Rule of Taxation, double taxation relief; Provisions regulating transfer pricing; Advance rulings; Advance pricing agreement Specific Reporting Regime in respect of Country by Country reporting and master file, Model tax Conventions, Tax Treaties, Tax Information Exchange Agreements, Anti Avoidance Measures Controlled Foreign Corporations, Base Erosion and Profit Shifting ,Other Anti Avoidance Measures, taxation of E-Commerce transactions general anti-avoidance rules (GAAR).

Learning Outcome

After completion of the course, student will be able to:

- Compute taxable income under different heads for different entities
- Plan activities keeping tax impact
- Understand the assessment and appeal procedures
- Carry out the exercise of tax planning
- Understand provisions relating to cross border taxation

Suggested Readings

Singhania, Vinod K., and Singhania, Monica. Students Guide to income Tax, Taxmann Publications, New Delhi

Singhania, Vinod K. and Monica Singhania. *Corporate Tax Planning and Business Tax Procedures.* Taxmann Publications Pvt. Ltd., New Delhi.

Ahuja, Girish. and Ravi Gupta. Corporate Tax Planning and Management. Bharat Law House

Acharya, Shuklendra and M.G. Gurha. Tax Planning under Direct Taxes. Modern Law Publication

Gaur & Narang, Income Tax Law & Practice, Kalyani Publishers.

Lal, B.B. Income Tax Law and Practice. Konark Publications, New Delhi.

AUDITING AND ASSURANCE

Course Objective

The purpose of the course is to help students gain an understanding of the basic principles of auditing, audit procedures, internal checks, and vouching. Students will also get an opportunity to learn procedures relating to the audit of companies and other entities and also the methodology involved in the auditing of computerized accounting transactions.

Detailed Contents of Syllabus

Unit 1: Basic Principles of Auditing: Definition - Nature and Scope of Auditing - Difference between Accounting, Auditing and Investigation - Objects of Audit - Qualities of an Auditor - Types of Audit.

Unit 2: Audit Planning and Internal Control: Preparatory steps to be followed in the commencement of a new audit - Audit Programme - Audit Notebook - Audit Working Papers - Audit Files- Audit report - Essentials of Effective Reporting. Internal Control: Elements - Objectives - Internal check - Objects of Internal Check - Duties of an auditor in connection with Internal check.

Unit 3: Verification Procedures: Definition - Meaning - Auditors duty regarding vouching of various items of debit side of the cash book: cash in hand, collection from debtors, interest on investment and rent received- Credit side of the cash book: wages, payment to suppliers, cash purchases and purchase of land & buildings.

Unit 4: Audit of limited companies: Procedures, Audit Reports Company Auditor - qualification, disqualification, Appointment - Remuneration - rights and duties - removal of auditor - Liabilities of the auditor - Civil and Criminal liabilities

Unit 5: Auditing of computerized accounting and Other Types of Audit: EDP Audit - EDP Audit features and limitation - General approach to EDP Audit - Special Techniques for Auditing in EDP environment - Need for Computer Assisted Auditing Techniques (CAAT) - Types and Uses of CAAT - Green (Environmental) Audit: Definition - Objectives - Stages of Green Auditing. Special features of Cost audit, Tax audit, and Management audit;

Learning Outcome

After completion of the course, student will be able to:

- Explain the basic concepts of auditing and differentiate it with accounting and investigation
- Prepare audit programme and frame audit procedures needed.
- Familiarise with the provisions of Companies Act regarding qualification, appointment, rights and duties of company auditor.
- Apply the concept of Computer Assisted Auditing Techniques and Green Audit in auditing practice

Suggested Readings

Books

William Messier Jr and Steven Glover and Douglas Prawitt, Auditing & Assurance Services: A Systematic Approach, Mc Graw Hill

Alvin A. Arens, Mark S. Beasley, and Randal J. ElderAuditing and Assurance Services, Pearson

Michael C. Knapp, Contemporary auditing, Clean earth Books

Dinkar Pagare, Practical Auditing, Sultan Chand & Sons Kamal Gupta, Contemporary Auditing, Tata Mc Graw Hill.

Jain D P, Auditing, Konark Publishers Pvt. Ltd.

Ravinder Kumar and Virender Sharma, Auditing, Principles and Practice, Eastern Economy Edition.

Sharma T R, 2016: Principles and Practice of Auditing, Sahithya Bhavan, Agra. Sundar. K & Paari. K, Practical Auditing, Vijay Nicole Imprints Pvt. Ltd. Chennai Tandon B N, 2013: Auditing, Sultan Chand and Sons, New Delhi.

Study Material

ICAI

DATA ANALYSIS & DATA MINING

Course Objective

The primary objective of this course to enable the students to learn the basics of data mining and programming in R. Besides, the students will get a grasp of Weka tool datasets and will get an understanding of pattern discovery overview. Students will be also taught cluster analysis.

Detailed Contents of Syllabus

Unit 1 Basics of Data Mining: Meaning of Data Mining - Kinds of Data can be mined - Kinds of Patterns can be mined - Type of Technologies used - Issues in Data Mining

Unit 2 R programming: Syntax, Atomic data types: numeric, character, logical,missing Data structures: vectors, matrices, arrays, data frames, lists, Data queries: enumeration, exclusion, Boolean selection, associative arrays, Control constructs: loops, conditionals, Vectorization for efficient computing Expressions and evaluation in the functional paradigm ii. Names Functions as objects, their arguments and execution, Class-based object-oriented programming

Input/output for Sequential data, Data tables, Web pages Model language and model formulae as used in Statistical models and Plotting

Unit 3 Weka Tool Datasets: Introduction, Iris plants database, -Introduction to WEKA, The Explorer - Getting started, Exploring the explorer, Learning algorithms, Students will work with multimillioninstance datasets, classify text, experiment with clustering, association rules, much more.

Unit 4 Pattern Discovery Overview: Pattern Discovery Basic Concepts; Efficient Pattern Mining Methods; Pattern Evaluation; Mining Diverse Frequent Patterns Sequential Pattern Mining; Pattern Mining Applications: Mining Spatiotemporal and Trajectory Patterns Constraint-Based Mining Graph Pattern Mining Pattern-Based Classification Pattern Mining Applications: Mining Quality Phrases from Text Data;

Unit 5 Cluster Analysis: Introduction; Similarity Measures for Cluster Analysis Partitioning-Based Clustering Methods; Hierarchical Clustering Methods Hierarchical Clustering Methods (continued); Density Based and Grid-Based Clustering Methods; Methods for Clustering Validation

Learning Outcome

At the end of the course, the student will be able to

- Understand the fundamental syntax of R through readings, practice exercises, demonstrations, and writing R code.
- Prepare or tidy data in preparation for analysis
- Analyze a data set in R and present findings using the appropriate R packages
- Understand pattern discovery and cluster analysis techniques

Suggested Readings

Foster Provost and Tom Fawcett. Data Science for Business: What You Need to Know about Data Mining and Data-Analytic Thinking

Hadley Wickham and Garrett Goleman. R for Data Science: Import, Tidy, Transform, Visualize, and Model Data. O'Reilly

Han et al., Morgan Kaufmann, Yanchang Zhao.Data Mining: Concepts and Techniques, R and

Data Mining: Examples and Case Studies Elsivier
Jeffrey S. Saltz and Jeffrey M. Stanton. An Introduction to Data Science, Thousand Oaks, Sage publications
John M Quick. StatisticalAnalysis with R. O'Reilly
Joseph Adler. R ina Nutshell: A Desktop Quick Reference. O'Reilly
Manning et al., Introduction to Information Retrieval, Cambridge University Press., (PDF available online)
Robert I. Kabacoff. R in Action Data Analysis and Graphics with R. Manning Publications
Zaki, Mohammed and Wagner, Meira. Data Mining and Analysis: Foundations and Algorithms, Cambridge University Press,

INVESTMENT MANAGEMENT

Course Objective

The course aims at developing an understanding of the basics of investment management including risk return analysis and construction of optimal portfolios. Performance evaluation methods of various styles and strategies are also examined as is the role of alternate investments.

Detailed Contents of Syllabus

Unit 1 Introduction: Returns and Risk; Some Basic Statistics, how securities are issued, interest rates, risky asset returns, historical evidence, dependence, active vs passive investing, risk adjusted return measures

Unit 2 Diversification: Choosing Optimal Portfolios; Asset Allocation Strategic allocation and Tactical asset allocation, combining a risk–free & a risky asset, Asset Allocation – Implementation, risk aversion and indifference curves

Unit 3 Estimating Risk and Return: Factor Models and Beta Estimation of risk, Describe measures of risk, including standard deviation and downside deviation, Describe reward-to-risk ratios, including the Sharpe and Treynor ratios - Asset Pricing Models, CAPM and APT macro factors) ,Identifying Additional Risk Factors / Factor Model Applications liquidity facto, Fama-French 3-factor mode Financial Market Anomalies, Some Issues in the Pricing of Fixed Income Securities Bond Valuation Principles, types of money market and fixed-income securities, term structure of interest rates, duration & immunization, Fixed Income Arbitrage, Default Rates and Low-Grade Bonds, Securitization.

Unit 4 Performance Evaluation: Evaluating Managed Fund Performance, holding period and time weighted rates of return bench marking, style analysis, performance attribution, concept of alpha, tracking error and information ratio Investment Strategy Implementation and Costs, Trading, Trader Behavior, Trading Costs Behavioral Finance. Implementation of Active Portfolio Quantitative Equity Investing, margin, short selling, Hedge Funds Market Timing.

Unit 5 Alternative Investments: Hedge funds, private equity, real estate, commodities, and infrastructure, diversifications and higher returns

Learning Outcome

After completion of the course, student will be able to:

- Describe performance measurement measures
- Evaluate portfolio performance
- Describe and contrast different investment strategies
- Propose investment strategy solutions
- Evaluate alternative avenue of investments

Suggested Readings

Bodie Z, A. Kane and A. J. Marcus, Investments, McGraw-Hill/Irwin

Baxter, Martin & Andrew Rennie. Financial Calculus: An introduction to derivative pricing, Cambridge University Press

Elton, Edwin J, Martin J Gruber, Stephen J. Brown and William N. Goetzmann. Modern Portfolio Theory and Investment Analysis. John Wiley

Hirt, G. & Block, S, Fundamentals of investment management, New York, NY: McGraw-Hill Irwin. Reilly F K, Keith C. Brown, Investment Analysis and Portfolio Management, South-Western Publishers,

Markowitz H M, Mean-Variance Analysis in Portfolio Choice and Capital Markets, Blackwell, New York,

Luenberger D G, Investment Science, Oxford University Press

Prasanna Chandra. Investment Analysis and Portfolio Management Mcgraw Hill
E. Fischer, Donald, J. Jordan Ronald, K.Pradhan Ashwini . Security Analysis and Portfolio Management. Pearson Education
Richard Grinold, Ronald Kahn.Active Portfolio Management: A Quantitative Approach for Producing Superior Returns and Selecting Superior Returns and Controlling Risk, McGraw-Hill
William Kinlaw , Mark P. Kritzman, David Turkington. A Practitioner's Guide to Asset Allocation Wiley Finance
Swensen, David. Pioneering Portfolio Management, Free Press

ENTREPRENEURSHIP

Course Objective

The purpose of the course is to enable the students to get an understanding of concepts in the area of entrepreneurship. Besides, the course aims at giving an understanding of the key steps in the formulation of a business model and develop a business plan, understand the stages of the entrepreneurial process and the resources needed for the successful development of entrepreneurial ventures.

Detailed Contents of Syllabus

Unit 1: Innovation and Entrepreneurship: Innovation and creativity, Innovation as a core competence, managing for innovation, Entrepreneurship Meaning – Evolution, Need for entrepreneurship - Types of Entrepreneurs - Intrapreneur Vs Entrepreneur- Growth of Entrepreneurship in India - Role of Entrepreneurship in Economic Development.

Unit 2: Understanding Customers: Customer Discovery, develop hypotheses and test them with customers. Minimum Viable Product (MVP) Design experiments for customer tests, Test how customers perceive the problem, Customer segmentation, Value Proposition Hypothesis

Unit 3: Business Model: Develop a business model and plan, test hypotheses: channel hypothesis, competitive hypothesis, key resource hypothesis, Customer relationship hypothesis, Pricing hypothesis, Business Strategy - Issues in scaling up operations. Preparation of feasibility study and business plan - Sensitivity analysis.

Unit 4: Finance and Regulations: Need for Institutional finance - Commercial banks- IDBI - IFCI - ICICI IRBI - SFC - SIDCS - SIDBI - EXIM bank - Need for institutional support - NSIC - SIDO – SSIB - SSID - SISI - DIC – TCO - Private equity and private investors, when to use private investments. Steps involved in stepping up of small enterprises, regulatory and policy framework.

Unit 5: Avoiding Entrepreneurial failures: Avoiding early-stage failures through lean testing, staged investments resource borrowing from partners, execution related failures, late stage failures speed trap, failing well – when to pull the plug, how to pull the plug while leaving relationships and integrity intact.

Learning Outcome

After completion of the course, student will be able to:

- Analyze the business environment in order to identify business opportunities,
- Get a better understanding of customers.
- Identify the elements of success of entrepreneurial ventures,
- Evaluate the effectiveness of different entrepreneurial strategies,
- Understand the importance of marketing and management in small businesses venture.

Suggested Readings

Neck, Heidi, Christopher P. Neck, Emma L. Murray. Entrepreneurship: The Practice and Mindset.

Los Angeles: Sage Publications.

Schrage, Michael, The Innovator’s Hypothesis, Boston: MIT Press

Osterwalder, A and Pigneur, Y. Business Model Generation

Blank S. and B.Dorf. The Startup Owners Manual, Wiley

Barringer, Bruce R., Ireland Duane R. Entrepreneurship: Successfully Launching New Ventures Prentice Hall

Davies, Paul. New Business in India: The 21st Century Opportunity. World Scientific Publishing Company

Westerman et al., Leading Digital, Harvard Business School Press
Ashok Soota, S.R. Gopalan. Entrepreneurship Simplified: From Idea to IPO. Penguin
Peter F. Drucker. Innovation and Entrepreneurship, Harper Collins
Robert D. Hisrich, Michael P. Peters, Dean A. Shepherd, Sabyasachi Sinha, Entrepreneurship. McGraw Hill
Nanda, K. C. Credit and Banking: What Every Small Entrepreneur (and Banker) Must Know. Response Books

DATA VISUALIZATION

Course Objective

The purpose of this course is to introduce to the students the basics of business intelligence while teaching them the mechanics of data visualization using Tableau and Power BI. Further, students will get to know the mechanism of data visualization using 'R' apart from learning the nuances of logistical regression, big data and web mining.

Detailed Contents of Syllabus

Unit 1: Data Visualization: Introduction and Design Principles: Why do we visualize data, how do we visualize data, Understanding key concepts in business intelligence, data analysis, and data visualization. Dashboard design: Importance of context, choosing an effective visual, decluttering and focus, Common mistakes in dashboard design, characteristics of a good dashboard design, data types, use of colour.

Unit 2: Power BI: Power BI: - Importing your data and automatically creating dashboards Connecting to and importing your data, then shaping and transforming that data, enriching your data with business calculation - Visualizing your data and authoring reports, Scheduling automated refresh of your reports Creating dashboards based on reports and natural language queries Sharing dashboards across your organization Consuming dashboards in mobile apps Leveraging your Excel reports within Power BI Creating custom visualizations that you can use in dashboards and reports Collaborating within groups to author reports and dashboards Sharing dashboards effectively based on your , organization's needs Exploring live connections to data with Power BI Connecting directly to SQL Azure, HD Spark, and SQL Server Analysis Services Introduction to Power BI Development API Leveraging custom visuals in Power BI.

Unit 3: Data Visualization using Tableau: Basics of data visualization Intro to Tableau Seminar: Getting started with data The Tableau Interface Creating basic charts Creating Simple dashboards Tableau data types, dimensions and measures, discrete and continuous fields Common chart types (e.g. bar chart, line chart, area chart) Filtering and sorting data Seminar: Mastering common chart types Filtering and sorting data in Tableau Intro to Data simple Calculations Data profile with Tableau Prep Transform and load data with Tableau Prep Advanced chart types (symbol and shaded maps, tree map, scatter plot, trellis) Interactivity types: Creating advanced chart types Interactivity in Tableau (tooltip, worksheet and dashboard actions, navigation).

BUSINESS VALUATION

Course Objective

The objective of the course is to develop an understanding of methods of valuing businesses including for acquisitions and mergers. Further, the course aims at imparting knowledge on discounted valuation techniques.

Detailed Contents of Syllabus

Unit 1 Introduction to Valuation: An understanding of 'Value' - The nature and scope of Valuation - Objectives of Valuation Importance of Business Valuation - Misconceptions about Valuation Elements of Business Valuation - Conceptual Overview - Valuation Approaches Choice of Approach - Fair Market Value - Adjustments for Valuation Purposes.

Unit 2 DCF Valuation: Estimating discount rates, cashflows, growth, terminal values, Choosing right model, forecasts, crossholdings, cash, management options, sensitivity analysis.

Unit 3 Relative Valuation, Asset based Valuation and Private Company Valuation: Multiples, PE & PEG ratios, choosing right comparable, choosing right multiples, , private company valuation, risk estimation, illiquidity issues, Asset based and liquation values Brand name valuation, intangibles.

Unit 4 Acquisitions and mergers: Basic Concepts in Mergers and Acquisitions – valuation issues, debt transference, control premium, synergy, cost savings.

Unit 5 Contingent Claim Valuation: Real options embedded, economic value of options, options in projects, investments, acquisitions, patents, options to delay, Valuing young companies, valuing distressed companies.

Learning Outcome

After completion of the course, student will be able to:

- Get familiar with the concepts and misconceptions about valuation.
- Use DCF valuation in estimating cash flows.
- Use different methods of business valuation.
- Use valuation methods for acquisitions.
- Develop contingent claim valuation.

Suggested Readings

Damodaran, Ashwath. Damodaran on Valuation: Security Analysis for Investment and Corporate Finance Wiley Finance

Damodaran Aswath. Dark Side of Valuation: The Valuing Young, Distressed and Complex Businesses. Pearson Education

Damodaran Aswath. Investment Valuation: Tools and Techniques for Determining the Value of any Asset. Wiley Finance

Koller, Goedhart and Wessels McKinsey & Co. Valuation: Measuring and Managing the Value of Companies, John Wiley & Sons

Koller, Goedhart and Wessels McKinsey & Co. Valuation Workbook: Step-by-Step Exercises and Tests to Help You Master Valuation. Wiley Finance

Sheridan Titman and John Martin, Valuation: The Art & Science of Corporate Investment Decisions. Prentice Hall

Richard Barker. Determining Value: Valuation Models and FinanciaStatements. Prentice Hall

Krishna G. Palepu, Paul M. Healy Business Analysis and Valuation: Using Financial Statements. Cengage

James R. Hitchner. Financial Valuation: Applications and Models. Wiley Prasanna Chandra, Corporate Valuation: A Guide for Analysts, Managers, and Investors. Tata McGraw Hill

Robert Holthausen and Mark Zmijewski. Corporate Valuation: Theory, Evidence and Practice. Cambridge Business Publishers

HUMAN RESOURCE MANAGEMENT

Course Objective

The purpose of this course is for the students to understand the basic concepts of human resource management in addition to getting a fair understanding of the process involved in the recruitment and selection of human resources. The students will also be taught about the techniques and methods of training, motivation, performance appraisal and the working mechanism of human resource information system.

Detailed Contents of Syllabus

Unit 1: Human Resource Management: Functions of Human Resource Management - Nature and Scope of Human Resource Management - Human Resource Planning - Meaning - Importance - Objectives - Process - Areas - Job Analysis - Purposes - Uses - Contents - Steps and Techniques.

Unit 2: Recruitment and Selection: Recruitment Policy - Sources - Methods - Recruitment Practice in India -Selection Procedure - Scientific Selection - Placement - Induction and Socialisation.

Unit 3: Training and Development: Principles of Training - Methods of Training - Procedure - Contributions of Training Evaluation of Training Programme - Career Development - Benefits - Promotion Practices in India Transfer - Transfer Policy and Procedure - Grievance and Redressal Procedures - Organisational Development - Meaning - Models and Interventions.

Unit 4 Motivation and Reward: Agency Theory, designing incentive systems, managing performance - Performance Appraisal: Need - Purpose and Use of Performance Appraisal - Steps in Performance Appraisal - Traditional Vs Modern Methods of Performance Appraisal - Performance Appraisal based on MBO system - Managerial Appraisal Managerial Ethics in Performance Appraisal.

Unit 5 Human Resource Information Systems: Human Resource Information System - Human Resource Management Research and Audit - Human Resource Management in changing environment - International Human Resource Management - Managing Human Resource in Virtual Organizations.

Learning Outcome

After completion of the course, student will be able to:

- Contribute to the development, implementation, and evaluation of employee recruitment, selection, and retention plans and processes.
- Develop, implement, and evaluate employee orientation, training, and development programs.
- Research and analyze information needs and apply current and emerging information technologies to support the human resources function.
- Conduct research, produce reports, and recommend changes in human resources practices.
- Apply the technique of information system as applicable to managing the human resources.

Suggested Readings

Adams, J, Managing people in organisations: contemporary theory and practice. Basingstoke: Palgrave Macmillan.

Armstrong, M, Armstrong's handbook of human resource management practice. Thirteenth edition. London: Kogan Page.

Farnham, D, Human resource management in context: strategies, insights and solutions. Chartered Institute of Personnel and Development, London

Biswajeet Patttanayak, Human Resource Management, PHI Learning

Bohlendar and Snell, Principles of Human Resource Management, Cengage Learning DeCenzo, D.A. and S.P. Robbins, Personnel/Human Resource Management, Pearson Education.

Gary Dessler. A Framework for Human Resource Management. Pearson Education.

Ivancevich, John M. Human Resource Management. McGraw Hill.

Robert L. Mathis and John H. Jackson. Human Resource Management. Cengage Learning.

Wreather and Davis. Human Resource Management. Pearson Education.

SUSTAINABLE FINANCE

Course Objective

The objective is to understand how the financial sector can support sustainable development and apply the key principles and core practices of green and sustainable finance.

Detailed Contents of Syllabus

Unit 1: Sustainable Finance in Context: Definition - approaches to green and sustainable finance - opportunities and challenges for green and sustainable finance - UN Sustainable Goals (SDGs) - The Five Pillars of Sustainable Finance- Climate Change and Sustainable Development.

Unit 2: Fundamentals of Sustainable Finance

Building a Sustainable Financial System - UNFCC, Kyoto Protocol, Paris Agreement -Introduction to Environmental, Social and Governance (ESG) and Risk Management -Greenwashing - Financial and Sustainability (Impact) Reporting - The Task Force on Climate-related Financial Disclosures (TCFD)

Unit 3: Responsible Banking, Sustainable insurance & Responsible and Sustainable Investment

The role of banking in transition to a sustainable, low carbon world, Principles for Responsible Banking and NET Zero Banking Alliance. The role of Insurance in the financial system- The insurance sector and climate-related risks, Principles for Sustainable Insurance – impact underwriting Climate Insurance-Responsible and sustainable Investment Products & services -challenges to the continued growth of a responsible and sustainable investment.

Unit 4: Green and Sustainable FinTech

Introduction to FinTech- Applying FinTech tools and techniques in green and sustainable finance- Policy and finance sector initiatives to support FinTech in Green and sustainable finance- Cost & Challenges of FinTech.

Unit 5: The future of green and sustainable finance

Importance of green and sustainable finance to become part of mainstream finance - progress in aligning finance with the objectives of the Paris Agreement - key challenges of mainstreaming finance- emerging and evolving areas of interest in green and sustainable finance - role of Green and Sustainable Finance Professionals.

Learning Outcome

After completion of the course, students will be able to:

- Understand the fundamentals of Sustainable Finance.
- Have a significant grasp of how Banking Financial Institutions and Insurance firms' products and services can align finance with sustainability objectives.
- Understand how FinTech tools and techniques can support the growth of green and sustainable finance.
- Get a thorough understanding of emerging and evolving areas of interest in green and sustainable finance.

Suggested Readings

1. Simon Thomson, Green and Sustainable Finance, Principles & Practice in Banking, Investment and Insurance of Green & Sustainable Finance, Chartered Banker Institute, Kogan Page.
2. Dirk Schoenmaker, Willem Schramade, Principles of Sustainable Finance, Oxford University Press.

PROJECT EVALUATION & MANAGEMENT

Course Objective

To develop a practical understanding of Project Management concepts in preparation, appraisal, planning, monitoring and control of projects.

Detailed Contents of Syllabus

Unit 1: BASICS OF PROJECT MANAGEMENT: 7 hours

Introduction, Definition, Goal, Need for Project ManagementPhases of Project Management Life Cycle – Processes in each phaseSelecting Projects to Meet Organizational Objectives, The Project Portfolio Process Project Manager – Roles & Responsibilities – Project Teams**,** Project Organisation – Pure, Functional and Matrix types

Unit 2: PROJECT IDENTIFICATION, APPRAISAL AND SELECTION: 10 hours

Introduction, Project Identification Process, Project Selection Criteria, Models - Types of Models, Project appraisal – strategic, financial and operational considerations – Financial parameters, Risk Considerations in Project Selection, Project Portfolio Management (PPM).

Unit 3: PLANNING AND SCHEDULING OF PROJECTS: 10 hours

Project Plan, The Planning Process — The Work Breakdown Structure (WBS), Integrating WBS with Organisation Breakdown Structure (OBS), The RACI Matrix, A Whole-Brain Approach to Project Planning, The Design Structure Matrix, Estimating Task Times PERT and CPM Networks - Building the Network - Finding the Critical Path and Completion Time - Calculating Activity Slack, Project Uncertainty - Calculating Probabilistic Activity Times, The Probability of Completing the Project on Time, Agile Project Management, Goldratt’s Critical Chain,The Gantt Chart Extensions to PERT/CPM Precedence Diagramming.

Unit 4: BUDGETING AND RESOURCE ALLOCATION: 10 hours

Methods of Budgeting – Cost estimating - Top-Down and Bottom-Up methods, Cost Estimating Work Element Costing. Project Uncertainty and Risk Management, Simulation. Expediting a Project – Crashing, Resource Loading/Levelling - Allocating Scarce Resources to Projects,

Unit 5: Project Evaluation and Closure: 8 hours

The Plan-Monitor-Control Cycle - Designing the Monitoring System - Data Collection and Reporting - Data Analysis Reporting - Designing the Control System, Tools for Control, Burnup and Burndown Charts, Project Evaluation, Project Auditing and Closure, The Audit Process, Project Closure - Types of Project Closure, The Project Final Report

Learning Outcome

After completion of the course, student will be able to:

- Understand the basics of project management Analyze business problems using data analysis and Microsoft Excel
- Appreciate the process of identification, appraisal and selection of projects.
- Demonstrate a working understanding of planning and scheduling of projects using CPM and PERT.
- Understand the relevance of cost estimation and budgeting techniques in project management.
- Appreciate the role of project control and evaluation.

Suggested Readings

Book

- Eric W Larson, Clifford F Gray & Rohit Joshi "Project Management The Managerial Process", Special Indian Education, 8e, McGraw Hill
- John M. Nicholas, Project Management for Business and Technology - Principles and Practice, 2nd Edition, Pearson Education,2016
- Gido and Clements, Successful Project Management, 6th Edition, Cengage, 2015.
- Harvey Maylor, Project Management, 4th Edition, Pearson Education, 2010

Study Material

- Additional content including PowerPoint files shared in LMS

BUSINESS ANALYSIS WITH ADVANCED EXCEL

Course Objective

The objective of the course is for students to use advanced excel techniques to analyse business problems in various functional areas.

Detailed Contents of Syllabus

Unit 1: Advanced Excel: Advanced Excel Functions covering lookup functions, financial functions, database functions, date-time functions, dynamic arrays. Pivot tables, power query, macros, form controls, charts, dashboards, Data preparation, collection, cleaning, import, structure, sort, filter, data entry forms, data validation.

Unit 2: Financial and Investment Analysis: Decision trees, Value of information, Statistical distributions, simulation using Monte Carlo technique, Portfolio Analysis with Risk measurement, Portfolio construction, Modelling stock and Bond valuation.

Unit 3: Sales and Marketing Data Analysis: Demand forecasting, Regression, Trends and Seasonality, Pricing Strategies, Discount analysis, Revenue Management, RFM analysis, Market Basket Analysis, Lifetime Customer Value Analysis.

Unit 4: Production, Operations and HR Analysis: Capacity Modelling, Process Control analysis, Quality analysis, Scheduling, Optimization.

HR analysis – Staffing metrics, T&D metrics, Incentive analysis, HR dashboards

Unit 5: Business Intelligence with DAX : Connecting and Shaping Data under Microsoft BI, Creating data model, Calculated fields and DAX, Visualizing data and generating Report.s

Learning Outcome

After completion of the course, student will be able to:

- Use advanced features of Microsoft Excel
- Analyze business problems using data analysis and Microsoft Excel

Suggested Readings

- Ellen F. Monk, Joseph A. Brady, and Emilio I. Mendelsohn, Problem- Solving Cases in Microsoft Access & Excel, Cengage Learning
- Michael Alexander and Dick Kusleika, Microsoft Excel 365 Bible, Wiley
- Wayne L. Winston , Marketing Analytics: Data-Driven Techniques with Microsoft Excel, Wiley
- S. Christian Albright and Wayne L. Winston, Business Analytics: Data Analysis & Decision Making, Cengage

SUPPLY CHAIN MANAGEMENT

Course Objective

The objective of the course is for the students to develop an understanding of the individual processes of supply chain management and their interrelationships within individual companies and across the supply chain.

Detailed Contents of Syllabus

Unit 1 Introduction: introduction to the supply chain concept the elements and flows, elements of supply chain strategy the key attributes of successful supply chain, Core Supply Chain processes: Reverse Logistics Processes Supply Chain Structure Design: Push, pull, postponement Supply Chain complexity- Alignment with Demand and Supply Uncertainty,, reducing variability and buffering against variability, Handling uncertainty, tools for identifying causes of variability and improving supply chain capability Evaluating supply chain network strategy: capacity, technology, translating supply chain decisions into financial terms - Total Landed Cost, Total Cost of Ownership, Discounted cash flow analysis Information flow design: Risk & Resilience Development in Supply Chains **Unit 2 Analytical Tools:** Supply chain network design Facilities location & Vehicle routing models Process Mapping System dynamic tools (causal loop diagrams, stock and flow diagrams, behaviour over time charts) Introduction to database management concepts and tools Introduction to machine learning concepts and tools

Unit 3 Demand Forecasting, Supply and Inventory Management: Forecasting metrics- MD, MSE, RMSE, MAD, MAPE, MPE Time Series Analysis- Level, trend & seasonality models- moving average, simple exponential smoothing, exponential smoothing with trend, damped trends, double exponential smoothing model for level & seasonality, Holt-Winter model for level, trend and seasonality Causal models- simple linear regression Croston's Model for intermittent demand, Inventory Management Economic Order Quantity models- sensitivity, non-instantaneous lead time, quantity discounts, concept of back orders, Single period inventory models – critical ratio, expected profit, expected units short Continuous review policy(s, Q) model & Periodic review policy (R,S) model using performance metrics (cycle service level and item fill rate) and stockout cost metrics (cost per stockout event and cost per item short)Special issues- exchange curves, grouping like items, location pooling Customer Management Processes, Demand Management Processes (Balances the customers' requirements with the firm's capabilities and capacity (S&OP), Order Fulfillment Processes (Integrates manufacturing, logistics, and marketing plans), Manufacturing Flow Management Processes, Supplier Relationship Management Processes,

Unit 4 Logistics, Distribution, Global Supply Chain, Sourcing and Outsourcing: Freight transportation- modes and their selection, impact on inventory, Packaging- Primary, Secondary, & Tertiary levels, containers, Warehousing- design, operations heuristics, material handling, Cross Docking Barcoding, RFID, Smart Cards ECR (Efficient Consumer Response) Analyze VMI (Vendor Management Inventory) - Global supplies WMS Customs, Duties, Tariffs, INCO terms, Rules of origin, Letter of credit etc.

International Transportation, landed cost analysis Trading blocks, Trade Zone, bonded warehouses,
ICD - Currency fluctuations, exchange rate risks, Transfer Pricing, Development of Supply Strategies
Purchasing Performance Evaluation Supplier Price Cost Analysis, Value Analysis Role of
Distribution

Channels Product Life Cycle and Distribution Challenges Managing Customer
Relationships Measuring Channel Performance

Unit 5 Performance Metrics and Improving Performance: Performance Measurement along the Supply Chain: Relationship between Company Strategy & Supply Chain Metrics, Functional classification of Decision areas in SCM – Procurement, Manufacturing, Distribution, Logistics, Approaches to Performance Measurement: Productivity Measures, Quality Measures, Customer

Service Measures, Cost Measures, Quality Management, Six sigma & Lean Management Concepts. Ecommerce, ERP, Recent Advances in Technology Taxation & supply chains

Learning Outcome

After completion of the course, the student will be able to:

- Develop an understanding of the individual processes of supply chain management and their interrelationships within individual companies and across the supply chain
- Link supply chain processes to business strategy and develop appropriate metric
- Use analytical tools and techniques in implementing supply chain management processes
- Carry out cost price analysis and value analysis
- Carry out performance measurement along supply chain

Suggested Readings

Sunil Chopra, Peter Meindl and Kalra, "Supply Chain Management, Strategy, Planning, and operation", Pearson Education

Douglas M. Lambert (ed). Supply Chain Management: Processes, Partnerships, Performance. The Supply Chain Management Institute, FL.

John J. Coyle, John Langley Jr., Robert A. Novack, and Brian J. Gibson; Supply Chain Management: A Logistics Perspective. Cengage Learning.

Jeremy F. Shapiro, "Modeling the supply chain", Thomson Duxbury.

Srinivasan G.S, "Quantitative models in Operations and Supply Chain Management", PHI.

David J. Bloomberg, Stephen Lemay and Joe B. Hanna, "Logistics", PHI.

James B. Ayers, "Handbook of Supply chain management", St. Lucle press.

Simchi-Levi, David, S. David Wu, and Zuo-Jun Shen, eds. Handbook of Quantitative Supply Chain Analysis: Modeling in the E-Business Era. New York, NY: Springer.

David Simchi Levi, Philip kaminsky, and Edith Simchi Levi. Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies. Irwin McGrawHill

Joel Wisner, Keah Choon Tan; G. Keong Leong. Principles of Supply Chain Management: A Balanced Approach". Cengage Learning