

**Syllabus
Of
Master of
Business
Administration
(Financial
Management)**



**Arun Jaitley National Institute of Financial Management
Faridabad**

First Term

Paper Code	Title of the Paper	Credit	Sessions
101	Financial Accounting	3	40
102	Managerial Economics	3	40
103	Management of Information Technology	3	40
104	Marketing Management	3	40
105	Public Financial Management	3	40
106	Business Communication	1.5	20
107	Organizational Behaviour	1.5	20
	Total	18	240

Second Term

Paper Code	Title of the Paper	Credit	Sessions
201	Cost and Management Accounting	3	40
202	Financial Management - I	3	40
203	Data Analysis and Decision Tools	3	40
204	Management of Information Systems	3	40
205	Macro - Economic Environment of Business	3	40
206	Human Resource Management	3	40
	Total	18	240

Third Term

Course Code	Title of the Paper	Credit	Sessions
301	Financial Institutions and Markets	3	40
302	Production and Operations Management	3	40
303	Project Planning, Evaluation, Financing and Management	3	40
304	Research Methodology & Intellectual Honesty	3	40
305	Financial Management - II	3	40
306	Legal Environment of Business	3	40
Total		18	240

Fourth Term

Compulsory Subjects			
Paper Code	Title of the Paper	Credit	Sessions
401	Security Analysis and Portfolio Management	3	40
402	Financial Derivatives	3	40
403	Quantitative Analysis for Financial Decisions	3	40
404	International Financial Management	3	40
4F	Elective Paper - I	3	40
4H	Elective Paper - II	1.5	20
4H	Elective Paper - III	1.5	20
Total		18	240
List of Optional Subjects			
4F1	International Trade and Finance	03	
4F2	Managing E-Business	03	
4F3	Corporate Tax Including GST	03	
4H1	Forensic Accounting	1.5	
4H2	Behavioural Finance	1.5	
4H3	Accounting in Government and Autonomous Bodies	1.5	
4H4	Data Science using Python	1.5	

Fifth Term

Compulsory Subjects			
Paper Code	Title of the Paper	Credit	Sessions
501	Fixed Income Securities	3	40
502	Regulatory Environment for Financial Sector	3	40
503	Merger, Acquisition and Corporate Restructuring	3	40
504	Corporate Governance and Business Ethics	1.5	20
5F	Elective Paper - I	3	40
5F	Elective Paper - II	3	40
5H	Elective Paper - III	1.5	20
Total		18	240

List of Optional Subjects			
5F1	Microfinance and Insurance	3	
5F2	Alternative Investments	3	
5F3	Strategic Cost Management	3	
5F4	Financial Analytics	3	
5F5	Data Analysis and using of ICT in Govt.	3	
5H1	Financial Econometrics	1.5	
5H2	FinTech	1.5	
5H3	Total Quality Management	1.5	
5H4	Public Private Partnership	1.5	

Sixth Term

Paper Code	Title of the Paper	Credit	Sessions
601	Corporate Strategy & Risk Management	3	
602	Business Valuation and Analysis	3	
603	Dissertation	6	
Total		12	

First Term

Paper Code 101
FINANCIAL ACCOUNTING

Max. Marks: 100

Course Credit: 03

Course Objectives:

The aim of the course is to make the students understand the concepts of accounting and the process that leads to the preparation of Financial Statements. This course will equip the students with the skills and abilities required to analyze financial statements for prudent decision-making.

Learning Outcomes:

The participants will be able to:

L01: use the conceptual framework of accounting to record the accounting events/ transactions and process them for the preparation of financial statements.

L02: learn accounting processes, records, and calculation of depreciation.

L03: draft Balance Sheet and Statement of Profit and Loss.

L04: understand, prepare & analyze the cash flow statements and annual reports.

L05: make use of Financial Statements Analysis for financial decision-making and be able to use Extensible Business Reporting Language.

Contents:

Unit I: Conceptual Framework of Accounting: Cash and Accrual Accounting; Users of Financial Statements; Capital of a Firm; Structure of Business Firms; Objectives of Corporate Financial Reporting; Components of Financial Statements; Accounting Principles; Accounting Concepts; Accounting Conventions; Importance of Accounting Policy and Accounting Standards.

Unit II: Accounting Records & Depreciation: Accounting Process, Journal, Ledger, and Trial Balance; and Cash Book and Bank Reconciliation Statement. Depreciation Accounting; Accounting including Impairment; and Accounting Standards relating to Non-current Assets.

Unit III: Income Statement and Balance Sheet: Legal Requirement relating to the preparation of Financial Statements of Companies (as per Schedule III of the Companies Act, 2013).

Income Statement- Structure and nature of the Statement of Profit and Loss; Understanding the various items of Profit and Loss Account and their treatment (Expenditure and Expenses; Income; Extraordinary Items; Prior-Period Items); Accounting Standards relating to Net Profit or Loss for the period.

Balance Sheet- Accounting Equation; Balance Sheet Structure; Classification of Assets (Current Assets; Non-Current Assets; Classification of Liabilities (Current Liabilities; Non-Current Liabilities; Secured and Unsecured Liabilities), Accounting Standards relating to Contingencies and Events Occurring after the Balance Sheet Date. Balance Sheet with adjustments, Notes to the Accounts, and Significant Accounting Policies.

Unit IV: Cash Flow Statements and Annual Reports:

Cash Flow Statement- Preparation of Cash Flow Statement; Operating Activities; Investing Activities; Financing Activities; Foreign Currency Cash Flows; Interpretation of Cash Flow Statement; Accounting Standards relating to Cash Flow Statement.

Other Financial Annual Reports- Auditors' Report; Directors' Report; Corporate Governance Report.

Unit V: Analysis of Financial Statement: Concept & Tools for Financial Statement Analysis; Comparative Financial Statements; Common Size Statements; Ratio Analysis (Liquidity Ratios, Solvency Ratios, Activity Ratios, Profitability Ratios, Market Value Ratios, and Predictive Ratios); Accounting Policy and Quality of Earning; Earnings Management; Potential Red Flags; and Limitations of Analysis of Financial Statements.

Extensible Business Reporting Language (XBRL): Requirements in Indian Context; and General Approach for the preparation of XBLR.

Suggested Readings:

Text Books

- R. Narayanaswamy : *Financial Accounting : A Managerial Perspective* : Prentice-Hall of India Pvt. Ltd. : Year of Publication latest edition.

Reference Books

- Ashish K. Bhattacharya : *Financial Accounting for Business Managers* : Prentice-Hall of India Pvt. Ltd. : Year of Publication latest edition.
- Horngren, Sundem, Elliott : *Introduction to Financial Accounting* : Pearson Education : Year of Publication latest edition.
- Wsetgandt, Kieso, Kimmel : *Financial Accounting* : John Wiley & Sons, Inc. : Year of Publication latest edition.
- N. Ramachandran, Ram Kumar Kakani : *Financial Accounting for Management* : McGraw-Hill : Year of Publication latest edition.
- P.C. Tulsian : *Financial Accounting* : Pearson Education : Year of Publication latest edition.
- Robert N. Anthony, James S. Reece : *Accounting Principles* : AITBS Publishers & Distributors : Year of Publication latest edition.
- R.L.Gupta, V.K.Gupta : *Fundamentals of Accounting* : Sultan Chand & Sons : Year of Publication latest edition.
- Ambrish Gupta : *Financial Accounting for Management* : Pearson Education : Year of Publication latest edition.

Paper Code 102
MANAGERIAL ECONOMICS

Max Marks: 100

Course Objectives:

The aim of the course is to make the students understand the concept of managerial economics and its application in the business environment this course will equip the students with the skill abilities to solve the business problem using the principles of economics.

Course Credit: 03

Learning Outcomes:

L01: Be able to appreciate application aspect of the fundamentals of economics, demand and supply.

L02: Be able to comprehend the functioning of firms under different market structures.

L03: Develop skills to analyse the aggregate output, prices, growth, business cycles etc. From policy angle.

L04: Appreciation of the relevance of applicability of Balance of Payments, Monetary and Fiscal Policy in other economic policies framework.

L05 : Be able to evaluate the implications of unfavourable Trade and Capital Flows and Regulations.

Contents:

Unit-I: Introduction to Managerial Economics and its relevance for Business World

Demand and Supply Analysis: Types Of Markets; Basic Principles and Concepts; The Demand Function and The Demand Curve; The Supply Function and the Supply Curve; Market Equilibrium; Consumer Surplus Producer Surplus; Total Surplus; Demand Elasticity; Income Elasticity of Demand of Normal and Inferior Goods; Cross-Price Elasticity of Demand; Demand Elasticity from Demand Functions

Demand And Supply Analysis: (Consumer and the Firm): Consumer Theory; Utility Theory; The Opportunity et (Consumption, Production and Investment Choice); Consumer Equilibrium: Maximizing Utility Subject To the Budget Constraint; Revisiting the Consumer's Demand Function; Objectives of the Firm and Analysis of Revenue, Costs and Profits.

Unit-II: The Firm And Market Structures: Factors that determine and Analysis of Market Structures. Optimal Price and Output In Monopoly Markets and Factors affecting Long-Run Equilibrium in Monopoly Market; and Identification of Market Structure.

Perfect Competition; Optimal Price and Output In Perfectly Competitive Markets; Monopolistic Competition; Optimal Price and Output In Monopolistically Competitive Markets; Oligopoly and Optimal Price and Output in Oligopoly Markets

Unit-III: Aggregate Output Prices And Economic Growth: Aggregate Output and Income; Gross Domestic Product, Components, Aggregate Demand; Aggregate Supply and Equilibrium National Income, Personal Income and Personal Disposable Income; Equilibrium GDP and Prices; Economic Growth and Sustainability; Sources of Economic Growth and Measures of Sustainable Growth.

Understanding Business Cycles: Overview and Phases of the Business Cycle; Resource Use through the Business Cycle; Theories of the Business Cycle; Unemployment and Inflation; and Popular Economic Indicators; Market Failures

Unit-IV: Balance Of Payments: Balance Of Payments, Accounts and its Components; National Economic Accounts and the Balance of Payment

Monetary and Fiscal Policy: Objectives of Monetary Policy and Rules of Central Banks; Contractionary and Expansionary Monetary Policies and Neutral Rate; Limitations Of Monetary Policy; Roles and Objectives of Fiscal; Fiscal Policy Tools and the Macro economy; Relationship between Monetary and Fiscal Policy; and Quantitative Easing and Policy

Unit-V: Trade And Capital Flows: Restrictions And Agreements; Tariffs; Quotas; Export Subsidies; Trading Blocs; Common Markets; Economic Unions; Capital Restrictions; and International Trade and Capital Flows.

Economics of Regulation: Overview of Regulation; Classification of Regulations and Regulators; Regulation of Commerce and Financial Markets; Cost-Benefit Analysis of Regulation; and Analysis and

Effects of Regulations; Economics of Information.

Suggested Readings:

Text Book:

- Samuelson, P.A. and Nordhaus, W.O. *Economics*, New Delhi: Tata McGraw Hill.

Recommended Books (latest editions):

- Froyen, R.T. *Macroeconomics: Theories and Policies*, New Delhi, Pearson Education.
- Fuller, Neil, *Principles of Macroeconomics*, Delhi, Overseas Press
- Gordon, R.J., *Macroeconomics*, New Delhi, Pearson education India Pvt. Ltd.
- Koutsoyiannis, A. *Modern Microeconomics*, Macmillan Press, London.
- Mankiw, N.G., *Macroeconomics*, New York, Worth Publishers
- Mankiw, N.G. *Principles of Microeconomics*. South-Western, Cengage Learning.
- Pindyck, R.S.D.L. Rubinfeld, P.L Mehta, *Microeconomics*, Pearson, New Delhi.
- Synder, C. and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning- New Delhi.
- Snyder, C. and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning- New Delhi.

Paper Code 103
MANAGEMENT OF INFORMATION TECHNOLOGY

Max Marks: 100

Course Credit: 03

Course Objectives:

To introduce the beginners with the nuances of Information Technology and its applications/utility in the modern day Smart Offices. The course aims to equip the learners with the skills to utilize the best of IT usage in their day to day office work and incorporate the logical intelligence and powers of IT as a strategic and reliable instrument.

- To develop skill set to use ICT in line with the moto of Digital India programme: "Power to Empower".
- Upgradation of knowledge base in terms of emerging trends in ICT.
- Understanding of SMART office tools and its effective usage.

Unit - I

1. Information & Communication Technology

IT Infrastructure, its components, Emerging trends in IT (Virtualization, Artificial Intelligence, Cloud Computing, IOT etc.) Number Systems, Computer Codes, Software, Computer languages, Operating Systems, Storage Media.

Appendix: OS Management, Memory Management

2. Information System Management

The role of Information Systems in Business, Perspectives of Information System, Information system and decision making, Case studies

Appendix: Ms-Excel and IDEA S/w

3. E-governance and Digital Government

Towards Faceless, Paperless, Cashless, SMART Government; Key features of Digital India, Financial Inclusion through JAM Trinity, E-Governance as a social transformational tool, Select Case studies (PFMS, DBT, E-Kranti, DigiLocker, GeM, CorePDS, ePass)

Unit - II

4. Data and Information Organization:

Database approach to data management, Organizing data in tradition file environment; database models (hierarchical, relational and network models), Entities, Attributes, Keys, Database Management Systems, data definition language, Relations and their schemas.

Appendix: Ms-Access/Oracle

5. Data warehouse & Data Mining

Big Data, Data Definition Language, Relational Database Management System, Keys, Integrity Rule, Relational Operations, Data warehouses and Data Mining, Case studies.

Appendix: Ms-Access / Oracle

Unit - III

6. Computer Networks, Internet and Telecommunications

Communication System, Mode of communication, applications of Networks, Network types, Network Topologies, Protocols, Telecommunication Software, Internet, Regulatory Authorities (ICANN, Nixi, Registry Authorities), Telecommunications and Networking in Business world, wireless revolution.

Appendix: look@LAN, Netview, Angry IP Scan

7. Ethical and Social Issues in Information Systems

Understanding Ethical and social issues related to systems, Ethics in Information Society, moral

dimensions of IS, IT Act 2008 (Cyber Law of India), Data Protection Bill.

8. Securing Information System

System vulnerability and abuse, Cryptography & Public Key Infrastructure, Cryptography, Conventional vs Modern Encryption Methods, Hashing Algorithms-Symmetric Algorithms/Public Key Cryptography, Asymmetric Algorithms/Public Private Key pairs, Digital Certificate, Types of Certificate, Public Key Substitution Risk, Public Key Infrastructure (PKI), Third Party Assurance-Certificate Authority.

Appendix: Wondercrypt S/w

Suggested Readings:

1. Albright Winston Zappe, Data Analysis & Decision Making with Microsoft Excel, Duxbury Press
2. Bott Ed, Siechert Carl, Microsoft Office Inside Out , PHI
3. Debby Russell, T. Gangemi, Sr., Computer Security Basics, O'Reilly Publications
4. P.K. Sinha, Computer Fundamentals, BPB Publication
5. Muttoo, Gupta, Pal, E-Governance in India- The progress Status, Palgrave Macmillan
6. Nippani K S, Murthy B K , Digital India: Governance Transformation, Wiley
7. Seguin Denise, Computer Concepts & Microsoft Office , PHI
8. Steven T. Karris, Networks Design and Management, Orchard Publications
9. Tanenbaum Andrew S., Computer Networks, Prentice – Hall
10. William Stallings, Wireless Communications and Networks, Pearson Education

Paper Code 104
MARKETING MANAGEMENT

Max. Marks: 100

Course Credit: 03

Course Objective:

To introduce the students to the concepts, strategies and contemporary issues involved in the marketing of products and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision-making.

LEARNING OUTCOMES:

L01: At the end of this unit, one should be able to analyse marketing environment and its impact on marketing strategies, develop an understanding of various marketing philosophies and relate them to marketing practices of organisations.

L02: At the end of this unit, one should be able to develop a Marketing research plan, apply concepts of consumer behaviour in marketing, select the markets for your products: segmentation, targeting and positioning.

L03: At the end of this unit, one should be able to apply concepts of Marketing Mix to develop Product, Branding and Pricing strategies and their application in marketing

L04: At the end of this unit, one should be able to develop an understanding of Channels of Distribution and Integrated Marketing communications and create distribution strategies and promotional campaigns.

L05: At the end of this unit, one should be able to analyse contemporary issues and developments in marketing, apply marketing concepts in specific contexts of rural, international and services marketing and develop digital marketing campaigns

Contents:

Unit-I: Introduction to Marketing: Nature and Scope of Marketing, Marketing Philosophies, Customer Value, Holistic Marketing

Marketing Environment: Understanding the impact of Macro and Micro environment on Marketing, Global Marketing, Marketing in the future

Unit-II: Identifying and Selecting Markets: Consumer Buying Behaviour, Organizational Buying Behaviour, Market Segmentation, Targeting and Positioning

Marketing Research and Market Information: Strategic Marketing Planning Process: Competitor analysis, Marketing Warfare Strategies.

Unit-III: Marketing Mix Strategies: Product strategies: Product, Planning and Development: Product Life Cycle, New Product development, Brands, Packaging and Labelling.

Developing Pricing Strategies: Setting Price, Factors influencing Price Determination

Unit-IV: Marketing Mix Strategies: Channels of Distribution, Designing Distribution Channels, Managing Conflicts and Controls in Channels, Retailing, Wholesaling and Logistics.

Marketing Communication: Role of Promotion in Marketing, Integrated Marketing Communication, Determining Promotional Mix, Advertising, Sales Promotion, Public Relations, Personal Selling and Sales Management and Managing a Holistic Marketing Organization.

Unit-V: Trends in Marketing: Service Marketing, Green Marketing, Customer Relationship Management, Rural marketing, International Marketing,

Digital and Social Media Marketing, Digital marketing tools: Ad words, Banners, emailing, Search Engine Optimisation

Suggested Readings (Latest Edition):

- Etzel, M. J., Bruce, J. W., Stanton, W. J., & Pandit, A. *Marketing*, New Delhi: Tata McGraw-Hill.
- Kotler, P. & Armstrong, G. *Principles of Marketing* Pearson.
- Kotler, P., Keller, K., Koshy, L., & Jha, M. *Marketing Management: A South Asian Perspective*. New Delhi: Pearson.
- Perrault. W.D (Jr.), Cannon, J.P., & McCarthy, E.J. *BasicMarketing*. New Delhi: Tata McGraw-Hill.
- Ramaswamy, V. S. & Namakumari, S. *Marketing Management: Global perspective Indian context* New Delhi: Macmillan.
- Saxena, R. *Marketing Management* New Delhi: Tata McGraw Hill.

Paper Code 105
PUBLIC FINANCIAL MANAGEMENT

Max Marks: 100

Course Credit: 03

Course Objectives:

To introduce the subject of Public Financial Management with emphasizing on fiscal and financial architecture of Government, Budget concept, finances of union and states and also learning the concept of public private partnership and privatization efforts and reforms.

Learning Outcomes:

- L01: To be able to appreciate of the applicability theories of public choice and public expenditure*
- L02: To be able to visualize and feasibly appreciate of the fiscal and financial architecture of the government of India and the Government of India.*
- L03: Reasonable skill upgradation vis-à-vis applicability of the principles of budgeting and budgeting practices in India.*
- L04: To be able to appreciate of the select concepts to the analysis of finances of the Union and the States of India.*
- L05: To be able to appreciate the analytics of public private partnership in India together with specific appreciation of the managerial aspects of public sector enterprises of their problems, privatization efforts and reforms.*

Unit-I: Introduction to PFM: History of development of PFM, need for PFM, Relationship of PFM with Governance; the PFM Objectives ; PFM Cycle; Measuring the Efficacy of a PFM System; PFM Institutional Framework; Measuring the Efficacy of a PFM System; Benchmarks of PFM activities; PFM in the welfare state; Fiscal policy as a driver of welfare State; Fiscal and Monetary Policies.

Public Choice: Provision for social goods, Public goods and Private goods. Merit and Demerit goods, Public interest, Marginal social sacrifice and Marginal social benefit, point of maximum social advantage, Petro criteria, Maximization of social welfare, Government Intervention, Macro economic effects of government intervention, Taxation and Public choice, Arrow's Theorem; Principles and approach to an efficient tax system; Direct Indirect Taxes; incidence and impact of taxation; Shifting of tax burden; Laffer's Curve, Tax buoyancy; International taxation.

Public Expenditure: Normative Theories of Public expenditure; Public goods approach; Positivist Theory; Keynesian Theory of Public Expenditure; Wagner's law of expending state activity; Wagner's Squared Hypothesis; Reasons for the growth of public expenditure; Peacock Wiseman Displacement Theories; Chow Test, Colin Clark's Critical Limit Hypothesis, Role of the state and Leviathan effect.

Unit-II: Public Financial Architecture: Fiscal Architecture of the Centre and States- Constitutional provisions , Revenue and Expenditure, Deficit and Borrowings aberration of the planning Era, Centrally Sponsored Schemes; Restructuring of the Centrally Sponsored Schemes; Tax Reforms; GST and Implementation Issues.

Fiscal and Financial Reporting: Finance Accounts, Appropriation Accounts, Combined Finance and Revenue Accounts; Fiscal Transparency and Marksmanship; Fiscal Rules and Fiscal Councils.

Principles of Federal Finance: Federal Financial Relations; Distribution of Financial Powers between Union and States; Finance Commissions, Central Transfers to States, 12th to 15th Finance Commissions; Criteria used for devolution and their critical evaluation; Terms of Reference of the 15th Finance Commission; Third tier of government-73rd and 74th Constitutional amendments. State Finance Commissions;

Fiscal Roadmap for India: Concept and Types of Deficit; Deficit Management; Fiscal responsibility and Budget Management Act (FRBMA) Acts and their impact on state Finances; Off Budget borrowings and their effect on fiscal deficits.

Public Debt Management: Public Debt Management; Borrowing powers of Union and States; Role of RBI and Ministry of Finance; External Assistance- Monitoring and Management; Borrowing Mechanisms, Debt instruments; Debt sustainability; Public Account and Cash Management.

Unit-III: Principles of Budgeting: Flow of economic activities and the budget, Principles of Budgeting; Functional and Economic Classification of Public Expenditure; Budgetary Practices and Reforms: Zero Based Budgeting, Performance and Programme Budgeting; Outcome Budgeting: Gender budgeting; Budget as a Strategic Policy Tool.

Budgeting Practices: Constitutional Provisions; Expenditure Classification; Different types of budgeting; Preparation, Presentation and Approval of the annual Budget; Budget execution and control process.

Budget and Accountability: Budget Transparency, Open Budget Index, Participatory Budget Making, Expenditure Tracking, Public Expenditure Review, Challenges in Contemporary Budgeting Processes and Civic Accountability.

CAG and Parliamentary Oversight; PAC and COPU.

Unit-IV: PFM at the Centre: Resources and Expenditure Management by the Centre, Revenue and Capital Account, Revenue and Capital

Expenditure, Committed Expenditure, Fiscal Parameters, Tax and Non Tax Revenue Tax: GDP Ratio; Devolution and Transfers, Decomposition and Financing of GFD.,

Outstanding Liabilities- Internal and External Debt, Contingent Liabilities; The Modified Exchequer Control Based Expenditure Management System Expenditure Management commission.

PFM in the States: Management of Revenue Expenditure , expenditure deficits and borrowings, committed expenditure, Major fiscal indicators to measure the state's financial health, Inter- State Comparisons, Decomposition and Financing of GFD, States borrowing from the market despite having high cash Balances,

Management of Financial Assets by Governments: International experience of Sovereign Wealth Funds and India's approach: National Investment and Infrastructure Fund, Indian experience with the national Investment Fund.

Unit-V: Public Private Partnerships: Public Private Partnerships; Other Public Investments Instruments; Case Studies

Central Public Sector Undertakings: Central PSUs and their Evolution; Performance of Central PSUs; MoU System; Disinvestment and privatization of Central PSUs; Reforming Public Sector Undertaking.

State Public Sector Undertakings: Performance of State Public Sector Undertakings; Reforms State Public Sector; Finance Commission Observations on State public Sector Reforms. Review, Presentations etc.

References

Text Book:

- R A Musgrave & P B Musgrave, *Public Finance in Theory and Practice*, McGraw Hill.

Reference Books (Latest Editions):

- Bhattacharjee G., *Special Category States of India*, Oxford University Press.
- H L Bhatia, *Public Finance*, Vikas Publishing House.
- John C. and Philip J., *Public Finance and Public Choices*, Oxford University Press.
- Kennedy M.M.J., *Public Finance*, PHI Learning Pvt. Limited.
- Mishra S. K., Puri V. K., *Indian Economy*, Himalaya Publishing House.
- Rosen and Gayer, *Public Finance*, Tata McGraw Hill.
- Singh S. K., *Public Finance in Theory and Practice*, S. Chand.
- Sundaram K. P. M. and Andley K. K., *Public Finance Theory and Practice*, S. Chand.

Paper Code 106
BUSINESS COMMUNICATION

Max. Marks: 50

Course Credit: 1.5

Course Objectives:

To provide participants an overview of the prerequisites to Business Communication, identify potential communication problems, and strategies to develop effective communication skills. This course will make participants conversant with the basic forms, formats and techniques of business writing so that they would be equipped to communicate effectively as a professional.

Learning Outcomes:

L01: To communicate effectively with the understanding of the basics, models and theoretical frameworks of communication in the organization.

L02: To work in culturally diverse organizations and communicate appropriately in different cultural contexts through dos and don'ts of different cultures.

L03: To improve their self-awareness regarding their own style of communication and motivate them to adopt a more effective communication style in varied contexts

L06: To be able to negotiate better by knowing the distinctive role of communication and interpersonal behavior across the negotiation process.

L05: To be able to draft effective business correspondence with brevity and clarity.

L06: To be able write reports in different format.

Contents:

Unit-1: Introduction to Corporate Communication: Role of Communication in Business; Objectives of Communication; The Process of Communication; Oral Communication; Face of Face Communication; Understanding Cultural Effects of Communication; Barriers of Communication; and The Importance of Listening in the Workplace, Barriers to Listening, Strategies for Effective Listening.

Unit-2: Managing Corporate Communication: Intra and Inter Personal Communication; Johari Window and Transactional Analysis; Role of Emotions in Inter Personal Communication – Communication Styles; and Gateways to Effective Interpersonal Communication.

Unit-3: Business Correspondence and Report Writing: Guidelines for Written Business Communication; Significance of Business Correspondence; Essentials of Effective Business Correspondence Business Letter – Structure and Forms; Business Meetings; Telephone Communication; Use of Technology in Business Communication, E-mail Messages; Mass Communication: Electronic Media, Print Media and Social Media; Report writing; Structure of reports: negative persuasive and special reporting; Informal reports – proposals; Formal reports; and Organization of press report.

Suggested Readings:

- Beebe, Ivy, (2019), *Communication: Principles for a life time (6th ed)*, Pearson.
- Boovee, Thill and Raina, (2019) *Business Communication today (14th ed.)*, Pearson.
- Lehman, C. M., Dufrene D. D., & Sinha, M. (2016). *BCOM: The South Asian Perspective on Business Communication (2nd ed.)*. New Delhi: Cengage Learning.
- Lesikar, Flatley, et.al, (2015), *Business Communication: Connecting in a digital world*, New Delhi, McGraw Hill.
- Mukerjee, H. S. (2012). *Business Communication (2nd ed.)*. New-Delhi: Oxford University Press

Paper Code 107
ORGANISATIONAL BEHAVIOUR

Max. Marks: 50

Course Credit: 1.5

Course Objectives:

Providing participants the understanding of what shapes the way organisations work. They will be equipped with a better understanding of human behaviour in organisations, and the skills and experience to apply knowledge in real-life situations. This course aims to delve into the impact of three determinants of organizational behaviour: individuals, groups, and structures; with the ultimate purpose of applying this knowledge toward improving the participants' own understanding of the aspects that motivate employees, increase their performance, and help organizations establish a strong and trusting relationship with their employees.

Learning Outcomes:

L01: To acquaint themselves with the basic processes and principles underlying human behaviour. ss

L02: To familiarize how people behave under different conditions and understand why people behave as they do.

L03: To explore the organization system and to capture the full complexity of human behaviour at work.

L04: To effectively recognize and resolve human issues in organizational settings.

L05: To understand of the dynamics of interaction and integration between the individual and the organization.

Contents:

Unit - I: Management, Introduction to Management and Management Process: Introduction, Importance of Management, Evolution of Management Thought, Principles of Management, Management Process/Functions, and a System View.

Unit - II: O.B. Introduction: Historical Perspective, Approaches to and Importance, Contributing Disciplines to O.B., O.B. Process, Models of O.B. Individual Perspective : Personality- Definition and Determinants, Personality Traits, Personality Attributes affecting OB, Values and Ethics; Attitudes, Learning; Definition and Importance of Motivation, Contemporary Theories in Motivation, Motivational Tools in Organization.

Unit - III: Group Dynamics: Group Behaviour in Organisation; Organizational Conflicts; Job Stress; Team Building, Leadership.

Organizational Perspective: Organisational Structure, Design & Change; Organizational Culture and Development; Quality of Working Life; International Organizational Behaviour.

Suggested Readings:

- Griffin & Moorhead (2017), *Organisational Behaviour: Managing People and Organisations* (11th ed.), CENGAGE Learning India Pvt. Ltd.
- Luthans, F. (2015), *Organizational Behaviour: An Evidence Based Approach* (13th ed.), McGraw-Hill Irwin.
- Nelson, D. L., Quick, J.C., & Khandelwal, P. (2016). *ORGB: A South Asian Perspective* (2n ed.), CENGAGE Learning India Pvt. Ltd.
- Pareek, U. and Khanna, S. (2016). *Understanding Organizational Behaviour* (4th ed.), New Delhi: Oxford University Press.
- Robbins, S. P., & Judge, T.A. & Vohra, N. (2015). *Organizational Behaviour* (16th ed.), New Delhi: Pearson Education.
- Singh, K. (2015). *Organizational Behaviour: Text and Cases* (3rd ed.), New Delhi: Vikas Publication.

Second Term

Paper Code 201
Cost and Management Accounting

Max Marks: 100

Course Credit: 03

Unit - I

Introduction to Cost and Management Accounting: Meaning, Objectives and scope of Cost Accounting and Management Accounting; Cost Classification; Elements of Cost; Installation of a Costing system; and Relationship between Management Accounting, Financial Accounting, and Financial Management.

Cost Ascertainment:

Material Cost and Control: Procurement procedures; Inventory control (Techniques of fixing of minimum, maximum and reorder levels, Economic Order Quantity, ABC classification; Stocktaking and perpetual inventory system); Inventory accounting

Labour Cost and Control: Attendance and payroll procedures; Overtime; Idle time and Incentives; Labour turnover; Direct and Indirect labour; Charging of labour cost; Identifying labour hours with work orders or batches or capital jobs; Efficiency rating procedures; Remuneration systems and incentive schemes.

Direct Expenses & Control: Control on material movements, Identification with the main product or service.

Overheads and their Control: Functional analysis (Factory, Administration, Selling, Distribution, Research and Development); Behavioural analysis (Fixed, Variable, Semi variable and Step cost); Factory Overheads; Administration overheads; Selling and distribution overheads; Overhead Allocation and Apportionment; Absorption of Overheads.

Unit - II

Cost Concepts in Decision Making: Relevant Cost; Differential Cost; Incremental Cost; and Opportunity Cost.

Costing Systems: Job Costing; Batch Costing; Contract Costing; Process Costing; and Operating Costing System.

Unit - III

Marginal Costing: Marginal Costing compared with Absorption Costing; Contribution; Breakeven Analysis (including graphic presentation); Profit-volume Ratio and its application; and Optimum Utilization of Resources (Make or Buy, Evaluation of Orders, Multiple scarce resource problems, and Product sales pricing).

Standard Costing: Various types of Standards, Setting of Standards, Basic concepts of Material, Labour and Overhead Standards and Variance Analysis.

Unit - IV

Budget and Budgetary Control: The Budget Manual; Preparation and monitoring procedures; Budget Variances; Flexible Budget; Performance Budgeting; Zero-base Budgeting; Preparation of Functional Budget (for operating and non-operating functions); and Cash Budget; and Master Budget.

Cost Book-keeping: Cost Ledgers (Non-integrated accounts and integrated accounts)

Responsibility Accounting

Unit - V

New Developments in Cost and Management Accounting: Life Cycle costing; Target costing; Kaizen Costing; Value Analysis and Value Engineering; Throughput Costing; Business Process Re-engineering; Back-flush Accounting; Lean Accounting; Socio Economic Costing; Activity Based Cost Accounting; Transfer Pricing; Balance Score Card; Costing of Service Sector; and Relevant Cost Analysis.

Paper Code: 202
Financial Management- I

Max Marks: 100

Course Credit: 03

Contents:

Unit - I

Financial Management – An Overview: Finance and Related Disciplines; Scope of Financial Management; Objectives of Financial Management; Primary Objective of Corporate Management; Agency Problem; Organization of Finance Function; and Emerging role of Finance Managers in India.

Time Value of Money: Rationale; Techniques; Practical Applications of Compounding; and Present Value Techniques (including Excel Applications). **Risk and Return:** Risk-return Trade off,

Valuation of Bonds and Shares (including Excel Applications).

Unit - II

Capital Budgeting – Principles and Techniques: Nature of Capital Budgeting; Data Requirement; identifying Relevant Cash Flows; Evaluation Techniques; (Payback period, Net Present Value (NPV), Internal Rate of Return (IRR), Profitability Index, NPV v/s IRR; and Capital Rationing including MS Excel Application. Risk analysis in Capital Budgeting (Sensitivity Analysis, and Certainty Equivalent Approach); Real Options in Capital Budgeting and Capital Budgeting Practices in India.

Unit - III

Concept and Measurement of Cost of Capital: Importance and concept; Measurement of Specific Costs; Computation of Overall Cost of Capital; and Cost of Capital Practices in India (including Excel Applications). **Leverage:** Meaning: Operating Leverage; Financial Leverage; Combined Leverage and Managerial use.

Unit - IV

Capital Structure and Valuation: Capital Structure Theories; Net Income Approach; Net Operating Income (NOI) Approach; Modigliani-Miller (MM) Approach; and Traditional Approach. Designing Capital Structure: Profitability Aspect; Liquidity Aspect; Control; EBIT-EPS Analysis including MS Excel Application and Capital Structure Practices in India.

Unit - V

Dividend and Valuation: Irrelevance of Dividends; and Relevance of Dividends, Factors Determining Dividend Policy; Theories of Dividend- Gordon Model; Walter Model; and MM Hypothesis including MS Excel Application; Forms of Dividend – Cash Dividend; Bonus Shares; Stock Split; and Stock Repurchase; Bonus Debenture; Dividend Policies in practice; Dividend Policy with reference to PSUs in India.

Suggested Readings:

1. Khan, M.Y and Jain, P.K.: Financial Management; Tata McGraw Hill, New Delhi, Latest Edition.
2. Pandey, I. M.: Financial Management; Pearson, New Delhi, Latest Edition.
3. Chandra, Prasana: Financial Management; Tata McGraw Hill, New Delhi, Latest Edition.
4. Brealey and Meyers: Principles of Corporate Finance: Tata McGraw Hill, New Delhi, Latest Edition.
5. Keown, Martin, Petty and Scott (Jr): Financial Management: Principles and Applications; Prentice Hall of India, Latest Edition.
6. Gitman, L.J: Principles of Managerial Finance; Addison Wesley, Latest Edition.
7. Vanhorne, James C: Financial Management and Policy; Prentice Hall of India, New Delhi, Latest Edition.
8. Kishore Ravi, M: Financial Management; Taxman, Latest Edition.

Paper Code 203
Data Analysis and Decision Tools

Max Marks: 100

Course Credit: 03

Unit - I

Basics of Mathematics: (will be extra and optional) Number System and Set Theory: Functions - Types, Limit and Continuity; Linear Equations and their solution, Progressions; Matrices; and Equations and Differential Calculus and basic Integration.

Statistics: Introduction to Statistics: Application of Statistics for Policy Makers, Data Collection; Primary and Secondary; Population and Sample; Descriptive Statistics (Measures of Central Tendency, Dispersion, Skewness and Kurtosis).

Unit - II

Correlation and Regression: Correlation and Causation; Significance and Types of Correlation; Methods of and calculating Correlation Coefficient; Coefficient of Determination; Regression Analysis and its uses, Fitting Regression Lines and Regression Equation; Standard Error of Estimate; and Relevance of p-value in interpreting the results of Correlation and Regression.

Probability and Probability Distributions: Concept of Probability: Probability Rules; Bayes's Theorem; Probability Distributions and Mathematical Expectation and Variance; Probability Distribution: Binomial Distribution; Poisson Distribution; and Normal and Distribution.

Unit - III

Sampling and Estimation: Introduction to Sampling – Methods of Sampling and Types of Sampling; Population Parameter, Sample Statistics and their properties; Sampling Distribution, Standard Error; Sampling Error; Finite Population Multiplier for Standard Error; Sampling Distribution of the Sample Mean and Proportion; Central Limit Theorem; Point Estimates and Confidence Interval - Confidence Interval for a Population Mean for known and unknown Variance and for Proportion; Determination of Sample Size; and Biases in Sampling.

Unit - IV

Hypothesis Testing: Hypothesis; Steps of Hypothesis Testing; Null and Alternative Hypotheses; Significance Level and its relevance in Hypothesis Testing; Power of a Test, and Probability Value; Hypothesis Testing concerning Mean (large and small samples) with known and unknown Variance; Hypothesis Tests concerning Mean Differences; Hypothesis Tests concerning Variance – One Sample and Two Samples; Analysis of Variance (ANOVA); Parametric and Nonparametric Tests; Appropriateness of Parametric and Nonparametric Tests; Nonparametric Tests; Chi-square test; Sign Test; Mann-Whitney U Test; Kruskal; and Wallis Test; and Kolmogorov-Smirnov Test.

Unit - V

Assumptions in Parametric Tests (and use of Appropriate Software): Common Assumptions in Parametric Tests; Assumptions in Hypothesis Testing Experiments; Comparing Means with t-Test; F-test For Comparing Variability; Correlation Analysis; and Regression Analysis.

Assumptions in Nonparametric Tests (and use of Appropriate Software): Common Assumptions in Nonparametric Tests; Chi-square Tests; Mann-Whitney U Test; Kruskal-Wallis Test; Wilcoxon Signed- Rank Test.

Assumptions in Nonparametric Correlations (and use of Appropriate Software): Spearman Rank-Order Correlation; Biserial Correlation; Tetrachoric Correlation; Phi Coefficient (Φ); Assumptions About Data; What if the Assumptions Are Violated?

Multiple Regression Model Building and Testing the relevant assumptions (including the use of appropriate Software)

Paper Code: 204
Management of Information Systems

Max Marks: 100

Course Credit: 03

Course Objective

- To appraise the learners regarding effective use of contemporary methods and tools available in the field of ICT for planning, analysis, management including policy decisions. Emphasis would be on solving mathematical problems relating to Financial Management and data analytics. This will help the professionals in planning and decision making.

Learning Outcomes:

- The participants would be able to develop skill set to use tools and techniques to transform facts into actions through analysis and would develop MIS in the context of organisational decisions making, problem solving and policy framework.
- The participants would be able to apply the theories, techniques and IT tools to solve problems from industry sectors such as banking and finance, retail, software, manufacturing and services.
- Would learn to build adequate and relevant capacities to conceptualize, lead, implement, gain-insight, generate quick and effective Business Intelligence from data set and assist in fact-based decision and policy making.
- The participants would be able to understand the role of regulatory bodies in planning and building the IT infrastructure, managing and re-engineering of IT Work Processes through case studies.

Curriculum:

Unit - I

1. Organizations, Management and Networked Enterprise in Global Environment :
Information Systems, Organizations and Strategy in Global Business Today, Decision Making, Shift in Information System thinking, Cost and Value of Information, Contemporary approaches to Information Systems, Improving Business Performance through IS, Ethical and Social Issues in Information Systems, Case studies

Appendix: Ms-Excel

2. Information Management & MIS: Databases and Information Management, Data Understanding and Interpretation, Pictorial Representation of Data, Frequency Tables and Histograms, Analyzing Relationship with Scatter plots, Exploring Data with Pivot Tables, Case Studies.

Appendix: Ms-Excel, Statpro/StatFi

Unit -II

3. System Applications for the Digital Age: Data Analytics & Business Intelligence :IT for competitive advantage, Achieving Excellence through BI, Managing knowledge for Artificial Intelligence, 8-V Data characteristics, Tableau Software Ecosystem, Dealing with Data Quality Problems and Standardization, Data Cleaning and Transformation, Tableau Desktop Workspace and Controls, Data Connection, Menu, Leveraging Toolbar Icons, Data Window, Data Types and Aggregation

Appendix: Tableau

Unit -III

4. Visual Analytics and Data Governance: Enhancing Decision making through visual analytics, Building Visualizations with Row and Column Shelves, Measure Values and Measure names, Understanding color in Icons and Pills, Trends and Outliers

Appendix: Tableau

5. Data Mining : Information Drill Down through Hierarchies & Filters, Creating and Using Filters, Filter Shell, Group Dimensions, Creating Customized Data Fields, Taming Data with Measure Names and Values.

6. Predictive Analysis and Dashboards: Developing Ad Hoc Analysis Environments, Generating New Data with Forecasts, SMART Dashboards to facilitate Analysis and understanding of information, Cascading Dashboard Designs to improve load speeds, Navigation, Embedding a Live Website in a Dashboard

Appendix: Tableau

Unit -IV

7. Emerging Technologies and MIS : Role of Internet and emerging technologies; IT enabled services; Seamless organizations; Virtual corporations; Web enabled computing as a strategic tool; Outsourcing as a strategic alternative, International Information Systems, Inter-organizational Information Systems.

8. Data Governance & Data Analytics through AI: PBI Ecosystem, Artificial Intelligence & Power BI, Data Mining, Trends Analysis, Dynamic Links, AI Interpretations (Analysis, Summary Report, Delta etc.), Predictive Analysis and Dashboards, Developing an Ad Hoc Analysis Environment

Appendix: Power BI

9. Strategic use of ICT and MIS : Planning and Building IT Architecture; Information Infrastructure; Legal Issues and National Information Infrastructure, IT Leadership & IS Strategic Planning, IS Strategy and Effects of IT on Competition.

Cases on strategic use of IT in different industries

Suggested Readings:

1. Albright Winston, Business Analytics Data Analysis & Decision Making, Cengage
2. Evans James R, Business Analytics: Methods, Models and Decisions, Pearson
3. Joshi Girdhar, Management Information Systems, Oxford
4. Laudon J., Laudon K.C., Management Information System: Managing the Digital Firm, Pearson
5. Murray G. Daniel, Tableau, Wiley (Big Data Series)
6. Sadagopan S, Management Information Systems, PHI
7. Timothy R. Mayes / Toss M. Shank, Financial Analysis for Windows, Dryden Press
8. Wayne L. Winston, Microsoft Excel Data Analysis and Business Modeling, Prentice Hall of India

Paper Code 205
MACRO-ECONOMIC ENVIRONMENT OF BUSINESS

Max Marks: 100

Course Credit: 03

Unit - I

Macro Economics: Key Macroeconomic Variables and their Relevance to Business, Comparing Economies in terms of Growth, Growth Models & their Validity. Neoclassical Growth Theory, Growth Model, Poverty Inequality - Concepts, Data & Measurement, Population Growth and Economic Development, Education and Health in Economic Development, Rural Development, Agricultural Markets.

Unit - II

International Trade and Financial Institutions: Overview of select International Trade theories & models like Ricardian trade theory - notion of comparative advantage and gains from trade due to specialisation; Heckscher-Ohlin theory: factor price equalisation; Krugman model; Distributional effects of trade; Trade, production patterns and world inequality; financial instability in a globalised world; Economics and politics of multilateral agreements: Washington Consensus and boost to transnational economic and trade engagements; WTO mechanism; G20; Global and regional economic forums for cross-border business and trade: Regional economic integration; European Union (EU), Asia-Pacific Economic Cooperation (APEC), Association of Southeast Asian Nations (ASEAN), Regional Comprehensive Economic Partnership (RCEP), Trans-Pacific Partnership (TPP), North American Free Trade Agreement (NAFTA), Montreal Institute for Learning Algorithms (MILA) etc.; Indian perspective; Reversal of Globalisation issues; International Financial Institutions: Role of international financial institutions in economic development, forex management and in international trade and business; New Development Bank (NDB), Asian Development Bank (ADB) and Asian Infrastructure Investment Bank (AIIB).

Unit - III

India in the Global Perspective of Business and Commerce: India's Trade policy: instruments of trade policy; tariffs, quotas, export subsidies, voluntary export restraints; Political economy of trade policy; Controversies in trade policy; Global Value Chains; Role of financial markets and institutions in India: Financial institutions and market intermediaries; markets, instruments and financial innovations; financial crises; Regulation of financial markets; Regulatory bodies and structures; Banking and Insurance Systems in India: Indian banking system - Changing role and structure; Problem of twin balance sheets and Non-Performing Assets (NPAs); Insurance Sector in India; Banking and Insurance Sector Reforms; Money and Capital Markets in India: Organisation, structure and reforms; Interest rates - sources of interest rate differentials; interest rates in India; Outcomes and challenges in India vis-à-vis other developing nations: COVID and post-COVID economic environment and business - international comparisons and growth strategies.

Unit - IV

Economics of Innovation: Types of Innovation, Sources of Innovation, Path Dependency, Theories of Innovation, Firm Characteristics and Innovation, Industry Characteristics and Innovation.

IPRs: Theories of IPR, Spillover and Appropriability, Formulating Technological Innovation and Organising for Innovation.

Unit - V

Indian Economy: India as an Emerging Economy: Major developmental issues and constraints; Economic development and occupational distribution; Experiences of structural changes in emerging economies; Changing profile of Gross domestic product (GDP) and employment in India; Labour force participation - Inter-State Variations; Economics of Poverty; Migration within the Country - Dimensions and Problems; Reverse Migration; Land, Labour and Credit Markets in India: Distribution of land ownership; Land reforms and its effects on productivity; Land acquisition; Microfinance; Inter-linkages between rural factor markets; Recent reforms in Labour markets; Infrastructure in Indian Economy: Energy, Electricity and Roads; Transport - Railways, Civil Aviation, Waterways; Telecommunication Infrastructure; Social infrastructure – Education and Health; Indian Agriculture: Present position of agriculture; Crop patterns and productivity; Inefficient Water Usage ; Food security; Public Distribution System (PDS); Size of firms and productive efficiency; Agriculture and rural credit; Agriculture Marketing and Warehousing; Recent reforms in Agriculture. Indian Industry: Industrial scenario in India; Structure of major industries, Industrial policy, Small Scale Enterprises; Informal Sector and Problems; Technology and Business Interface; Tertiary Sector in Indian economy: India's foreign trade; Balance Of Payment (BOP); Special Economic Zones (SEZ); Foreign Exchange Management Act (FEMA) and Prevention of Money Laundering Act (PMLA).

Paper Code: 206
Human Resource Management (HRM)

Max Marks: 100

Course Credit: 03

Objectives: The primary objective of the paper 'Human Resource Management' is to introduce the participants the various aspects of managing people at work. It mainly includes how to procure, develop, retain and control people at work in the organization. Such knowledge facilitates the manager/administrator to better deal with people in getting the required work done from them.

Unit - I

Human Resource Management: Nature and scope of Human Resource Management, its Evolution And Development, HR Philosophy, Policies, Procedures and Practices, HRM in India.

Unit - II

Acquisition of Human Resource: Human Resource Planning, Job Analysis and Design, Recruitment and Selection, Placement, And Induction, Internal Mobility and Separation.

Unit - III

Development of Human Resource: Managerial Competencies and Career Development, Employee Training, Executive Development, Career Planning.

Unit - IV

Maintenance of Human Resource: Compensation Management, Performance Management and Appraisal, Workers' Participation in Management, Grievance Resolution, Industrial Relations, Trade Unions, Collective Bargaining, Labour Codes.

Unit - V

Control of Human Resource: Competency based Human Resource Management, Talent Management, Human Resource Information System, Managing Gen-Y Employees, and International Human Resource Management and Cultural Considerations.

Third Term

Paper Code: 301
Financial Institutions and Markets

Max Marks: 100

Course Credit: 03

OBJECTIVE

To provide an overall understanding of Indian Financial System. It aims at discussing the different components of Indian Financial Systems viz., Financial Institution, Financial Markets and Financial Instruments.

Unit - I

Financial System and Economic Development: Introduction to Financial Markets; Financial Intermediation; Regulation - aspects and institutional framework in India; Primary Financial Institutions of India-its framework & their Roles in the Economic Development of India; and Interest rate - basic components;

Unit - II

Money Markets & their Financial Instrument: Clearing Corporation of India Ltd., Money market; Money market instruments - call money and notice money; Introduction: Commercial Papers (CPs), Certificate of Deposits (CDs), Treasury Bills, Collaterised Borrowing and Lending Obligation; and Commercial bills, repos and its basic regulatory framework.

Unit - III

Capital Market: Features of Primary Market -focus: Initial Public Offering, Follow on Public Offering, Application Supported by Blocked Amount; Secondary Market – Its features and importance in overall development; Credit Rating (Basics); Merchant Banking; and Right Issues & Book Building.

Unit - IV

Foreign Exchange Market: Foreign Exchange Market- concept & organization; Features of Foreign Exchange Market, Size of Foreign Exchange Market; Regulatory aspects of Foreign Exchange Market in India; and Various participants /players in the Foreign Exchange Market i.e Banks, Brokers etc.

Unit - V

Non-Banking Finance Companies (NBFCs): Types & Functioning; RBI Guidelines for NBFC; and Role of NBFC in financing projects.

Changing Financial Markets Scenario & Other Financial Services: Introduction to Insurance, Re-Insurance & Banca-Insurance; Pension Functions; Payment Banks; Alternative Delivery Channels in Banks & FIs; and New entrants: small banks and micro finance banks etc. in India.

Paper Code: 302
Production and Operations Management

Max Marks: 100

Course Credit: 03

Objective:

The course is designed to acquaint the students with decision making in planning, scheduling and control of production and operations functions in both manufacturing and services; productivity improvement in operations through layout engineering and quality management etc; effective and efficient flow replenishment and control of material with reference to both manufacturing and services organizations.

Unit - I

Introduction nature and scope of production and operations management historical evolution – types of manufacturing systems difference between manufacturing and service operations – role of production and operations manager.

Unit - II

Production, Planning and Control: Stages in Production, Planning and Control, Production, Planning and Control in mass batch and job order manufacturing industry, aggregate planning, capacity planning and maintenance planning.

Unit - III

Plant location and Layout: Plant Location Planning, Plant Layout Planning, Types of Layouts material handing equipment's, material handing principles, models used in lay out designs.

Unit - IV

Productivity: factors affecting productivity, Job Design, process flow charts methods study, work measurement engineering and behavioral approaches.

Unit - V

Material management: costs associated with inventory economic order quantity ABC analysis materials requirement planning (MPP), just in time (JIT) production, total quality management (TQM), acceptance sampling, control charts, quality circle zero defects programmes, ISO 9000, Application of Computer in Production & Operations Management.

Paper Code: 303
Project Planning, Evaluation, Financing and Management

Max Marks: 100

Course Credit: 03

Unit - I

Introduction: Project: Important, Features, Types; Infrastructure Creation: Features, Significance, Bottlenecks; Resource Allocation Framework; Value Chain Analysis of the Project; Generation of Ideas; and Tools for Identifying Investment Opportunities.

Project Costing & Appraisal: Breakdown structure of the project; Factors affecting the cost of the project; Life cycle costing and Activity Based Costing; Costing with alternative configuration/specifications; Appraisal: Marketing, Technical, Political, Financial, Social; and Preparation of detailed project report.

Unit - II

Financial Analysis: Estimation of cost of project & Means of financing; Estimates of sales and production; Working capital requirement and financing; Projected cash flows of project; Basic principles of measurement of cash flows; Project Investment Criteria (including the selection of appropriate method); Choice between Mutually Exclusive Projects and Unequal Life; Inflation and Capital Budgeting; and Relevance of Real Options in Project Evaluation.

Unit - III

Cost of Capital: Types & Measure of risk; Sensitivity & Scenario Analysis; Special decision situations; Calculation of cost of Capital: Capital Asset Pricing Model (CAPM), Inflation; and Weighted cost of capital: Book Value & Market Proportions.

Social Cost Benefit Analysis (SCBA): Rationale of Social Cost Benefit Analysis; United Nations Industrial Development Organization (UNIDO) Approach; Little and Mirrlees Approach; Shadow Prices; and Case Studies in the Indian scenario.

Unit - IV

Arrangement of Funds: Traditional sources of financing (Equity shares, preference shares, Debentures/bonds, loan from financial institutions); Alternative sources of financing (Foreign Issues, Foreign direct investment (FDI) & Foreign Institutional Investors, External Commercial Borrowing (ECB), Private Equity, Securitization, Venture Capital etc.); Public Private Partnerships: Forms, Guidelines, Problems, Issues; Project Financing; Managing Risks in Private Infrastructure Projects; and Financial Structure and Corporate Governance.

Project Implementation: Project contracts: Principles, Practical and Legal aspects; Tendering Process, Escrow; Other aspects: Insurance, Human Resource; Network analysis: Critical Path Method (CPM), Programme Evaluation Review Technique (PERT).

Unit - V

Project Review and Control: Time and Cost control; Performance review; Project control system and Management Information System (MIS); Project Audit, Termination and Abandonment Analysis; and Government Projects: Auditing and Control.

Paper Code: 304
Research Methodology & Intellectual Honesty

Max Marks: 100

Course Credit: 03

OBJECTIVE

This course of research methodology is for imparting knowledge of different areas of research to the students. Based on this knowledge one can solve any real-life problem, which may arise during the service life.

Unit - I

Problem Definition & Research Design: Nature and purpose of scientific inquiry; Parameters of research; Definition of construct and variables; Introduction to Research; and Steps in Research Process. Research Design: Exploratory; Descriptive; and Conclusive Research Design.

Unit - II

Sampling and Data Collection: Population and samples; Types of Sampling: Probability Sampling: simple random sampling, systematic sampling, stratified random sampling, cluster sampling; Non-Probability Sampling: convenience sampling, Judgmental sampling, snowball sampling, quota sampling; Errors in sampling; Sample Size.

Primary and secondary data sources; Conducting a literature review; and Design of questionnaire.

Unit - III

Data Preparation & Hypothesis Development: Data Types; Data File Preparation; Data Cleaning; and Data Management; Basic measurement scales: Nominal scale, Ordinal scale, Interval scale, Ratio scale. Attitude measurement scale - Likert's Scale, Statistical Decisions in Hypothesis Testing Experiments; Type I and Type II Error; Pilot Testing.

Unit - IV

Analysis and Interpretation of Data: Reliability and Validity of Data; Descriptive Analysis; Correlation and Regression Analysis; Analysis of Variance- One way and two-way; Application of Statistical Software in Research Using SPSS; and Time Series Modeling Using E views.

Unit - V

Conducting Empirical Research & Report Writing: Structure and Components of Research Report; Selecting the Topic; Sponsored or Independent Research; The Research Proposal; Working Papers and Literature on the Internet; Getting the Data; Choice of Computer Software; Methodology; How Might the Finished Project Look; Presentational Issues; and Plagiarism and its relevance to the society.

Paper Code: 305
Financial Management- II

Max Marks: 100

Course Credit: 03

Unit I

Working Capital Management: An Overview: Nature of Working Capital; Planning of Working Capital; Computation of Working Capital; and Management of Working Capital in India (including Excel Applications), Working Capital Financing.

Inventory Management: Nature of Inventories; Objective of Inventory Management; Analysis of Investment in Inventory- Incremental Analysis (including Excel Applications).

Unit II

Cash Management: Motives for Holding Cash; Cash Planning; Basic Strategies of Cash Management; Cash Management Techniques / Processes; Investing Surplus Cash in Marketable Securities; and Cash Management Practices in India (including Excel Applications).

Credit Management/ Receivable Management: Objectives; Credit Policies; Credit Terms; and Collection Policies; Factoring (concept only).

Unit III

Long-Term Sources of Finance: Fundamentals of Equity Shares; and Issue Procedures. Term Loans, Debentures / Bonds and Securitization: Terms Loans; Debentures/Bonds/Notes; and Securitization.

Hybrid Financing Instruments: Preference Share Capital; Convertible Debentures/ Bonds; Warrants; and Options.

Unit - IV

Lease Financing and Hire-Purchase Finance: Lease Financing; and Hire Purchase Finance (including Excel Applications).

Venture Capital Financing: Process and Method of Venture Capital Financing; Disinvestment Mechanisms; Development of Venture Capital in India.

Unit - V

Corporate Restructuring: Conceptual Framework; Financial Framework; Merger and Demergers; Legal and Procedural Aspects of Mergers/Amalgamations and Acquisition/Takeovers; and other forms of Corporate Restructuring.

Sustainability and Finance: Sustainability-focused Financial Decision Making; Triple Bottom Line and Corporate Sustainability Reporting Framework.

Unit 1: Introduction to Indian Legal System

- Meaning of Law and its Significance; Relevance of Law to Modern Civilized Society; Sources of Law; Legal Terminology and Maxims; and Understanding Citation of Cases
- Relevance and importance of regulatory institutions in laying out the framework for business,
- Introduction to the Indian legal system, salient features of the Constitution of India, Structure of Judiciary, Executive and the Legislature

Unit 2: Business laws

A. Contract Act

- Importance of Contract Act in business
- Concept of Contract, written and oral contracts
- Essentials of a valid contract, offer, acceptance, consideration; Capacity to Contract; Consent
- Performance of contract and Discharge of Contract
- Breach of contract and Remedies

B. Elements of Law relating to Partnership and LLP:

- Nature of Partnership and Similar Organization – Co-Ownership, HUF;
- Rights and Liabilities of Partners;
- New Admitted, Retiring and Decreased Partners;
- Registration of Firms;
- Dissolution of Firms and of the Partnership;
- Limited Liability Partnership Act.

Unit 3: Transactional Laws

A. Sale of Goods Act

- Importance of Sale of Goods Act
- Important definitions
- Sale and Agreement to Sale; Sale and Possession; Conditions and Warranties
- Sale by Sample, sale by description
- Payment of Price; Risk of Loss/Damage Liability
- Rights of unpaid Seller
- Pledge, Hypothecation and Mortgage
- *Caveat Emptor*

B. Negotiable Instruments Act

- Important definitions
- Characteristics and Types of Negotiable Instruments
- 'Holder' and 'Holder in due course' and privileges
- Crossing of cheque
- Dishonour of Cheque and Remedies

Unit 4: Commercial laws

A. Consumer Protection Act, 1986 as amended in August 2019

- Important definitions and Concepts
- Central Consumer Protection Authority; Central Consumer Protection Council; Consumer Mediation Cell
- Consumer Grievance Redressal

B. Intellectual Property rights

- Intellectual Property Rights and its importance in trade and commerce
- Patents, trade secrets, trademarks, Industrial Designs Copyrights and Geographical Indications

C. Information Technology Act

- Important definitions
- E contract
- Cybercrimes and Penalties

D. Arbitration & Conciliation Act

- Alternate Dispute Resolution and Arbitration – importance in business and mechanism
- Domestic and International Arbitration

Unit 5: Companies Act 2013

- Forms of Different Business Enterprise; Importance of Corporate Model of business
- Nature and kinds of company
- Formation of Companies- Concept of Separate Legal personality
- Doctrines -Lifting of Corporate Veil; Constructive Notice; Indoor Management; Ultra Vires
- Memorandum and Articles of Association
- Offer Documents & Issuance of Securities
- Membership, Share and Share Capital, Shares, Transfer and Transmission of shares
- Accounts & Auditors
- Class Action Suit
- Meetings
- Board of Directors, Appointment and Cessation, Duties, Responsibilities and Liabilities of Directors, Independent Directors
- Liquidation of the companies

Fourth Term

Paper Code: 401
Security Analysis and Portfolio Management

Max Marks: 100

Course Credit: 03

Unit - I

Understanding Investments and Securities Markets: The Investment Decision Process, Investment vs. Speculation; Common Errors in Investment Management; The Indian Securities Market: Constituents, Regulations and Trading; Investment Alternatives: Marketable and Non-marketable Securities

Returns and Risks; Qualities of Successful Investment; Measurement of Risk and Return: Ex-post and Ex-ante; and Risk and Return in a Portfolio Context: up to three Securities.

Unit - II

Portfolio Theory: Introduction to Portfolio Theory; Portfolio Return and Risk; Measurement of Movements in Security Returns; Markowitz and Efficient Frontier; Optimal Portfolio; and Riskless Lending and Borrowing.

Asset Pricing Models: The Capital Asset Pricing Model (CAPM); Empirical Evidence on Capital Asset Pricing Model; Security Market Line; Arbitrage Pricing Theory; and Other Multifactor Models.

Market Efficiency: Various Forms of Efficient Markets; Tests and Implications of Various Efficiency Levels; and Implications for Investment Analysis.

Unit - III

Fundamental Analysis: Economic Analysis: Global and Domestic Economic Indicators, Business Cycles; and Industry Analysis: Analysis of Industry and Sectors, Macroeconomic Analysis, Life Cycle and Competitive Analysis, Industry.

Forecasts: Company Analysis: Analysis of Company Strategies, Interpretation of Financial Results, Earnings and Profitability Estimation; and Tools for Judging Undervaluation or Overvaluation.

Unit - IV

Fixed Income Securities: Bond Characteristics; Bond Prices; Bond Yields; Determinants of Interest Rates; Pricing and Valuation; Interest rate risk and Bond Prices; Duration and Immunization; and Bond Portfolio Management.

Valuation of Equity: Discount Models (Dividend & Free Cash Flow); Relative Valuation methods (PE, P/BV, MV/BV etc.); Other Comparative Valuation Ratios; Forecasting the Aggregate Stock Market Returns; and Issues and Perspectives on Valuation.

Unit - V

Technical Analysis: Conceptual Framework; Charting Techniques; Technical Indicators; Testing Technical Trading Rules; Evaluation of Technical Analysis; and Moving Averages and Stochastic Indicators.

Portfolio Management: Specification of Investment Objectives; Portfolio Selection and Strategies; Portfolio Rebalancing; and Application of Derivatives Futures & Options in Portfolio Management

Evaluation of Performance: Measures of Return; Risk Adjusted Measures of Performance; Market Timing; and Other Issues in Performance Evaluation.

Paper Code: 402
Financial Derivatives

Max Marks: 100

Course Credit: 03

Unit I

Financial Risk Management: Risk Management as a process; Risk Governance; Identifying Risks; Measuring Risk; Managing Risk.

Overview of Derivatives: Introduction to derivatives; OTC and Exchange Traded Derivatives; Types of Financial Derivatives- Forwards, Futures, Options, SWAP and others; Types of Traders- Hedgers, Speculators and Arbitrageurs.

Unit II

Forward Contracts: Pricing and Valuation of Forward Commitments; Differences between Forward and Futures Contracts.

Futures Contracts Valuation and Strategies: Types of Futures Contracts- Index Futures, Stock Futures, Currency futures, Interest Rate Futures; Mechanics of Buying & Selling Futures Contracts; Payoff of Futures Contracts; Risk Management Applications of Futures Strategies; Valuation of Futures Contracts. Status of Forward and Futures Market in Indian Context.

Unit III

Options Contracts: Types of Options Contracts-Call Option, Put Option; Mechanics of Buying & Selling Option Contracts; Payoff of Option Contracts; ITM, ATM, OTM.

Option Valuation Model: Binomial and Black-Scholes Option Pricing Model; Put-call Parity; Option Greeks (Delta, Gamma, Theta and Rho) and Implied Volatility;

Unit IV

Option Strategies and their Applications: Spread Strategies (Call or Put Options) - Vertical Spread (Bull Spread, Bear Spread and Butterfly Spread); Condor Strategies (Long Condor and Short Condor); Straddle (Long Straddle and Short Straddle); Strangles (Long Strangles and Short Strangles); Strip and Strap Option Strategies. Status of Options Market in Indian Context.

Unit V

Financial Swaps Contracts: Types of Financial Swaps- Interest rate swap and Currency Swap; Credit Derivatives; Credit Default Swaps (CDS).

Risk Management Applications of **Swap Strategies:** Managing Interest Rate Risk, Currency Risk and Credit Risk. Status of Swaps Market in Indian Context.

Derivatives Growth: Comparative Analysis of Derivatives Market in India and Abroad.

Paper Code: 403
Quantitative Analysis for Financial Decisions

Max Marks: 100

Course Credit: 03

Unit - I

Introduction to Quantitative Analysis and Operation Research.

Linear Programming: Formulation of Linear Programming Problems; Assumption Underlying Linear Programming; Simplex Method; Solution to Maximization Problems; and Solution to Minimization Problems.

Queuing Theory: General Structure of Queuing System; and Operating Characteristics of Queuing System.

Unit - II

Replacement Theory: Replacement Policy for Equipment Which Deteriorates Gradually; Replacement of Items that Fail Suddenly; and Staff Replacement.

Assignment Models: Algorithm for Solving Assignment Model; Hungarian's Method for Solving Assignment Problem; Variations of Assignment Problem; Multiple Optimal Solutions; Maximization case in Assignment Problem; and Travelling Salesman Problem.

Transportation Models: Transportation Problem: Mathematical Model of Transportation Problem; Methods for Finding Initial Feasible Solution: Northwest Corner Method; Least Cost Method; Vogel's Approximation Method; Test of Optimality by Modi Method.

Unit - III

Forecasting Models: Qualitative Models of Forecasting; Time Series Models of Forecasting; and Casual Models of Forecasting.

Factor Analysis: Cluster Analysis- a Classification Technique; Usage of Cluster Analysis; Statistics Associated With Cluster Analysis; Process of Clustering; Cluster Analysis: Metric Data; and Cluster Analysis: Non-metric Data.

Cluster Analysis: Uses of Factor Analysis; Steps in a Factor analysis Exercise; Establishing the Strength of the Factor Analysis Solution; The Factor Score coefficient Matrix; Factor Loadings and Computation of Eigenvalues; Total Variance Accounted by the Extracted Factors; Communality: Explanation of the Original Variable's Variance; Establishing the Statistical Independence of Extracted Factors; Rotation of Factors; Labelling or Naming the Factors; Applications of Factors Analysis in Other Multivariate Techniques.

Unit - IV

Machine Learning: Supervised machine learning; unsupervised machine learning; over fitting and identify methods of addressing it; neural networks; deep learning nets; and reinforcement learning.

Big Data Projects: Steps in a Data Analysis Project; Preparing and Wrangling Data; Data Exploration; Model Training; Text-Based Data for Financial Forecasting; Textual data; and Evaluate the Fit of a Machine Learning Algorithm.

Unit - V

Data Envelopment Analysis: Introduction; Quantifying Efficiency Scores; Efficient Frontier and Software assisted calculations.

Structural Equation Modeling: Introduction; AMOS; Modeling Nominal Variables; Running a Factor Analysis and the use of Moderating Variables.

Paper Code: 404
International Financial Management

Max Marks: 100

Course Credit: 03

Unit - I

Environment of International Financial Management: Multinational Business Finance: An overview; Agency Problem; Objectives of the Firm and Risk Management; International Financial Management and Domestic Financial Management; Motivations for International Finance; and The Determination of Exchange Rates and Central Bank Intervention.

Unit - II

International Monetary System: The Gold Standard; The Bretton Woods System; The Flexible Exchange; alternative Exchange Rate Systems; The European Monetary System; International Financial Institutions; Parity Conditions in International Finance; Purchasing Power Parity, International Fisher Effect; Interest Arbitrage- Covered Interest Arbitrage and Interest Parity Theory; Models of Exchange rate forecasting; The Demand and Supply Approach; The Monetary Approach; The Portfolio balance Approach; The Currency Forecasting; and The Balance of Payments and International Economic Linkage.

Unit - III

Foreign Exchange and Derivatives Markets and Foreign Exchange Risk Management: The Foreign Exchange Market; Functions of the Foreign Exchange Market; The Foreign Exchange Rates- Direct and Indirect Quotations; Spot Market and Forward Market; Bid- Ask Spread; Currency Futures and Options Markets; Growth of the Swap market; Interest Rate and Currency Swaps- Forms; Interest Rate Swaps; Foreign Exchange Risk Management: Measuring and Managing Translation; Comparison of Four Translation Methods; Transaction and Economic Exposure; and Selection of the Exposure Management Tool.

Unit - IV

Financing the Multinational Corporation: Eurocurrency markets, Eurocurrency Interest Rates; Domestic Issues v/s Euro Issues; International Bonds Markets; External Commercial Borrowings; Performance of Indian Euro Issues, GDRs and ADRs; Cost of Capital for Foreign Investments; Multinational Capital Structure; International Portfolio Investments; and Corporate Strategy and Foreign Direct Investment.

Unit - V

Foreign Investments Analysis and Multinational Working Capital Management: Capital Budgeting for the Multinational Corporation; Country Risk Analysis- Nature of Country Risk Assessment; Techniques to assess Country Risk; Raters of Country Risk; Financing Foreign Trade; Multinational Cash management- Centralized perspective of Cash Flow Analysis; Techniques to Optimize Cash Flow- Leading and Lagging, Netting, Matching; Short-Term Financing; and Managing the Multinational Financial System.

ELECTIVE SUBJECT
FOURTH TERM

Paper Code: 4F1
International Trade and Finance

Max Marks: 100

Course Credit: 03

Unit I

International Trade: Free Trade Theory; Alternative Explanations of Trade; and Gains from Free Trade and Welfare.

Unit II

Balance of Payments: Theories of Protectionism; Role of the WTO in Trade Policy; and Multilateralism and Problems of Developing Countries with WTO.

Unit III

Globalisation, Trade and Developing Countries: Balance of Payments: Introduction; International Monetary System and Exchange; International Financial Institutions; and International Debt and the Role of the Financial Institutions.

Unit IV

Trade Policies: Trade and Development; Trade in Primary Commodities: Issues; Issues on Trade in Services; and Trade Negotiations Under WTO: A Historical View.

Unit V

Theory of Regional Blocks: Regional Trading Blocs; and International Capital Mobility and the Emerging Monetary System.

Unit VI

Trade Policies in India: Indian Trade Policy: Historical Perspective and Recent Developments; India's Balance of Payments; and Trade and Development in India.

Unit - I

1. Introduction to Electronic Business: Managing businesses electronically, E-Business and E-Commerce, e-Transactions on the electronic media. Growth of E-Business, Impact of E-Business on Industries, Potential benefits of Electronic Business;
2. Components of E-Business technology, Role of websites and Internet in E-Business, Emerging technologies for E-Business solutions, Internet and World Wide Web as enablers, Impact of Electronic Commerce on Business Models, Variance of E-Commerce, Knowledge management in the e-Commerce Era
3. Electronic Commerce and role of Independent third parties: Introduction, Electronic Commerce Integrity and Security Assurance, Electronic Commerce systems reliability assurance, Risk Assessment Assurance, Third party assurance of web based electronic commerce (Trustee, Verisign, CA)
4. EDI, Electronic Commerce and the Internet, Data Transfer and standards, Financial EDI, EDI Systems and Internet

Unit - II

5. Regulatory Environment: Introduction, Cryptography & Public key Infrastructure, Privacy Issues, Domain Name Issues, International Tax Issues, Electronic Agreements and Digital Signatures, IT Act, Cashless Economy. Integrators and Key Players
6. Internet Security Standards & PKI Standard Issues and Committees, Security Committees and Organizations, Security Protocols and languages, Messaging Protocols, Cryptography and Authentication – Messaging security issues; Encryption techniques; Key Management, Digital Signatures and Digital Certificates.

Unit - III

7. Electronic Commerce Payment Mechanism, Electronic Wallets, SET Protocol, Payment Gateways, Security and Privacy Issues related to E-Commerce, On-line, Pre-paid and post-paid Electronic Payment Systems, Architectural Framework for E-Business Certificate Issuances, Certificate Authorities and Hierarchy
8. E-Commerce Applications e-Procurement, GeM, e-Governance, Web based marketing, Advertisements on the Net, Intelligent Messaging System, Developing Databases on the Web.

Unit - IV

9. Implementing B-2-B E-Commerce, Supply-Chain Integration, Enterprise Application Integration, E-Commerce Value Chain, Internet Business Models, Internet Business Strategy, Implementation Strategies.
10. Search Engines and Internet Advertising, Building Virtual Communities, Building e-Alliances, Business Exchanges and Intermediaries, E-Business Strategies and Economies of E-Business.

Suggested Readings

1. Awad Elias M., Electronic Commerce: From Vision to Fulfillment, PHI
2. Chaffey Dave, e-Business and e-Commerce Management – Strategy, Implementation and Practice , Pearson
3. Deitel Harvey M., Deitel Paul J., e-Business and e-Commerce for Managers, Pearson
4. Greenstein M. and Feinman M Todd Electronic Commerce: Security, Risk Management and Control, Irwin McGraw-Hill
5. S.J. Josph P.T., E-Commerce: An Indian Perspective, PHI

Paper Code: 4F3
Corporate Tax Including GST

Max Marks: 100

Course Credit: 03

Unit - I

Corporate Tax Planning, Tax Avoidance and Tax Evasion: Concepts & Objectives; Factors & Methods; Tax Planning and Corporate Planning Different types of Company; Taxation of Companies (residential status and tax liability); Residential status & Incidence of Tax for Corporate Assesse; Taxation of Company-Computation of Tax Liability.

Unit - II

Dividend Tax and Tax Planning (Location of Business): Dividend Tax-Types of Dividend; Tax Planning relating to Employees, Remuneration, Tax Planning relating to Location of Business; Tax Planning relating to Nature of Business; (Sec. 32AD, 33AB, 3ABA); (Sec. 35ABB, 35AD); (Sec. 80-IA, 80-IAC, 80-IB, 80-IBA, 80-ID, 80-IE , 80JJA); Tax Planning relating to Forms of Business (Sole Proprietorship & Partnership, Company and Limited Liability Partnership).

Unit - III

Managerial Decisions and Tax Planning: Tax Planning relating to Managerial Decisions (Capital Structure & Dividend Policy, Procurement of Assets Lease vs. Purchase and Procurement of Assets Installment vs. Hire Purchase); Tax Planning relating to Business Restructuring; Tax Planning relating to Managerial Decision (Make or buy); Tax Planning relating to Scientific Research; Business Restructuring relating to Amalgamation.

Tax Planning relating to Foreign Collaboration: Business Restructuring; Demerger including Slump Sale; Double Taxation Relief and Transfer pricing.

Unit - IV

Tax Procedure and Management: Transfer Pricing and International/ Cross Border Taxation; Advance Payment-Concepts and Problems; Voluntary Return of Income; Tax Deduction at Source in Different Cases; Procedure and Management; Procedure of Assessment, Appeals & Revision; Search, Seizure and Assessment; Refund Procedure.

Unit - V

Concept of Indirect Taxes: Concept and Features of Indirect Taxes and Principal Indirect Taxation.

Goods and Services Tax (GST) Laws: Constitutional Aspects of GST; Levy and Collection of Central Goods and Services Tax (CGST) and Integrated Goods and Services Tax (IGST), Application of CGST/ IGST Law, Concept of Supply Including Composite and Mixed Supplies, Charge of Tax including Reverse Charge, 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 Notes; Electronic Way Bill; Returns and Payment of Tax.

Paper Code: 4H1
Forensic Accounting

Max Marks: 50

Course Credit: 1.5

Unit 1

Introduction to Forensic Accounting (4 hours)

- Definition and scope of forensic accounting
- Role and responsibilities of forensic accountants
 - Investigations
 - Quantification of Damages and Economic Losses
 - Expert witness
 - Financial statement analysis
 - Applicable Laws – India
 - Applicable Laws – Abroad
- Overview of forensic accounting techniques and methodologies

Unit 2

Fraud Examination and Investigation (8 hours)

- Types of fraud and financial crimes
- Fraud detection and prevention methods
- Conducting fraud investigations
- Interviewing techniques and gathering evidence

Unit 3

Asset Tracing and Recovery (2 hours)

- Techniques for tracing and identifying hidden or misappropriated assets
- Investigating asset movement and concealment
- Asset recovery strategies and legal considerations

Unit 4

Fraud Prevention and Risk Management (2 hours)

- Internal controls and fraud prevention measures
- Risk assessment and management strategies
- Whistleblowing programs and their role in fraud detection and prevention

Unit 5

Computer Forensics and Digital Evidence (2 hours)

- Overview of digital forensics in forensic accounting
- Gathering and analyzing digital evidence
- Cybercrime and electronic fraud investigation

Unit 6

Ethics and Professional Standards in Forensic Accounting (2 hours)

- Professional ethics for forensic accountants
- Confidentiality, objectivity, and independence
- Ethical considerations in fraud investigations and reporting

**Paper Code: 4H2
Behavioural Finance**

Max Marks: 50

Course Credit: 1.5

Unit - I

Neoclassical Foundations of Finance: Rational Markets Hypothesis and the Challenge of Behaviouralists; Foundations of Rational Finance; Efficient Markets Hypothesis; Bayes' Theorem; Exponential Discounting; and Neoclassical Versus Behavioural Economics.

Heuristics and Biases: Heuristic Simplification: Information Processing Errors; Self-Deception; Emotional Factors; Social Influences; Varied Wants; Social Influence on Investment and Consumption; and Varied Human Wants.

Unit - II

Foundations of Behavioural Finance: Prospect Theory and Mental Accounting; Challenges to Efficient Markets Hypothesis; Neuroscientific and Evolutionary Perspective.

Investor Behaviour: Market Outcomes; Value Investing.

Unit - III

Behavioural Corporate Finance: Behavioural Corporate Finance; Building a Smart Organisation; Improving Organisational Decision - Making Process; Debiasing the Corporation; and Investment Wisdom and Insights.

Paper Code: 4H3
Accounting in Government and Autonomous Bodies

Max Marks: 50

Course Credit: 1.5

Unit - I

Financial Administration in Government and Government Accounts: Introduction and Origin; development and departmentalization of accounts.

Accounting system in Non-Civil Ministries / Departments: Railways, Defence, P&T.

Structure and form of Government Accounts; Consolidated fund; Contingency fund and Public Accounts; Classification in Government Accounts (LMMH), including practical; Deposits, Reserve Fund: Concept and Accounting procedures including practical.

Payment systems: Function of DDOs & Controlling officers, preparation of bills; Pre-check of bills and payment in the PAO, methods of payment; Banking arrangements, focal point banking system; Personal account, concept and accounting procedure; PAO 2000 (A Software developed by the O/O CGA); Electronic payment system

Unit - II

Revenue Accounting: Tax & Non-Tax Revenue; Schematic flow of transactions; CG (receipt & payment rules); and Adjustments through transfer entries including rectification of errors (with practical).

Compilation and Consolidation of accounts: Monthly Accounts, Annual Provision Accounts; Reconciliation of Accounts.

Operation of suspense heads: Concept and Special Features including Practical. Inter Government Settlement; Review of Balances and Scrutiny of Adverse Balances.

Finance accounts: Purpose, Use, Compilation and Consolidation; Appropriation Accounts - Purpose, Use, Compilation and Consolidation; Reading and Analysis of Governments Accounts with special reference to the Accounts of Railways, Defence & P&T.

Combined Finance and Revenue Account - Purpose and Use

Unit - III

Accounts Reporting and Reforms: Accrual Accounting in Govt. – Issues, Problems and Solutions; Tasks involved in the conversion of Accounts from Cash to Accrual. Cash based Budget vis-a-vis Accrual based Accounts.

Accounting for Non-Profit Organizations and Autonomous bodies including universities: Port Trusts and Urban local bodies; Salient Features of their Accounts; Receipt & Payments Account and its preparation; Preparation of Cash Flow Statements; Income and Expenditure Account and its preparation.

Balance Sheet: Its preparation; Accounting of Grants from Govt. and other Institutions; Accounting of Earmarked Funds and Sponsored Projects; Accounting Standards; Accounting Policies.

Paper Code: 4H4
Data Science using Python

Max Marks: 50

Course Credit: 1.5

Unit - I

Introduction to Python and NumPy: Python Distributions; Using Python; Writing Python Code; IPython. Numpy Installation; Ndarray; Basic Operations; Indesing, Slicing, and Iterating; Shape Manipulation; and Array Manipulation.

Unit - II

Data Manipulation with Pandas: Data preparation; Concatenating; Data Transformation; Discretization and Binding; Permutation; String Manipulation; Data Aggregation; and Group Iteration. **Visualization with Matplotlib:** IPython and IPython QtConsole; Matplotlib Architecture; Pyplot; Using the kwargs; Adding Further Elements to the Chart; Saving Your Charts; Chart Typology; and Multi-Panel Plots.

Unit - III

Machine Learning: Supervised and unsupervised Learning; Training Set and Testing Set; Supervised Learning with scikit-learn; The Iris Flower Dataset; K-Nearest Neighbors Classifier; Diabetes Dataset; and Support Vector Machines.

Fifth Term

Paper Code: 501
Fixed Income Securities

Max Marks: 100

Course Credit: 03

Unit - I

Fixed Income Essentials: Fixed Income Securities: Fixed Income Markets; Fixed Income Valuation and Asset Backed Securities; Basic Features of a Bond; Yield Measures; Structure of a Bonds Cash Flows; Bonds with Contingency Provisions (Callable Bonds, Putable Bonds, Convertible Bonds); Global Fixed-Income Markets; Primary and Secondary Bond Markets; Sovereign Bonds; Non-Sovereign Government, Quasi-Government and Supranational Bonds; Corporate Debt; Short-Term Funding Alternatives Available to Banks; Bond Prices and the Time Value of Money; Prices and Yields; Maturity Structure of Interest Rates; and Yield Spreads.

Unit - II

Analysis of Risk: Understanding Fixed Income Risk and Return; Interest Rate Risk on Fixed-Rate Bonds; Macaulay, Modified, and Approximate Duration; Effective Duration; Properties of Bond Duration; Duration of a Bond Portfolio; Interest Rate Risk and the Investment Horizon; Fundamentals of Credit Analysis; Credit Risk; Capital Structure, Seniority Ranking, and Recovery Rates; Ratings Agencies, Credit Ratings, and Their Role in the Debt Markets; Traditional Credit Analysis; Credit Risk vs. return; Yield and Spreads; Credit Analysis Models; Measures of Credit Risk; Traditional Credit Models; Structural Models; Reduced Form Models; and Term Structure of Credit Spreads.

Unit - III

Asset Backed Securities: Introduction to Asset Backed Securities; Benefits of Securitization for Economies and Financial Markets; Securitization Process; Residential Mortgage Loans; Residential Mortgage-Backed Securities; and Collateralized Debt Obligations.

Unit - IV

Valuation: The Arbitrage-Free Valuation Framework; Meaning of Arbitrage-Free Valuation; Interest Rate Trees and Arbitrage-Free Valuation; Monte Carlo Method; Valuation and Analysis of Bonds with Embedded Options; Interest Rate Risk of Bonds with Embedded Options; and Valuation and Analysis of Convertible Bond.

Unit - V

Term Structure Analysis: The Term Structure and Interest Rate Dynamics; Spot Rates and Forward Rates; Swap Rate Curve; Traditional Theories of the Term Structure of Interest Rates; A Framework for Fixed-Income Portfolio Management; Managing Funds against a Bond Market Index; Managing Funds against Liabilities; Fixed Income Portfolio Management; Fixed-Income Strategies; Combination Strategies; Derivatives-Enabled Strategies; International Bond Investing; Relative Value Methodologies for Global Credit Bond Portfolio Management; Credit Relative-Value Analysis; Total Return Analysis; Primary Market Analysis; Liquidity and Trading Analysis; Spread Analysis; Structural Analysis; Credit Curve Analysis; and Credit Analysis.

Paper Code: 502
Regulatory Environment for Financial Sector

Max Marks: 100

Course Credit: 03

Unit I

Structure of Capital Market: Primary Market and Secondary Market
Securities Market Intermediaries

Unit II

Securities Contracts (Regulation) Act, 1956; Securities and Exchange Board of India Act, 1992; and Depositories Act, 1996.

Unit III

SEBI (Buyback of Securities) Regulations, 1998; SEBI (Delisting of Equity Shares) Regulations, 2009; SEBI (Share Based Employee Benefits) Regulations, 2014; and SEBI (Issue of Sweat Equity) Regulations, 2002.

Unit IV

SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009; SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015; and SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011.

Unit V

SEBI (Prohibition of Insider Trading) Regulations, 20015; Mutual Funds; Collective Investment Schemes; and SEBI (Ombudsman) Regulations, 2003.

Paper Code: 503
Merger, Acquisition and Corporate Restructuring

Max Marks:100

Course Credit: 03

OBJECTIVE

This course enables the participants to go deeper into a certain aspect of corporate finance and provide specialized attention to various aspects: corporate strategy, investment decision, disinvestment decision, financing decision, and the legal and taxation implications of corporate restructuring. Perspectives of a CEO, CFO as well as an investment banker are covered in an integrated manner.

CONTENTS

Unit - I

Concept of M&A and Restructuring and the role: Introduction to M&A its Rationale; Horizontal, Vertical and Conglomerate Mergers; Shareholders; Governments; Other Stakeholders.

Unit - II

Hostile Takeovers and Defending: Offensive Strategies; Defensive Strategies.

Unit - III

Leveraged Buyouts & Restructuring: Defining LBOs; The LBO process; RJR Nabisco Case; Divestitures & Demergers.

Unit - IV

Legal Aspects and Insolvency: Accounting; Legal: Companies Act, SEBI SAST, Due Diligence Review (DDR); Techniques and Procedures; Taxation; Insolvency & Bankruptcy Code, 2016 (IBC); Role of ARCs and Pes in Insolvency Financing.

Unit - V

Valuation: Fairness Opinions; Court Cases on Review, Role of Hedge Funds; Relative Valuation (P/E, P/B, EV/EBITDA) and DCF Valuation.

Paper Code: 504
Corporate Governance and Business Ethics

Max Marks: 50

Course Credit: 1.5

Unit - I

Conceptual Framework of Corporate Governance: Introduction, Need and Scope, Evolution of Corporate Governance, Management vs. Ownership, Majority vs Minority, Corporate Governance codes in major jurisdictions, Sarbanes Oxley Act, US Securities and Exchange Commission; OECD Principles of Corporate Governance; Development in India, Corporate Governance in Indians Ethos, Corporate Governance – Contemporary Developments

Legislative Framework of Corporate Governance in India: Listed Companies, Unlisted Companies, PSUs, Banks and Insurance Companies

Unit - II

Board Effectiveness: Composition and Structure, Duties and Liabilities, Evolution of Jurisprudence, Diversity in Board Room, Women Director, Nominee Directors; Selection and Appointment Process, Independent Directors; expectations, liabilities and their role, code of conduct, responsibilities and effectiveness; Various policies and disclosures to be made as per regulatory requirements/voluntarily made as part of good governance.

Performance Evaluation of Board and Management: Evaluation of the performance of the Board as a whole, individual director (including independent directors and chairperson), various Committees of the Board and of the management; Role of promoter/controlling shareholder, redressal against Oppression and Mismanagement; Monitoring of group entities and subsidiaries; Accounting and Audit related issues; Related Party Transactions; Vigil Mechanism/Whistle blower; Corporate Governance and Shareholders' Rights; Corporate Governance and other stakeholders.

Unit - III

Ethics & Business: Ethics, Business Ethics, Organization Structure and Ethics, Addressing Ethical Dilemmas, Code of Ethics, Indian Ethos, Designing Code of Conduct, Policies, Fair practices and framework.

Introduction to Business Ethics: Definition of Ethics and Business; Ethical Dilemma; Factors affecting the business ethics: Economics, Law, Environment, Technology, Development; Why ethics matters; and Applying an ethical framework.

Ethical Theories: Utilitarianism; Deontological; Kantian ethics; Virtue ethics; Justice and rights; Process and framework of ethical decision-making in business; Market ethics; and Cognitive barriers to a good ethical judgment.

ELECTIVE SUBJECT
FIFTH TERM

Course Objective

By the end of the course, participants will be able to:

1. Understand the causes of poverty, market failures in credit delivery, and the evolution of the microfinance sector.
2. Analyze microfinance models, their institutional mechanisms, and state-wise/global practices.
3. Evaluate the role of NGOs, SHGs, and MFIs in promoting inclusive finance and community empowerment
4. Assess the financial, social, and operational sustainability of microfinance institutions.
5. Examine micro insurance as a risk management tool for low-income households and its integration with microfinance.
6. Apply analytical frameworks to evaluate performance, risk, and creditworthiness of MFIs.
7. Discuss policy, regulatory, and governance issues affecting the microfinance and micro insurance sectors in India.

Unit - I

Sources and Consequences of Poverty, Informal Sector: The Nature of the Market Failure – Credit provision to the poor, collateral, borrowing, repayment, social collateral, peer networks Overview of Microfinance: Indian Rural financial system, introduction to Microfinance, Microfinance concepts, products, (savings, credit, insurance, pension, equity, leasing, hire-purchase service, Microfinance in kind, Micro-remittances, Micro-Securitization, franchising etc.), Microfinance models (Generic models viz. SHG, Grameen, and Co-operative, variants SHG NABARD model, SIDBI model, SGSY model, Grameen Bangladesh model, NMDFC model, credit unions etc. unbranded primitive models) Emerging practices of Microfinance in India state wise cases, Emerging Global Microfinance practices. Need of Microfinance. Microfinance, Development, Income generating activities and Micro Enterprise Market (demand) analysis, financial analysis including sources. Technological analysis, Socio-economic analysis, Environmental analysis. Logical framework, Implementation & Monitoring Credit Delivery Methodology: Credit Lending Models

Associations; Bank Guarantees Community Banking, Cooperatives, Credit Unions, Grameen Model, SHG, Individual, Intermediaries, Could be individual lenders, NGOs, micro credit programmes, and Commercial banks).

Unit - II

Catalyst Role of NGOs Educating and formation of SHGs, Linkages with Banks & Markets, Liaisoning with Govt. Dept. Capacity building of SHGs members about value additions, record keeping etc. Pricing of Microfinance Products Purpose base, Activity base, Economic class base Open bidding, etc. Pricing saving products, Amount of savings base, Attendance at periodical meeting Adding to corpus. Gender issues in Microfinance and Conflict resolution in Microfinance -Client impact studies measuring impact of Microfinance and Micro enterprises.

Unit - III

Commercial Microfinance MFIs: Evaluating MFIs- Social and performance metrics, fund structure, value-added services The Rise of Commercial Microfinance-: Transforming NGOs. Structure of Microfinance Industry and Constraints on MFI Growth. The partnership model – MFI as the servicer

Investing in Microfinance Sources of capital, profit vs. non-profit investing-Accessing Capital Markets for funds Managing MFIs Management talent, corporate governance, ownership Viability of MFIs Subsidy dependence and sustainability of MFIs-Role of effective interest rates on viability-Operating Self-sufficiency- Financial Self-sufficiency Credit Rating of MFIs Need and basic criteria/indicators for rating MFIs-Credit rating agencies in India and abroad-CAMEL – ACCION rating tools : An introduction Monitoring parameters including risk monitoring and Delinquency Management Follow-up methods- Recovery of loan-Provisions for Loan-loss reserve Risk Management Asset Liability Management- operating risk management - Portfolio management, Public Policy and MFIs: Banking regulation, multilateral institutions.

Unit - IV

Strategic Issues in Microfinance: Sustainability, Going to Scale and Managing the “Last 100 Meters”, Opening New Markets, Gender, Finance Plus, Housing Finance Micro insurance: products, eligibility, insurance premium and claim administration systems, regulatory guidelines, relevant cases Field visits and surveys

Paper Code: 5F2
Alternative Investments

Max Marks: 100

Course Credit: 03

Course Objective:

1. To introduce the concept of Alternative Investment to students and comparing it with the traditional investments. To discuss various categories of alternative investments. To understand the goals of alternative investment and the various laws applicable to such investments.
2. To understand the methods for accessing Alternative Investments.
3. To familiarize the students, the various alternative investments i.e. Hedge funds, real assets, private equity, and derivatives etc.
4. To introduce the concept of Structured Products in Alternative Investing
5. To understand the process of due diligence necessary for investment through alternative routes.

Unit I

Introduction to Alternative Investments: Alternative Investments; Alternative Investments v/s Traditional Investment; Categories of Alternative Investment;; Structures among Alternative Investments; Goals of Alternative Investing; The Participants; issues in performance appraisal of alternative investments; Regulatory Environment of AIFs in India including Taxation, 'Angel Tax' controversy under S.56(2) of the Income Tax Act, 1961.

Unit II

Hedge Funds: Natural Resources and Land; Commodities; Commodity Forward Pricing; Commodities: Applications and Evidence; Real Estate and Debt; Real Estate Equity; Structure of the Hedge Fund Industry; Macro and Managed Futures Funds; Hedge Fund Structures; Hedge Fund Liquidity; Event-Driven Hedge Funds; Relative Value Hedge Funds; Equity Hedge Funds and Funds of Hedge Funds. Case studies: LTCM, Bernie Madoff, John Paulson.

Methods for Alternative Investing and Accessing Alternative Investments: Hedge Fund Replication; Potential Benefits of Replication Products; The Case for Hedge Fund Replication; Unique Benefits of Replication Products; Factor-Based Approach to Replication; Payoff-Distribution Approach; Algorithmic (Bottom-Up) Approach

Unit III

Real Assets

compare the characteristics, classifications, principal risks, and basic forms of public and private real estate investments; commercial property types, including their distinctive investment characteristics; portfolio roles and economic value determinants of real estate investments, income, cost, and sales comparison approaches to valuing real estate properties; discuss types of REITs; calculate and interpret the value of a REIT share using the net asset value, relative value (price-to-FFO and price-to-AFFO), and discounted cash flow approaches

Unit IV

Private Equity: Private Equity Assets; Equity Types of Private Equity: Venture Capital and Leveraged Buyouts; Access to Private Equity; private equity fund structures, terms, due diligence, and valuation in the context of an analysis of private equity fund returns, alternative exit routes in private equity and their impact on value, interpret LBO model and VC method output, interpret and compare financial performance of private equity funds from the perspective of an investor; calculate management fees, carried interest, net asset value, distributed to paid in (DPI), residual value to paid in (RVPI), and total value to paid in (TVPI) of a private equity fund.

Unit V**Structure Products**

Introduction to Structuring; Credit Risk and Credit Derivatives; Collateralised Debt Obligation Structuring of Credit Risk; Equity-Linked Structured Products; Overview of Collateralised Debt Obligation Variations; Balance Sheet Collateralised Debt Obligations and Arbitrage Collateralised Debt Obligations; Mechanics of and Motivations for an Arbitrage Collateralised Debt Obligation; Cash-Funded Collateralised Debt Obligations versus Synthetic Collateralised Debt Obligations; Cash Flow Collateralised Debt Obligations versus Market Value Collateralised Debt Obligations; Credit Enhancements; Developments in Collateralised Debt Obligations and Risks of Collateralised Debt Obligations.

Unit VI**Due Diligence & Selecting Managers**

Active Management and New Investments; Selection of a Fund Manager; Quantitative screening; Investment team and organization attributes; Investment process structure; Analysis of historical track record and statistics; Investment Process Due Diligence; Operational Due Diligence and Due Diligence of Terms and Business Activities.

Paper Code: 5F3
Strategic Cost Management

Max Marks: 100

Course Credit: 03

Unit - I

Introduction to Strategic and Cost Management: Concept of Strategy; Process of Strategy; Strategic Framework; Business Strategy; Strategy Development; Strategic Analysis; Environmental Analysis; Competitive Forces; Strategic Choice; and Strategic Integration.

Unit - II

Basic Cost Concepts: Cost; Deferred Cost and Expired Cost; Traditional Classification of Cost; Cost Behaviour in Relation to Changes in Output or Activity; Capital Cost and Revenue Cost; Costs for Decision-Making and Planning; and Cost Flows in Manufacturing, Merchandising and Service Organizations.

Unit - III

Cost Management Techniques-I: Pricing Strategies; Life Cycle Costing; Target Costing.

Unit - IV

Cost Management Techniques-II: Kaizen Costing; Value Chain Analysis; and Just-In-Time (JIT) Inventory Management.

Unit - V

Performance Evaluation: Responsibility Accounting and Divisional Performance Evaluation; Transfer Pricing; and Strategic Performance Measurement—Balanced Scorecard.

Unit - I

Financial Instruments and understanding their Trading: Money; Valuation of Interest Rate Instruments; Zero Coupon Pricing; Day-Count Conventions; Quote Types; Clearing and Settlement; About Risk; Credit and Counterparty Risk; Settlement Risk; Market Risk; and Model Risk.

Unit - II

Continuous Time Models: Classifications of Partial Differential Equations; Parabolic PDEs; The Black-Scholes-Merton Model; Volatility; Parity Relations; A Practical Guide to Pricing; Currency Options and the Garman-Kohlhagen Model; Analytical Pricing Formulas for American Options; and Poisson Processes and Jump Diffusion.

Unit - III

Interest Rate: Introduction to Interest Rates; Benchmark Rate; Base Rate; Prime Rate; Deposit Rate; Discount Rate; Capitalization Rate; Simple Rate; Effective (Annual) Rate; The Repo Rate; Interbank Rate; Coupon Rate; Real Rate; Nominal Rate; Yield- Yield to Maturity (YTM); Current Yield; Par Rate and Par Yield; Prime Rate; Risk Free Rate; Spot Rate; Forward Rate; Swap Rate; Term Structure of Interest Rates; Accrued Interest; Dividend Rate; Yield to Maturity (YTM); Credit Rate; Hazard Rate; Rates and Discounting Summary and Black-Scholes Formula.

Market Interest Rates and Quotes: The Complexity of Interest Rates; The LIBOR Rates; The EURIBOR Rates; The EONIA Rates; The Euro Repurchase Agreement Rate – Eurepo; Sterling Overnight Index Average (SONIA); and Federal Funds.

Interest Rate Instruments: Introduction to Interest Rate Instruments; Bonds, Bills and Notes; Bonds, Market Quoting Conventions and Pricing; Accrued Interest; Floating Rate Notes; FRA – Forward Rate Agreements; Interest Rate Futures; Interest Rate Bond Futures and CTD; Swaps; Overnight Index Swaps (OIS); Asset Swap and Asset Swap Spread; Swaptions; Credit Default Swaps; Hazard rate models; Total Return Swaps; Caps, Floors and Collars; Interest Rate Guarantees – IRG; Repos and Reverses; Loans and CPPI – Constant-Proportions-Portfolio-Insurance.

Unit - IV

Yield Curves: Introduction to Yield Curves; Credit Ratings; Zero-coupon Yield Curves; and ISMA and Moosmuller.

Bootstrapping Yield Curves: Constructing Zero-Coupon Yield Curves; The Matching Zero-Coupon Yield Curve; Implied Forward Rates; Bootstrapping with Government Bonds; Bootstrapping a Swap Curve; A More General Bootstrap; Nelson-Siegel Parameterization; Interpolation Methods; and Spread and Spread Curves.

The Interbank Market: Spreads and the Interbank Market; TED-Spread and Other Spreads; Overnight Indexed Swaps (OIS) and Basis Spread; Some Overnight Indices; and Basis Swaps.

Unit - V

Measuring the Risk: Risk Measures; Delta; Duration and Convexity; Modified Duration, Dollar Duration and DV01; Convexity; Gamma; Accrued Interest; Rho; Theta; Vega; YTM; Portfolio Immunization Using Duration and Convexity; The Fisher-Weil Duration and Convexity; Hedging with Duration; and Shifting the Zero-Coupon Yield Curve.

Risk Management: Introduction to Risk Management; Capital Requirement; Risk Measurement and Risk Limits and Risk Control in Treasury Operations.

Stochastic Processes: Pricing Theory; Interest Rates; and Stochastic Processes for Interest Rates.

Paper Code: 5F5
DATA ANALYTICS & USE OF ICT IN GOVERNMENT

Max Marks: 100

Course Credit: 03

Objective of the Paper: Today, Digital Governance has transformed the Government functioning towards a participative Government leading to effective service delivery, social inclusion and citizen empowerment. Innovative technologies, evolving business models, Big Data and Cyber Security have further pronounced the need to have a competent team within the Government to achieve intended outcomes of the technology interventions. The Government is overloaded with data and there is an emergent need to build adequate and relevant capacities within the Government to conceptualize, lead, implement, gain-insight and assist in fact-based decision and policy making.

Unit - I

Digital Government: Towards Faceless, Paperless, Cashless, SMART Government; Key features of Digital India & Smart City Programme; Financial inclusion through JAM Trinity; Tax reforms; Legal frameworks (IT Act, Data Protection Bill); Important Case studies; and Rise of Big Data & fact based Decision Making

Unit - II

Data Science, RDBMS & Analytics: Overview, RDBMS, Data Structure, HDBMS, RDMS, Cloud Database, SQL, Authentic Data Repositories, Understanding Analytics, Scope of Analytics in Government Tool: Ms-Access/ SQL

Unit - III

Pictorial Representation of Data: Introduction to Spreadsheet and its uses, Formulas, Built-in Functions, Analytics on Spread Sheets; Pivot Tables, Frequency Tables and Histograms; Analyzing Relationship with Scatter plots; Correlations: Indicators of Linear Relationships, Simple Linear Regression; Case Studies based on data from data.gov.in, website of various Ministries
Analytical Tool: Ms-Excel, StatPro, IDEA

Unit - IV

Data Governance & Data Analytics through Tableau: Tableau Software Ecosystem; Dealing with Data Quality Problems and Standardization; Data Cleaning and Transformation; Workspace Controls, Data Connection, Menu, Leveraging Toolbar Icons; and Data Window, Data Types and Aggregation

Visual Analytics: 6-V Data characteristics; Building Visualizations with Row and Column Shelves; Measure Values and Measure names; Understanding color in Icons and Pills; and Trends and Outliers

Unit - V

Data Mining: Information Drill Down through Hierarchies & Filters; Creating and Using Filters, Filter Shell; Group Dimensions; Creating Customized Data Fields; and Taming Data with Measure Names and Values

Predictive Analysis and Dashboards: Developing an Ad Hoc Analysis Environment; Generating New Data and Forecasts; SMART Dashboards to facilitate Analysis and understanding of information; Cascading Dashboard Designs to improve load speeds; and Navigation, Embedding a Live Website in a Dashboard

Cyber Security Issues & PKI: Cryptography; Public key Infrastructure; and Case study on

Cyber Frauds

SUGGESTED READINGS:

- 1) Albright Winston Zappe, Data Analysis & Decision Making with Microsoft Excel, Duxbury Press
- 2) Apte D P, Statistical Tools for Managers
- 3) Evans James R, Business Analytics: Methods, Models and Decisions, Pearson
- 4) Joseph Steinber, Cybersecurity for Dummies, Wiley
- 5) Murray G. Daniel, Tableau, Wiley (Big Data Series)

- 6) Muttoo, Gupta, Pal, E-Governance in India- The progress Status, Palgrave Macmillan
- 7) Nippani K S, Murthy B K , Digital India: Governance Transformation, Wiley
- 8) Sekhar, Sahu, Gollamudi, Digital Empowerment (Selected eGovernance Initiatives)
- 9) Data Resource (Indicative):
 - (i) www.data.gov.in,
 - (ii) www.indiabudget.gov.in and data from website of various Ministries
 - (iii) <https://www.indiastat.com/> (AJNIFM Library subscription)
 - (iv) statista.com
 - (v) <https://www.kaggle.com/>
 - (vi) <https://data.world/>
 - (vii) worldstatistics.com

Paper Code: 5H1
Financial Econometrics

Max Marks: 50

Course Credit: 1.5

Unit - I

Financial Econometrics: Scope and Methods; Classical Linear regression model; Regression Application in Finance

Unit - II

Regression Analysis: Theory and Estimation; Modeling Univariate Time Series; Approaches to ARIMA Modeling and Forecasting; Autoregressive Conditional Heteroskedastic Models

Unit - III

Vector Autoregressive Models; Cointegration and State Space Models; Robust Estimation.

Unit - IV

Principal Components Analysis and Factor Analysis; Heavy-Tailed and Stable Distributions in Financial Econometrics.

Unit - V

ARMA and ARCH Models with Infinite-Variance Innovations; Panel Data; Simulation Methods.

Paper Code: 5H2
FinTech

Max Marks: 50

Course Credit: 1.5

Unit - I

Fintech, Digital Disruption and Digital Payments

Overview of Fintech: Definition; Need for Fintech; Fintech Segments; Rise of Fintech across the globe; Effect of Fintech in every industry; new opportunities created by Fintech; understanding fintech ecosystem and its stakeholders.

Digital Disruption: Understanding key factors of digital disruption, Rise of social media, analytics for digital disruption, cloud computing and benefits, use of mobile application.

Digital Payments - Evolution of digital payments, benefits and drawbacks of cash transactions, cash vs digital payments, application of digital payments in e-commerce and offline commerce transactions, Types of digital payments in India, Business to Business vs Business to Customer Vs Customer to Customer payments, comparison & value propositions

Cards : types of cards, stakeholders of card network, approval flow, MDR calculations, settlement cycle, Cards and uses in procurement, commercial and retail transactions, Understanding payment gateways, payment processors; process flow, applications in industries.

Wallets and PPIs: Definitions, RBI guidelines, applications, segmentation, Wallets vs UPI, Industry analysis, key wallet and PPI players; application in business cycles.

Payment infrastructure of India: Payment rails of India. Role of RBI and NPCI, Key tools and their benefits; RuPay card and its uses in Jan-Dhan accounts ; IMPS, Aadhar enabled payment system, Bharat bill payment system , allied developments.

Unit II

Blockchain and application

Introduction to Blockchain: Need for blockchain technology, evolution of blockchain technology, stages of growth, sectors affected by blockchain; Centralized vs Distributed ledger, public vs private blockchain.

Blockchain concepts: Introduction to hashing, properties, application, mining, mining rewards, understanding immutability of blockchain, nonce and loop concept, cryptography, asymmetric vs symmetric key concept and application.

Applications of blockchain: Application of blockchain in banking & public services ; distributed Finance; Application in international transactions; Indian bank blockchain infrastructure ; Govt of India's blockchain policy; Blockchain and Crypto currency ; regulations on crypto currency

Unit III

Digital Lending and New Age Banking

Digital Lending: Introduction to digital lending, API based collection, India Stack, use cases and application

P2P Finance: Concept, need, guidelines, scope, RBI regulations, benefits , key players, recent development

SME and Supply chain finance: India's MSME finance gap, need of MSME finance modules , role of digital lending, key supply chain finance modules, dynamic discounting, Dealer finance, Trade Receivables Discounting System(TReDs) ; RBI guidelines, channel funding, vendor finance modules,

SME finance via Peer to Peer lending. Numericals.

Global Developments in Fintech: Understanding global development of Fintech. Key stakeholders in China's Financial Ecosystem; Why China is world's Fintech capital; Key Fintech Developments in China.

Neo-Banking: Introduction to Neo-banking; Framework of Neo-banking; types of neo-banks, benefits, future of neo-banking, close vs Open banking, Case studies.

Fintech Analytics and Risk Management: Understanding data analytics; role of big data; key risks in fintech; mitigation techniques; Understanding Fintech sutras

Paper Code: 5H3
Total Quality Management

Max Marks: 50

Course Credit: 1.5

Introduction /Course Description:

This course provides a comprehensive understanding of **Total Quality Management (TQM)** and its strategic role in enhancing organizational performance. It introduces key concepts, tools, and standards that support continuous improvement, customer satisfaction, and competitive advantage. Students will learn how TQM principles integrate with business strategy, quality economics, statistical methods, quality systems, and certification requirements.

Course Learning Outcome:

- Understand essential concepts, principles, and models of Total Quality Management.
- Apply quality planning and improvement tools to enhance organizational performance.
- Analyse the economic impact of quality on business operations.
- Evaluate and implement quality management systems, including ISO 9000, along with auditing and certification processes.

Content

Unit - I

Introduction: Basic Concepts and Approach

Building Blocks of TQM

TQM and Business Strategy

Unit - II

Quality-Centered Strategic Planning

Economics of Quality

Statistical Quality Control

Unit - III

Organization for Quality

ISO 9000 Quality Management System

Auditing and Certification

Paper Code: 5H4
Public Private Partnership

Max Marks: 50

Course Credit: 1.5

Unit - I

Public Private Partnership: Concept, Myths and Facts; Rationale for Public Private Partnership; Public Private Partnership models; and Critical success factor of Public Private Partnership; Communication in Public Private Partnership projects; Conceptualizing Public Private Partnership; Understand Service Needs and Configuration of Projects Identification and Organization.

Unit - II

Analyse and Structure: Understanding Structuring Issues; Demand Analysis, Cost Analysis and Risk Analysis; Assessing Financial Viability; Value for Money Analysis; and Public Private Partnership Structuring: Sequential analysis to arrive at Optimal Structure.

Unit - III

Tendering and Contracting: Understanding the Standard Bid Process; Pre-qualification of Bidders; Understanding the Request for Proposal: Instruction to Bidders; Key elements of Drafts Concession Agreement; Contract Management; Contract Management Team; Relevance of Role play and Walk through in Implementation and Monitoring Public Private Partnership.

Sixth Term

Paper Code: 601
Corporate Strategy & Risk Management

Max Marks: 100

Course Credit: 03

Unit - I

Corporate Strategy and Planning: Concept of Corporate Strategy; The 7-S Framework; Corporate Policy and Planning in India.

Corporate Management: Board of Directors; Role and Functions; Top Management: Role and Skill.

Swot Analysis: Environmental Analysis; Competitive Analysis; Internal Corporate Analysis.

Unit - II

Strategic Analysis & Choices: Cost Analysis; Portfolio Analysis and Display Matrices; Operating and Financial Analysis; Strategic Alternatives; Diversification; Mergers and Acquisitions.

Implementation & Evaluation of Strategy: Implementation of Strategy; Evaluation and Control of Strategy; Turnaround Management.

Unit - III

Introduction to Risk: Risk and Uncertainty; Dynamic Nature of Risks; Types of Risk.

Sources and evaluation of Risks: Identification, Sources and Quantification of Risk; Impact of Business Risk; Impact of Business Risk and Role of Risk Committee in identifying Risk.

Risk Management: Objective, importance and Process of Risk Management; Risk Management techniques.

Unit - IV

Evaluation of Risk Management Strategies: Risk Management Strategy alignment with Business Strategy; Internal Control environment and linkages with Risk Management; Risk Culture and attitude to risk management; Integrated Risk Reporting and Stakeholder responsibilities; IT Risk Management - Disaster Recovery.

Risk Model: Value at Risk (VAR); Stress Testing; Scenario Analysis; Country and Sovereign Risk Models and Management.

Credit Risk Management and Management: Evaluating and Mitigating of Credit Risk; Qualitative and Quantitative techniques to manage Risk; Credit scoring models.

Unit - V

Risk Associated with Corporate Governance: Evaluation of Risk Associated with Governance; Description and evaluation of framework for Board level consideration of risk; OECD Guideline for Corporate Governance.

Enterprise Risk Management: Scope and Techniques

Operational Risk Management

Scope and Techniques

Paper Code: 602
Business Valuation and Analysis

Max Marks: 100

Course Credit: 03

Unit - I

Principles of Valuation: Valuation Fundamentals & Context; Definition, Concept and Fundamental Principles of Valuation, Purpose and Role of Valuation, Steps in Valuation, Distinction between Price and Value; Independence and objectivity; Overview of different valuation models, financial statements and value drivers; Organization and Analysis of Financial Statements and Accounting Policy; and Organization and Analysis of Key Financial and Non- Financial Ratios in forecasting future cash flows- Accounting Policy choices and scope of earnings management.

Valuation Inputs-Strategic Analysis: Industry Analysis e.g. (Porter's Five Forces Model) Audit of Internal and external environment -SWOT&C, PEST Analysis,; Company analysis – Analysis of the sources of past growth in ROIC and revenue and sustainability of the same vis-à-vis capabilities of the company, Analyzing the core competence of the business and its ability to take future opportunities and resilience to address challenges; Establishing the relationship between each item in the profit and Loss Account with revenue and other drivers of costs and expenses.

Unit - II

Analyses and Valuation Approaches: Sensitivity Analysis, Scenario Analysis, Simulation, Regression Analysis, Time Series model, Stress Testing; Income Approach (Cash Flow Forecasting and Risk), Cost Approach and Market Approach; DCF Methods of Valuation – Enterprise Value Approach, Capital Cash Flow Approach, Equity Cash Flow Approach; Adjusted present value, Valuation based on residual income or economic value added; forecasting cash flows, determining the cost of capital and discount rate (including use of the concept of asset beta); determining the terminal value and determining the value of equity from the enterprise value; Accounting Based Valuation; Business valuation in Global Setup; Techniques to manage Risks in Business Valuation; Market Approach; Direct comparison with comparable and multiples; Replacement Cost Model; Sum of Parts valuation; and Other approaches: Asset approach ad real option/contingent claim approach, Criteria for selecting the appropriate Valuation Method, Suitability of different valuation methods in different contexts, Choice of valuation methods based on the growth stage of the firm, nature of the industry and availability of information.

Unit - III

Application of Business Valuation: Mergers & Amalgamations; De Mergers; Acquisitions/disposal of business / slump sale; Liquidation; Internal & External Restructuring; Valuation in Mergers and Acquisitions Strategies: Intensive Growth, Diversifies Growth Moves and Synergies: Monopoly theory, Valuation theory, Overseas Merger; Fair Value in Financial Reporting; Valuation of closely held Companies; Valuation of Investment Company; Valuation of Startups; Valuation of Stressed Companies – liquidation valuation; Valuation of IPOs and FPOs, Venture Capital; Valuation of Power and Utilities Industries; Valuation of Financial Institutions – Banks and Insurance Companies; and Valuation of Divestiture – Spin off/Split off.

Unit - IV

Valuation for Other Purposes: Asset Valuation – Cost Based Valuation; Valuation of Derivatives – Financial Derivatives and Commodity Derivatives; Valuation of Real estates, Plant & Equipment, Tangible; Intangible assets including Goodwill, Brand, Patent Rights etc.; Valuation for Collaterals; Valuation of Property and casualties insurance; Valuation for Direct and Indirect Taxation; Valuation of Equity / Preference shares; Bond Valuations and Valuation of securitized instruments; Valuation of instruments including mortgage based securities; and Offer for Sale.

Unit - V

Valuation Standards, Validation and Report writing: Engagement procedure for valuation assignment, term of reference and deliverables; Due Diligence: Application of Valuation Standards; Data collection for Business valuation; Report for Gap Analysis; and Business Valuation Report Writing.