

Master of Commerce (M.Com.)

Courses and Syllabi

(2018 - 2020)



P.G. & RESEARCH DEPARTMENT OF COMMERCE

BISHOP HEBER COLLEGE (Autonomous)

(Affiliated to Bharathidasan University)

(Reaccredited with 'A' Grade (CGPA – 3.58/4.0) by the NAAC &

Identified as College of Excellence by the UGC)

DST – FIST Sponsored College & DBT Star College

TIRUCHIRAPPALLI – 620 017

TAMIL NADU, INDIA

2018 – 2020

SCHEME OF COURSES & SYLLABUS 2018

Programme : M.Com. (2018 onwards)

Sem	Course	Course Code	Course Title	Hours /Week	Credits	Marks		
						CIA	ESA	Total
I	Core I	P18CM101	Organizational Behaviour	6	5	25	75	100
	Core II	P18CM102	International Financial Management	6	5	25	75	100
	Core III	P18CM103	Logistics and Supply Chain Management	6	4	25	75	100
	Core IV	P18CM104	Advanced Cost Accounting	6	4	25	75	100
	Elective I	P18CM1:1/ P18CM1:2	Strategic Management / Auditing	6	4	25	75	100
II	Core V	P18CM205	Research Methodology	6	5	25	75	100
	Core VI	P18CM206	Enterprise Resource Planning	6	5	25	75	100
	Core VII	P18CM207	Project Appraisal Planning and Control	6	5	25	75	100
	Elective II	P18CM2:2/ P18CM2:3	Direct Tax Law and Practice / Indirect Tax Law and Practice	6	4	25	75	100
	NMEC	P18CM2E1	Teaching and research Aptitude	4	2	25/ 40	75/ 60	100
	VLOC	P17VL2:1/ P17VL2:2	RI/MI	2	2	25	75	100
III	Core VIII	P18CM308	Security Analysis and Portfolio Management - I	6	4	25	75	100
	Core IX	P18CM309	Indian Financial Markets	6	4	25	75	100
	Core X	P18CM310	Business Analytics and Intelligence	6	5	25	75	100
	Core XI	P18CM311	Financial Engineering - I	6	5	25	75	100
	Elective III	P18CM3:3/ P18CM3:4	Accounting for Managerial Decisions / Business Valuation and Business Analysis	6	4	25	75	100
IV	Core XII	P18CM412	Security Analysis and Portfolio Management - II	10	5	25	75	100
	Core XIII	P18CM413	Business Ethics, Corporate Social Responsibility and Governance	10	4	25	75	100
	Core XIV	P18CM414	Financial Engineering - II	10	4	25	75	100
	Elective IV	P18CM4F1	Internship	6	5	-	-	100
	Project	P18CM4PJ	Project	6	5	-	-	100
Total					90			2100

Core Theory: 14	Core Project: 1	Elective :4	Value Education: 1	Total	21
NMEC :1					
NMEC offered by the Department: Human Resource Development - P18CM2E1					

SEMESTER – I

ORGANISATIONAL BEHAVIOUR

Core : I
Hours : 6

Course Code: P18CM101
Credits:5

COURSE OBJECTIVES

At the end of the course students shall be able to

1. Familiarize with behavioural process in an organization.
2. Understand organizational psychology.

Unit I Introduction, Perception, Learning

- 1.1 Organizational Behaviour
 - 1.1.1 Definition
 - 1.1.2 Importance
 - 1.1.3 Historical Background
- 1.2 Perception
 - 1.2.1 Definition
 - 1.2.2 Process
 - 1.2.3 Factors affecting Perception
 - 1.2.4 Social Perception.
- 1.3 Learning
 - 1.3.1 Definition
 - 1.3.2 Theories of Learning
 - 1.3.2.1 Classical Conditioning
 - 1.3.2.2 Operant Conditioning
 - 1.3.2.3 Social Learning
 - 1.3.3 Organizational Reward Systems.

Unit II Personality, Attitudes, Motivation, Values

- 2.1 Personality
 - 2.1.1 Meaning of personality
 - 2.1.2 Development of Personality – Nature Vs Nurture
 - 2.1.3 Theories of Personality
 - 2.1.3.1 The Myers-Briggs Type Indicator
 - 2.1.3.2 The Big Five Personality theory
- 2.2 Attitudes
 - 2.2.1 Definition
 - 2.2.2 Dimensions of attitude –Job Satisfaction - Organizational Commitment.
- 2.3 Motivation
 - 2.3.1 Definition
 - 2.3.2 Theories of Work Motivation

- 2.3.2.1 Hierarchy of Needs theory
 - 2.3.2.2 Theory X and Theory Y
 - 2.3.2.3 Two factor theory
 - 2.3.2.4 McClelland's Theory of Needs
 - 2.3.2.5 Goal Setting theory
- 2.4 Values
- 2.4.1 Definition
 - 2.4.2 Important types of Values
 - 2.4.3 Values across cultures

Unit III Groups, Teams and Conflict Management

- 3.1.
- 3.1.1 Groups
 - 3.1.1.1 Stages of Group Development
 - 3.1.1.2 Group Properties
 - 3.1.1.3 Group Decision Making
 - 3.1.2 Teams
 - 3.1.2.1 Importance
 - 3.1.2.2 Types
 - 3.1.2.3 Formation of teams
 - 3.1.2.4 Factors determining Team effectiveness.
- 3.2 Conflict Management
- 3.2.1 Traditional vis-a-vis Modern view of conflict
 - 3.2.2 Constructive and Destructive conflict
 - 3.2.3 Conflict Process
 - 3.2.4 Strategies for encouraging constructive conflict
 - 3.2.5 Strategies for resolving destructive conflict

Unit IV Power, Politics and Organizational Culture

- 4.1 Power and Politics
- 4.1.1 The concept of Power
 - 4.1.2 Sources of Power
 - 4.2.3 Power and Politics
 - 4.2.4 Using power to manage effectively.
- 4.2 Organizational Culture
- 4.2.1 Dimensions
 - 4.2.2 Culture as a liability
 - 4.2.3 Ethical organizational culture
 - 4.2.4 Positive organizational culture.

Unit V Leadership, Change, Organizational Development and Job Stress

- 5.1 Leadership
- 5.1.1 Definition

- 5.1.2 Leadership Styles– Autocratic, Democratic, Laissez faire, Charismatic, Transformational, and Servant Leadership.
- 5.2 Change
 - 5.2.1 Importance
 - 5.2.2 Forces responsible for change
 - 5.2.3 Resistance to change
 - 5.2.4 Overcoming resistance to change
- 5.3 Organisational Development – Learning organisation.
- 5.4 Job stress
 - 5.4.1 Sources
 - 5.4.2 Effects
 - 5.4.3 Management.

Books for Reference

1. Stephen Robbins et al, Organizational Behaviour, Pearson, 13th Ed.
2. Davis and Newstrom, Human Behaviour at work .
3. Fred Luthans, Organizational Behaviour.

SEMESTER -- I

INTERNATIONAL FINANCIAL MANAGEMENT

Core : II

Hours : 6

Code : P18CM102

Credits : 5

Course Objectives

At the end of the course the students will be able to understand

1. The concept of international finance, trade and its theories.
2. Globalisation, Multinational firms and MNC's and international trade.
3. Foreign exchange exposures, its types and techniques
4. Foreign Direct Investment, International Cost of Capital and International Capital Budgeting.
5. Multinational Cash Management and International transfer pricing.

Unit – I

Financial Management in a Global Context and International Business

- 1.1 International Financial Management
 - 1.1.1 Introduction
 - 1.1.2 The Finance Function
 - 1.1.3 Recent Changes in Global Financial markets
- 1.2 International business
 - 1.2.1 Introduction
 - 1.2.2 Evolution
 - 1.2.3 Nature
 - 1.2.4 Balance of Payments- Components, Meaning of Surplus and Deficit in BOP
 - 1.2.5 Theories of International Trade
 - 1.2.6 Comparative advantage theory
 - 1.2.7 Absolute advantage theory
 - 1.2.8 Heckscher Ohlin theory
- 1.3 Gains from trade and terms of trade,
- 1.4 Barriers to International trade.

Unit – II

Multinational Corporations

- 2.1 Globalisation and Multinational firms
- 2.2 International monetary system
 - 2.2.1 Evolution
 - 2.2.2 Gold Standard
 - 2.2.3 Bretton Woods System
 - 2.2.4 Flexible Exchange rate regime

- 2.2.5 Current exchange rate arrangements
- 2.2.6 The Economic and Monetary Union (EMU)
- 2.3 MNC's and International trade
- 2.4 Merits and demerits of MNC's
- 2.5 WTO

Unit – III

Foreign Exchange Exposures

- 3.1 Measuring and Managing Economic exposure
- 3.2 Management of Translation and translation exposure
- 3.3 Distinction between transaction and translation exposure
- 3.4 Techniques of transaction exposure
- 3.5 Bid, Cross and Spread
- 3.6 Computation of bid/ ask spread.

Unit – IV Longterm Asset-Liability Management

- 4.1 Foreign Direct Investment
- 4.2 Types of Foreign Direct Investment
- 4.3 Foreign investment flows and Barriers
- 4.4 Cross Border Acquisitions
- 4.5 International Cost of Capital
- 4.6 Weighted average cost of capital
- 4.7 Cost of different sources of capital
 - 4.7.1 Cost of debt
 - 4.7.2 Cost of equity
 - 4.7.3 Cost of preferred stock
- 4.8 International Capital Budgeting, techniques- Payback, ARR, NPV and IRR.

Unit - V

Multinational Cash Management

- 5.1 Introduction
- 5.2 Objectives
- 5.3 Need and importance of multinational cash management
- 5.4 Types of multinational cash management
 - 5.4.1 Centralised Cash management
 - 5.4.2 Decentralised Cash management
- 5.5 Techniques of international cash management
- 5.6 Netting systems, Bilateral netting, Multilateral Netting
- 5.7 Transfer pricing in cash management
- 5.8 Impact on cash management.

Theory : 40 % Problems : 60 %

Books for Reference

1. Dr. Francis Cherunilam (2011) ,International Trade and export management, 20th edition, Himalayan Publishing House, Chennai.
2. C. Jeevanantham (2012), International Business, Sultan Chand and sons, New Delhi.
3. P. G. Apte, (2009), International Financial Management, Fifth Edition, Tata McGraw-Hill, New Delhi.
4. Dr. D. Joseph Anbarasu, Global financial Management, Anes Student edition.

SEMESTER – I

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Core : III

Hours : 6

Course Code : P18CM103

Credits : 4

Course Objectives

At the end of the course the students will be able to

1. Know about Process and functions of supply chain management and logistics system
2. Learn about Design and network in supply chain
3. Understand the Role of Internet Technologies in logistics management.
4. Understand the Transportation network and sourcing in logistics management.

Unit - I Introduction to Logistic Management

- 1.1 Definition,
- 1.2 Scope
- 1.3 Functions
- 1.4 Objectives
- 1.5 Integrated logistics management
- 1.6 Role of logistics in the supply chain
- 1.7 Logistics & customer service
- 1.8 Role of logistics in competitive strategy
- 1.9 Logistics organization and performance measurement
- 1.10 ERP
- 1.11 SAP
- 1.12 ORACLE

Unit- II Introduction to Supply Chain Management

- 2.1 Definition
- 2.2 Objectives
- 2.3 Importance
- 2.4 Decision phases
- 2.5 Process view
- 2.6 Competitive and supply chain strategies
- 2.7 Achieving strategies fit
- 2.8 Supply chain drivers
- 2.9 Obstacles
- 2.10 Framework
- 2.11 Facilities
- 2.12 Inventory

- 2.13 Transportation
- 2.14 Information
- 2.15 Sourcing
- 2.16 Modeling for supply chain

Unit - III Designing the Supply Chain Management

- 3.1 Designing the distribution network
- 3.2 Role of distribution
- 3.3 Factors influencing distribution
- 3.4 Design options
- 3.5 e – business and its impact
- 3.6 Distribution networks in practice
- 3.7 Networking design in the supply chain
- 3.8 Role of network
- 3.9 Factors affecting the networking design decisions
- 3.10 Modeling for supply chain.

UNIT- IV Reverse logistics and Containerization

- 4.1 Reverse logistic
 - 4.1.1 Scope
 - 4.1.2 Design
 - 4.1.3 e-logistic
 - 4.1.4 Logistics information system
 - 4.1.5 Application of IT in logistics
 - 4.1.6 Automatic identification technologies
 - 4.1.7 Bar coding, RFID technology
- 4.2 Containerization
 - 4.2.1 Concept
 - 4.2.2 Types
 - 4.2.3 Benefits
 - 4.2.4 Types of carriers – indirect & special carriers
 - 4.2.5 Role of intermediaries – shipping agents, brokers
 - 4.2.6 Freight management
 - 4.2.7 Route planning of ports, ICDs, CONCOR
 - 4.2.8 Global shipping options

Unit- V Transportation Network and Sourcing

- 5.1 Transportation
 - 5.1.1 Role of transportation
 - 5.1.2 Modes and their performance
 - 5.1.3 Transportation infrastructure and policies
 - 5.1.4 Design options and their Trade-off
 - 5.1.5 Tailored transportation

- 5.2 Sourcing
 - 5.2.1 In-house or Outsource
 - 5.2.2 3 PL and 4 PL
 - 5.2.3 GPS and GIS technology
 - 5.2.4 Supplier scoring and assessment
 - 5.2.5 Lean Management
 - 5.2.6 Lean Manufacturing
 - 5.2.7 Mass Customization

Books for Reference

1. Ailawadi C. Sathish&Rakesh Singh, Logistics Management, *Prentice Hall, India, 2005.*
2. Sunil Chopra and Peter Meindl, Supply Chain Management – Strategy, Planning and Operation PHI, 4th Edition, 2010.
3. Agrawal D K, Textbook of Logistics & Supply Chain Management, Macmillan India Ltd, 2003.

SEMESTER -I
ADVANCED COST ACCOUNTING

Core : IV
Hours : 6

Course Code : P18CM104
Credits : 4

Course Objective

1. To provide the students with an in-depth knowledge of various methods of costing

Unit – I Introduction to Costing, Job Costing and Batch costing

- 1.1 Introduction to cost accounting
- 1.2 Methods and technique of costing
- 1.3 Job Costing
 - 1.3.1 Objectives of Job order costing
 - 1.3.2 Importance of Job costing
 - 1.3.3 Procedures of Job order cost system
 - 1.3.4 Preparation of Job Sheet
- 1.4 Batch costing
 - 1.4.1 Computation of selling price
 - 1.4.2 Computation of economic batch quantity

Unit - II Joint Product and By-Products costing

- 2.1 Objectives of Joint cost analysis
- 2.2 Methods of Apportionment of joint Product
 - 2.2.1 Average unit cost method
 - 2.2.2 Physical unit method
 - 2.2.3 Survey method
 - 2.2.4 Contribution (or gross margin) method
 - 2.2.5 Standard cost method
 - 2.2.6 Sales value at split off Point method
 - 2.2.7 Sales value after further Processing method
- 2.3 Treatment of By – Products

Unit - III Process Costing

- 3.1 Features of Process Costing
- 3.2 Application of Process costing
- 3.3 Process Accounts with
 - 3.3.1 Abnormal Process loss
 - 3.3.2 Normal Process loss
 - 3.3.3 Abnormal Gains

- 3.4 Computation of inter process profit
- 3.5 Computation of Equivalent Production
 - 3.5.1 Weighted Average
 - 3.5.2 FIFO

Unit – IV Operating Costing/ Service Costing

- 4.1 Range of Application of operating costing method
- 4.2 Costing in service industry
 - 4.2.1 Costing in Hospital
 - 4.2.2 Costing in Hotel
 - 4.2.3 Costing in Transportation (Goods and Passenger)
 - 4.2.4 Costing in Power house

Unit – V Contract Costing

- 5.1 Basic features of contract costing
- 5.2 Costing Procedure
- 5.3 Treatment of cost of Plant and machinery
- 5.4 Work certified and Uncertified
- 5.5 Profit on uncompleted contracts
- 5.6 Escalation clause
- 5.7 Cost – Plus contracts
- 5.8 Preparation of Contract A/c

Part A - Theory Only (Part B and Part C) Problems

Books for Reference

1. S P JAIN K L NARANG, Cost Accounting ,Kalyani Publishers, Chennai 2007.
2. S.P Iyengar, Cost Accounting, Sultan Chand & Sons, 1990.
3. T.S.Reddy and Y.Hari Prasad Reddy, Cost Accounting, Margham Publication Chennai 2014.

SEMESTER-I
STRATEGIC MANAGEMENT

Elective : I
Hours : 6

Course Code : P18CM1:1
Credits : 4

Course Objective

At the end of the course, students shall be able to understand the Issues involved in the Strategic Management, appreciate the relevance in current management area.

Unit I Strategy

- 1.0 Concept of Strategy
- 1.1 Meaning of Strategy
- 1.2 Nature of Strategy
- 1.3 Essence of Strategy
- 1.4 Levels of Strategy
- 1.5 Importance of Strategy
- 1.6 Process of Strategy
- 1.7 Strategic Intent
- 1.8 Strategic Vision
- 1.9 Core values and Core purpose
- 1.10 Strategic Mission
- 1.11 Business definition
- 1.12 Business Objectives
- 1.13 Business Goals

Unit II Environmental Analysis

- 2.0 Environmental Analysis
- 2.1 Dimensions of External Environment
- 2.2 PESTLE Framework
- 2.3 McKinsey's 7S Framework
- 2.4 General Environment and organizations strategy
- 2.5 Environmental Scanning, Competitive Forces
- 2.6 Competitive environment
- 2.7 Porter's Five Forces Framework
- 2.8 Process for analysing external environment
- 2.9 Scenario planning, Internal Analysis
- 2.10 Types of Resources
- 2.11 The critical success factor
- 2.12 The value chain Framework
- 2.13 Quantitative and Qualitative assessment
- 2.14 comparison standards

Unit III Cost Concepts

- 3.0 Meaning of Cost
- 3.1 Causes and effects of High cost
- 3.2 changing Role of cost in different market conditions
- 3.3 The experience curve
- 3.4 Causes of experience curve effect
- 3.5 Additional considerations for using experience curve effect
- 3.6 Experience curve and competitive strategy
- 3.7 Applicability of experience curve
- 3.8 Limitation of experience curve
- 3.9 Role of Cost in Business Growth
- 3.10 Cost leadership
- 3.11 Differentiation
- 3.12 Concept
- 3.13 Types
- 3.14 Sources
- 3.15 Cost
- 3.16 Advantage and disadvantages
- 3.17 Concept of Focus

Unit IV Corporate Strategies and Alliances

- 4.0 Nature and scope of Corporate strategies
- 4.1 Nature of stability strategy
- 4.2 Expansion strategies
- 4.3 Intensification
- 4.4 Integration
- 4.5 International Expansion
- 4.6 Diversification
- 4.7 Related
- 4.8 Unrelated
- 4.9 Rationale for Diversification
- 4.10 Alternative Routes to Diversification
- 4.11 Mergers and Acquisition
- 4.12 Reasons for Mergers and Acquisition
- 4.13 Failurefor Mergers and Acquisition
- 4.14 Steps in Mergers and Acquisition
- 4.15 Strategic Alliances
- 4.16 Reasons
- 4.17 Types
- 4.18 Benefits
- 4.19 Cost and risk
- 4.20 Factors contributing to successful Alliances
- 4.21 Planning for a successful alliance

- 4.22 Retrenchment strategy
- 4.23 Turnaround strategy
- 4.24 survival strategy
- 4.25 liquidation strategy

Unit V Structural Dimensions

- 5.0 Meaning of Structural Dimensions
- 5.1 Matching organizational structure to strategy
- 5.2 Determinants of organizational structure
- 5.3 Structure proposition
- 5.4 The stages models of structure
- 5.5 Forms of organization
- 5.6 Benefit and limitation
- 5.7 Structuring Multinational organizations
- 5.8 Behavioural Dimensions
- 5.9 Leadership
- 5.10 Roles
- 5.11 Concept
- 5.12 Functions
- 5.13 Styles
- 5.14 Corporate culture
- 5.15 Ethics and values
- 5.16 Control
- 5.17 Strategic Control process
- 5.18 Methods of control
- 5.19 Problems of control system
- 5.20 Process of Evaluation
- 5.21 Business Portfolio Analysis
- 5.22 Qualitative Factors
- 5.23 Balanced scorecard
- 5.24 Structure of Evaluation

Book for Reference

John A Pearce II and Richard B Robinson, Strategic Management, Tata McGraw Hill.

SEMESTER –I

AUDITING

Elective : I
Hours : 6

Course Code : P18CM1:2
Credits : 4

Course Objective

At the end of the course the students shall gain knowledge about the basic principles of auditing and its classification and will be able to distinguish between internal check, control and audit and will be aware of Electronic Data Processing Audit and Investigation.

Unit I Introduction

- 1.1 Definition
- 1.2 Objective of an Audit
- 1.3 Role of auditors in detecting errors and frauds
- 1.4 Basic principles governing an audit
- 1.5 scope and procedures
- 1.6 Advantages and limitations
- 1.7 Classification of audit.

Unit II Internal Check, Verification of Assets and Liabilities

- 2.1 Internal check
- 2.2 Internal control and Internal Audit
- 2.3 Introduction of vouching
- 2.4 Objectives
- 2.5 Importance of vouching
- 2.6 Verification of assets and liabilities.

Unit III Investigation and EDP Audit

- 3.1 Investigation
- 3.2 Professional ethics
- 3.3 Misconduct
- 3.4 General approach to EDP based audit
- 3.5 Approaches to EDP audit
- 3.6 Special techniques for auditing in an EDP environment.

Unit IV Audit of Limited Companies-Company Auditor

- 4.1 Appointment
- 4.2 Qualification
- 4.3 Rights, duties and liabilities of company auditor

- 4.4 Types of audit reports
- 4.5 Audit certificate (based on recent amendment with respective Company Act 2013)

Unit V New Areas of Auditing

- 5.1 New areas of Auditing
- 5.2 Cost Audit
- 5.3 Management Audit
- 5.4 Human Resource Audit
- 5.5 Operational Audit
- 5.6 Forecast Audit
- 5.7 Social Audit
- 5.8 Tax Audit
- 5.9 Forensic Audit
- 5.10 Environmental (Green) Audit.
- 5.11 Health and safety audit

Books for Reference

- 1. B.N.Tandon, Auditing .Sultan Chand & Sons
- 2. S.K.Basu, Auditing concepts and techniques, Pearson Ed.
- 3. Study materials of The Institute of Chartered Accountants of India on Auditing

SEMESTER - II
RESEARCH METHODOLOGY

Core : V
Hours : 6

Course Code: P18CM205
Credits : 5

Course Objectives

At the end, the students will be able to

1. Gain knowledge on Research Process, Research Design and Report Writing
2. Understand the concepts of Sampling Distribution
3. Perform Parametric Test
4. Perform Non-Parametric Test
5. Application of Correlation, Regression and Time Series
6. Well versed in using SPSS and E-views for the analysis of data

Unit I : Introduction to Research Methodology

- 1.1 Nature and Scope of Business Research
- 1.2 Identification of Research problem
- 1.3 Research objective
- 1.4 Type of Business Research
- 1.5 Research Process
- 1.6 Research Designs
 - 1.6.1 Exploratory
 - 1.6.2 Descriptive
 - 1.6.3 Experimental and Observational
- 1.7 Planning and formulation of Research Projects
- 1.8 Preparation of questionnaire and schedules
- 1.9 Measurement problem and scaling techniques
- 1.10 Collection of data
 - 1.10.1 Primary and Secondary data
- 1.11 Purpose of research application
- 1.12 Type of research reports
- 1.13 Structure of Research report
- 1.14 Report writing and Presentation

Unit II Sampling Distribution and Estimation

- 2.1 Introduction to sampling distributions
- 2.2 Sampling distribution of mean and proportion
- 2.3 Application of central limit theorem
- 2.4 Sampling techniques
- 2.5 Estimation

- 2.5.1 Point and Interval estimates for population parameters of large sample and small samples
- 2.5.2 Determining the sample size

Unit III Introduction to Statistical Software

- 3.1 Understanding of Data
- 3.2 Data Management
- 3.3 Use of Statistical software to get descriptive statistics
- 3.4 Recoding variables
- 3.5 Analysis of data
 - 3.5.1 Coding
 - 3.5.2 Editing and tabulation of data
- 3.6 Various kinds of charts and diagrams used in data analysis
- 3.7 Application of statistical techniques for analysing the data

Unit IV Application of Parametric and Non-Parametric Test

- 4.1 Parametric Test
 - 4.1.1 Hypothesis testing: one sample and two sample tests for means and proportions of large samples (z-test),
 - 4.1.2 One sample and two sample tests for means of small samples (t-test),
 - 4.1.3 F-test for two sample standard deviations
 - 4.1.4 ANOVA one and two way
- 4.2 Non-Parametric Test
 - 4.2.1 Chi-square test for single sample standard deviation
 - 4.2.2 Chi-square tests for independence of Attributes and goodness of fit
- 4.3 Sign test for paired data.
- 4.4 Rank sum test
 - 4.4.1 Kolmogorov-Smirnov – test for goodness of fit, comparing two populations
 - 4.4.2 Mann – Whitney U test and Kruskal Wallis test
 - 4.4.3 One sample run test

Unit V Correlation, Regression and Time Series Analysis

- 5.1 Correlation analysis
- 5.2 Estimation of regression line
- 5.3 Time series analysis

Text : Lab Manual of the Department

Books for Reference

1. Cooper, Schindler Business Research Methods, Tata McGraw hill.
2. C.R.Kothari, Research Methodology, New age International Publication, second Edition 2004.
3. Richard I. Levin, David S. Rubin, Statistics for Management, Pearson Education
4. Srivatsava TN and Shailaja Rego, Statistics for Management, Tata McGraw Hill.
5. N. D. Vohra, Business Statistics, Tata McGraw Hill.

PRACTICAL 80 %, THEORY 20%

SEMESTER - II
ENTERPRISE RESOURCE PLANNING

Core : VI
Hours : 6

Course Code : P18CM206
Credits : 5

Course Objectives

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

1. gain insight on the evolution and basics of ERP and its technologies.
2. secure an understanding on the Modules related to ERP.
3. obtain an awareness on the implementation of ERP.
4. acquire knowledge on the players in the ERP market.
5. develop a familiarity with the basics of Oracle ERP.

Unit I ERP Basic Concept and Related Technologies

- 1.1. EPR Basic Concepts
 - 1.1.1 ERP- Meaning and Definition
 - 1.1.2 Evolution and Growth
 - 1.1.3 Conceptual Framework of ERP
 - 1.1.4 Benefits
 - 1.1.5 Limitations
 - 1.1.6 Scope
- 1.2. ERP Technologies
 - 1.2.1 Business Process Reengineering(BPR)
 - 1,2.2 Management Information System (MIS)
 - 1.2.3 Decision Support System (DSS)
 - 1.2.4 Executive Support System (ESS)
 - 1.2.5 Data Warehousing
 - 1.2.6 Data Mining
 - 1.2.7 Online Analytical Processing (OLAP)
 - 1.2.8 Supply Chain Management (SCM)
 - 1.2.9 Customer Relationship Management (CRM)

Unit II ERP Modules

- 2.1 Finance Module
- 2.2 Production Planning, Control and Maintenance
- 2.3 Sales& Distribution
- 2.4 HRM
- 2.5 Inventory Control
- 2.6 Quality Management.

Unit III ERP Implementation

- 3.1 Approaches to the study of ERP implementation
- 3.2 Perspectives in ERP implementation
- 3.3 Challenges to implementation
- 3.4 Implementation strategy
- 3.5 Phases in ERP implementation
- 3.6 Benefits realized in ERP implementation
- 3.7 Reasons for failure of ERP implementation

Unit IV : ERP Market

- 4.1 Marketplace Dynamics
- 4.2 SAP AG
- 4.3 Oracle
- 4.4 BAAN Company
- 4.5 PeopleSoft
- 4.6 JD Edwards
- 4.7 QADInc
- 4.8 SSA Global
- 4.9 Lawson Software
- 4.10 Epicor
- 4.11 Ramco Systems

Unit V : Basics of Oracle

- 5.1 Relational Database
- 5.2 History of Oracle Database
- 5.3 Oracle Database Architecture
- 5.4 Oracle Database Storage Structures
- 5.5 Oracle Database Memory Structures
- 5.6 Application and Networking Architecture.

Books for Reference

- 1. Alexis Leon, ERP Demystified, Tata McGraw Hill, 2nd Edition, 2007.
- 2. Mary Summer, Enterprise Resource Planning, Prentice Hall, 2004.
- 3. Ellen Monk, Bret Wagnor, Concepts in Enterprise Resource Planning, 2nd Edition, 2005.
- 4. Parthasarathy, Enterprise Resource Planning- Managerial and Technical Perspective, New Age International Ltd Publishers, 1st Edition, 2007.
- 5. Vinod Kumar Garg, Venkitakrishnan, Enterprise Resource Planning- Concepts and Planning. PHI Learning Pvt Ltd, 2nd Edition, 2011.

SEMESTER - II
PROJECT APPRAISAL, PLANNING AND CONTROL

Core : VII
Hours : 6

Course Code : P18CM207
Credits : 5

COURSE OBJECTIVES

At the end of the course the students will gain an understanding about

1. the concepts and importance of capital investments, capital budgeting and the generation of project ideas and screening
2. the concept of technical analysis
3. the investments criteria
4. the Social Cost Benefit Analysis and Multiple Projects and constraints
5. the project management and the network techniques for project management

Unit I Project Planning Overview and Generation and Screening of Project Ideas

- 1.0 Meaning of Capital investments
- 1.1 Definition of Capital Investments
- 1.2 Types
- 1.3 Importance
- 1.4 Difficulties

- 1.1 Capital budgeting
 - 1.1.1 Phases of capital Budgeting
 - 1.1.2 Objectives of Capital Budgeting
 - 1.1.3 Facets of Project Analysis
 - 1.1.4 Common Weaknesses in Capital Budgeting.
- 1.2 Decision - making
 - 1.2.1 Levels of Decision Making
 - 1.2.2 Key Issues in Major Investment Decisions
- 1.3 Generation and screening of project ideas
 - 1.3.1 Generation of ideas
 - 1.3.2 Monitoring the environment
 - 1.3.3 Corporate Appraisal
 - 1.3.4 Tools for identifying Investment Opportunities
 - 1.3.5 Scouting of Project Ideas
 - 1.3.6 Preliminary Screening
 - 1.3.7 Project Rating index
 - 1.3.8 Sources of Positive Net Present Value

Unit II Technical Analysis

- 2.1 Manufacturing Process/ Technology
- 2.2 Technical Arrangements
- 2.3 Material Inputs and Utilities
- 2.4 Product Mix
- 2.5 Plant Capacity
- 2.6 Location and Size
- 2.7 Machineries and Equipments
- 2.8 Structures and Civil Works
- 2.9 Environmental Aspects
- 2.10 Project Charts and Layouts
- 2.11 Schedule of Project Implementation
- 2.12 Need for Considering Alternatives

Unit III Investment Criteria

- 3.1 Meaning of Investment criteria
- 3.2 Net Present Value
- 3.3 Benefit Cost Ratio (or Profitability Index)
- 3.4 Internal Rate of Return
- 3.5 Urgency
- 3.6 Payback Period
- 3.7 Accounting Rate of Return
- 3.8 Assessment of Various Methods
- 3.9 Investment Evaluation in Practice

Unit IV Social Cost Benefit Analysis and Multiple Projects and Constraints

- 4.0 Rationale for SCBA
- 4.1 UNIDO Approach
- 4.2 Net Benefit in Terms of Economic (Efficiency) Prices
- 4.3 Measurement of the Impact on Distribution
- 4.4 Savings Impact and its Value
- 4.5 Income Distribution Impact
- 4.6 Adjustment for Merit and Demerit Goods
- 4.7 Little Mirrlees Approach
- 4.8 Shadow Prices
- 4.9 SCBA by Financial Institutions
- 4.10 Public Sector Investment Decisions in India
 - 4.1.1 Meaning of Constraints
 - 4.1.2 Method of Ranking
 - 4.1.3 Mathematical Programming Approach
 - 4.1.4 Linear Programming Model

4.1.5 Integer Linear Programming Model

4.1.6 Goal Programming Model

Unit – V Implementation - Project Management and Network Techniques for Project Management

- 5.0 Forms of Project Organisation
- 5.1 Project Planning
- 5.2 Project Control
- 5.3 Human Aspects of Project Management
- 5.4 Pre-requisites for Successful Project Implementation
- 5.5 Essence of Project Management
 - 5.1.0 Development of Project Network
 - 5.1.2 Time Estimation
 - 5.1.3 Determination of the Critical Path
 - 5.1.4 Scheduling when Resources are Limited
 - 5.1.5 PERT Model
 - 5.1.6 CPM Model
 - 5.1.7 Network Cost System

Theory – 60 %, Problems – 40 %

Books for Reference

1. Prasanna Chandra, Project : Planning, Analysis, Selection, Financing, Implementation and Review, Tata McGraw Hill
2. Prasanna Chandra, Project: Preparation, Appraisal and Implementation, Tata McGraw Hill

SEMESTER – II
DIRECT TAX LAW AND PRACTICE

Elective : II
Hours : 6

Course Code: P18CM2:2
Credits : 4

Course Objectives

At the end of the course, students shall be able to

1. Explain the concepts of taxation in general and income tax in particular
2. Calculate the taxable income under different source of income.
3. Understand the calculation of gross total income
4. Compute total taxable income and tax liability
5. Prepare form 16 and online filing of tax return.

Unit I Basic Concepts of Income Tax

- 1.1.1 Cannon of taxation
- 1.1.2 Assesses -Various types of Assesses
- 1.1.3 Assessment year and Previous year
- 1.1.4 Incomes exempted u/s 10
- 1.1.5 Determination of the residential status of individual
- 1.1.6 Computation of Taxable Income for ordinary resident, not ordinary resident and non-resident
- 1.2.1 The features of salary
- 1.2.2 Incomes chargeable under section 15
- 1.2.3 Different forms of salary
- 1.2.4 Advance salary and Arrear salary
- 1.2.5 Computation of Taxable Gratuity
- 1.2.6 Computation of Taxable Pension
- 1.2.7 Computation of Taxable Leave Salary
- 1.2.8 Provident fund and its calculation
- 1.2.9 Profit in lieu of salary
- 1.2.10 Allowances - Taxable and Non-Taxable
- 1.2.11 Perquisites –Taxable and Non-Taxable
- 1.2.12 Deductions u/s 16 .

Unit II Computation of Income under House Property

- 2.1.1 Basic terms
- 2.1.2 Expected Rent
- 2.1.3 Fair Rental Value
- 2.1.4 Market Value
- 2.1.5 Actual Rent
- 2.1.6 Standard Rent

- 2.1.7 Unrealized Rent
- 2.1.8 Vacancy period and Arrear rent
- 2.1.9 Gross Annual Value
- 2.1.10 Net Annual Value
- 2.1.11 Standard Deduction
- 2.1.12 Sub letting
- 2.1.13 Composite Rent
- 2.1.14 Municipal tax and Municipal value ratio
- 2.1.15 Notional value
- 2.1.16 Self-occupied house and Let out house
- 2.1.17 Deemed to be let out house
- 2.1.18 Taxable Income under the head house property
- 2.1.19 Exempted Income under the head house property
- 2.1.20 Calculation of Gross Annual Value and Net Annual Value
- 2.1.21 Treatment of partly let out and partly self-occupied house
- 2.1.22 Treatment of part of the year let out and part of the year self-occupied
- 2.1.23 Unrealized rent and arrear rent recovered
- 2.1.24 Calculation of income from house property

Unit III Computation of Income under Business or Profession

- 3.1.1 Basic terms
- 3.1.1 Business and Profession
- 3.1.2 Vocation, Speculation business and Illegal business
- 3.1.3 Bad debt recovered allowed earlier
- 3.1.4 Bad debt recovered disallowed earlier
- 3.1.5 Under valuation of stock and over valuation of stock
- 3.1.6 Taxable incomes under the head income from Business and Profession
- 3.1.7 Various methods of accounting
- 3.1.8 The losses, which are incidental to business
- 3.1.9 Expenses which are expressly allowed and disallowed
- 3.1.10 Calculation of undervaluation and over valuation of stock
- 3.1.11 Calculation of Income from Business
- 3.1.12 Rules for calculating Income from Profession
- 3.1.13 Calculation of Income from Profession

Unit IV Computation of Income under Capital Gains

- 4.1.1 Basic terms
- 4.1.2 Income from Capital Gains
- 4.1.3 Capital assets - Short term and Long-term capital asset
- 4.1.4 Short term capital gain and Long-term capital gain
- 4.1.5 Transfer and Slump sale
- 4.1.6 Cost of acquisition and Cost of improvement
- 4.1.7 Indexed cost

- 4.1.8 Treatment of depreciable asset while calculating capital gains
- 4.1.9 Various assets, which are not included in capital assets
- 4.1.10 The capital gains exempted u/s 10
- 4.1.11 Various exemption u/s 54,54B,54D,54EC, 54ED,54F,54G and 54H
- 4.1.12 Calculation of income under capital gains

Computation of Income under Other Sources

- 4.2.1 General income u/s 56 (1)
- 4.2.2 Specific income u/s 56(2)
- 4.2.3 Deductions
- 4.2.4 The treatment of casual incomes
- 4.2.5 Various kinds of securities and their tax treatment
- 4.2.6 Grossing up of income and its calculation
- 4.2.7 Computation of income from Other Source

Unit V Computation of Taxable Income and Tax Liability

- 5.1.1 Computation of Gross Total income
- 5.1.2 Deduction under Sec.80
- 5.1.3 Set off and Carry forward of Losses
- 5.1.4 Relief and Rebate
- 5.1.5 Assessment of Taxable Income and Tax liability for Individuals
- 5.1.6 Form 16
- 5.1.7 Data Calculation Sheet & IT Calculation Sheet
- 5.1.8 Online Filing of Tax return.

[Theory – 25 % (Section A), Problems – 75 % (Section B & C)]

Books For Reference

1. V.K. Singhanian and KapilSinghanian, (2018),Direct Tax Law and Practice, Delhi,Taxman Allied Publishers (P) Ltd.
2. T.S.Reddy and Y.Hari Prasad Reddy, (2018), Income Tax – Theory ,Law and Practice, Chennai, Margham Publications .

SEMESTER II
TEACHING AND RESEARCH APTITUDE

NMEC – I
Hours : 2

Course Code : P18CM2E1
Credits : 2

Course Objectives

1. To gain insight into the teaching and research aptitude
2. To understand and identify cognitive abilities. Cognitive abilities include comprehension, analysis, evaluation, understanding the structure of arguments and deductive and inductive reasoning.
3. To have a general awareness and knowledge of sources of information.
4. To aware of interaction between people, environment and natural resources and their impact on quality of life.

Unit I

- 1.1 Teaching Aptitude
 - 1.1.1 Teaching nature
 - 1.1.2 Objectives
 - 1.1.3 Characteristics and
 - 1.1.4 Basic requirements
 - 1.1.5 Learner's characteristics
 - 1.1.6 Factors affecting teaching
 - 1.1.7 Methods of teaching
 - 1.1.8 Teaching aids
 - 1.1.9 Evaluation systems
- 1.2 Research Aptitude
 - 1.2.1 Research Meaning,
 - 1.2.2 Characteristics and
 - 1.2.3 Types
 - 1.2.4 Steps of research
 - 1.2.5 Methods of research
 - 1.2.6 Research Ethics
 - 1.2.7 Paper, article, workshop, seminar, conference and symposium
 - 1.2.8 Thesis writing its characteristics and format

Unit II

- 2.1 Reading Comprehension
- 2.2 Communication
 - 2.2.1 Nature
 - 2.2.2 Characteristics
 - 2.2.3 Types
 - 2.2.4 Barriers
 - 2.2.5 Effective classroom communication

Unit III

- 3.1 Reasoning (Including Mathematical)
 - 3.1.1 Number series
 - 3.1.2 Letter series
 - 3.1.3 Codes
 - 3.1.4 Relationships
 - 3.1.5 Classification
- 3.2 Logical Reasoning
 - 3.2.1 Understanding the structure of arguments
 - 3.2.2 Evaluating and distinguishing deductive and inductive reasoning
 - 3.2.3 Verbal analogies
 - 3.2.4 Word analogy
 - 3.2.5 Applied analogy
 - 3.2.6 Verbal classification
 - 3.2.7 Reasoning Logical Diagrams
 - 3.2.8 Simple diagrammatic relationship
 - 3.2.9 Multi diagrammatic relationship
 - 3.2.10 Venn diagram
 - 3.2.11 Analytical Reasoning

Unit IV

- 4.1 Data Interpretation
 - 4.1.1 Sources of data
 - 4.1.2 Acquisition of data
 - 4.1.3 Interpretation of data
 - 4.1.4 Quantitative data
 - 4.1.5 Qualitative data
 - 4.1.6 Graphical representation
 - 4.1.7 Mapping of data
- 4.2 Information and Communicating Technology (ICT)
 - 4.2.1 ICT - Meaning,
 - 4.2.2 Advantages
 - 4.2.3 Disadvantages
 - 4.2.4 Uses
 - 4.2.5 General abbreviations
 - 4.2.6 Terminology
 - 4.2.7 Basics of internet and e-mailing.

Unit V

- 5.1 People and Environment
 - 5.1.1 People and environment interaction
 - 5.1.2 Sources of pollution
 - 5.1.3 Pollutants and their impact on human life

- 5.1.4 Exploitation of natural and energyresources
- 5.1.5 Natural hazards
- 5.1.6 Mitigation
- 5.2 Higher Education System
 - 5.2.1 Governance Polity and Administration
 - 5.2.2 Structure of the institutions for higher learning and research in India
 - 5.2.3 Formal and distance education
 - 5.2.4 Professional/technical education
 - 5.2.5 General education
 - 5.2.6 Value education governance, polity and administration
 - 5.2.7 Concept of institutions and their interactions.

Reference

1. Dr. M S Ansari & RPH Editorial Board (Author) – “CBSE UGC-NET Teaching and Research Aptitude- Paper -I” - Ramesh Publishing House (2015), New Delhi.
2. R.S. Aggarwal (Author) – “A Modern Approach to Verbal & Non-Verbal Reasoning” - S.Chand (2017), New Delhi.
3. Editorial Board Arihant express – “UGC NET/JRF/SLET General Paper-1 Teaching & Research Aptitude” - Arihant Publication (2017), New Delhi.
4. Editorial Board PratiyogitaDarpan (Author) – “UGC NET/JRF Exam. Solved Papers Teaching & Research Aptitude (General Paper - I)” – Upkar Prakashan Publication (2015), New Delhi.

SEMESTER – III

SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT – I

Core : VIII

Hours : 6

Course Code : P18CM308

Credits : 4

Course Objective

At the end of the course, students shall be able to learn the dynamics and SAPM and apply the techniques.

Unit - I Investment Scenario

- 1.1 Concept of investment
- 1.2 Investment objectives and constraints
- 1.3 Security and Non – security forms of investment
- 1.4 Concept of risk and return.

Unit –II Fundamental Analysis

- 2.1 Objectives and belief of fundamental analysis
- 2.2 Importance of economic analysis
- 2.3 Economic forecasting methods
- 2.4 Importance of industry analysis
- 2.5 Key characteristics in industry analysis
- 2.6 Industry life cycle
- 2.7 Techniques for evaluating relevant industry factors
- 2.8 Company analysis

Unit- III Technical Analysis

- 3.1 Concept of technical analysis
- 3.2 Dow theory
- 3.3 Types of charts
- 3.4 Perspective on technical analysis
- 3.5 Advanced technical tools
- 3.6 Efficient market hypothesis (EMH)
 - 3.6.1 Concept of efficiency of stock markets
 - 3.6.2 Forms of EMH

Unit- IV Valuation Models

- 4.1 Equity Stock valuation models
- 4.2 Dividend capitalization models

4.3 Earning capitalization models and other models

Unit –V Valuation of Fixed Income Investments

5.1 Types of Bonds

5.2 Bond return and prices

5.3 Bond risks

5.4 Duration

5.5 Volatility

5.6 Immunization

Theory 25 %, Problem 75 %

Books for References

1. Prasanna Chandra, Investment analysis and Portfolio Management, Tata Mcgrawhill.
2. V. K. Bhalla, Investment Management – Security analysis and Portfolio Management, S. Chand.

SEMESTER - III
INDIAN FINANCIAL MARKETS

Core : IX
Hours : 6

Course Code : P18CM309
Credits : 4

Course Objectives

1. To Understand the Concepts of Indian Financial System and its Components
2. To become familiar about the functioning of Various Financial Markets

Unit I An Overview of the Indian Financial System

- 1.1.0 Introduction and features of Financial System
 - 1.1.1 Function of Financial System
 - 1.1.2 Structure of Indian Financial System
 - 1.1.3 Phases of Indian Financial System
- 1.2.0 Financial Sector Reforms in Indian Financial System
 - 1.2.1 Reforms in the policies of the Financial Sector
 - 1.2.2 Reforms in the New Issue Market and Stock Market
 - 1.2.3 Reforms in the Government Securities Market
 - 1.2.4 Reforms relating to Modernization in Banks
 - 1.2.5 Reforms for globalization of financial markets
 - 1.2.6 Demonetization and its impact on Financial system

Unit II Regulating Framework of Stock Market

- 2.1. Securities Contract (Regulation) Act 1956
 - 2.1.1 Important provisions under the Act
 - 2.1.2 Definition of Stock Exchange
 - 2.1.3 Recognition of Stock Exchange
 - 2.1.4 Recognized Stock Exchanges
 - 2.1.5 Withdrawal of recognition
 - 2.1.6 Corporatization and Demutualization
- 2.2.0 SEBI (Securities and Exchange Board of India)
 - 2.2.1 Establishment of SEBI
 - 2.2.2 Organizational Structure of SEBI
 - 2.2.3 Objectives
 - 2.2.4 Powers and Function of SEBI
 - 2.2.5 Investor Protection
 - 2.2.6 Model Code of Conduct
 - 2.2.7 Investors grievances
 - 2.2.8 SEBI and Reforms in primary Securities Market
 - 2.2.9 SEBI and Reforms in Secondary Securities Market
 - 2.2.10 SEBI Failure in Investor Protection

- 2.2.11 Ombudsman
- 2.2.12 Investor Education and Investor's Protection Fund
- 2.2.13 SAT

Unit III Financial Markets

- 3.1.1 Features of Financial Markets
- 3.1.2 Types of Financial Markets
- 3.2.0 Money Market
 - 3.2.1 Definition and Features
 - 3.2.2 Structure of Money Market
 - 3.2.3 Money Market Instruments
 - 3.2.4 T-Bills, Call market, Commercial Paper, Bill Market, Repo and Reverse Repo - Certificate of Deposits, Discount Market, Market for Financial Guarantees.
 - 3.2.5 Role of DFHI and STCI
- 3.3.0 Debt Market
 - 3.3.1 Features of Debt Market
 - 3.3.1 Types of Debt Market
 - 3.3.2 Debt Market Instruments
 - 3.3.3 Government Securities
 - 3.3.4 Public Sector Bonds
 - 3.3.5 Private Sector Bonds
 - 3.3.6 Role of RBI in Regulating Money market and Debt Market

Unit IV Capital Market

- 4.1.1 Features
- 4.1.2 Types of Capital Markets
- 4.1.3 New Issue Market
- 4.1.4 Features
- 4.1.5 Functions of NIM
- 4.1.6 Listing of Securities and Procedures for Listing
- 4.1.7 Issue Mechanism
- 4.1.8 Green Shoe Option and Stock option
- 4.1.9 Guidelines regarding Stock Option
- 4.1.10 Application Supported Blocked Amount (ASBA)
- 4.1.11 SEBI's Guidelines for IPOs
- 4.1.12 Intermediaries in NIM
- 4.1.13 Recent Trends in NIM

Unit V Secondary Market

- 5.1.1 Features
- 5.1.2 Functions
- 5.1.3 Various Stock Markets in India – BSE – NSE – OTCEI – NCDEX
- 5.1.4 Procedure for Trading in Stock market

- 5.1.5 Depository System
- 5.1.6 Objectives
- 5.1.7 Depository Process
- 5.1.8 Benefits of Depository System
- 5.1.9 Dematerialization and Rematerialization
- 5.1.10 National Securities Depository Ltd (NSDL)
- 5.1.11 Central Depository Services (India) Ltd.(CDSL)
- 5.1.12 Legal Control of Stock Exchanges in India
- 5.1.13 Recent Developments in the Secondary Market

Books for Reference

1. PreetiSingh,“Dynamics of Indian Financial System-Markets, Institutions & Services”, Ane Books Pvt.Ltd.
2. H.R.Machiraju , “Indian Financial System”, Vikas Publishing House Pvt Ltd.
3. P.N.Varshney&D.k.Mittal , “Indian Financial System”, Sultan Chand &sons.
4. M.Y.Khan, “Indian Financial System”, Tata McGraw Hill Education Pvt.Ltd.
5. Dr.S.Gurusamy – “Financial Markets & Institutions”, Vijay Nicole Imprints Pvt.Ltd.

SEMESTER – III
BUSINESS ANALYTICS AND INTELLIGENCE

Core : X

Hours : 6

Course Code : P18CM310

Credits : 5

Course Objectives

The course is designed to provide in-depth knowledge of handling data and Business Analytics' tools that can be used for fact-based decision-making. At the end of the course, the students will be able to

1. Understand the role of business analytics within an organization.
2. Analyse data using statistical and data mining techniques and understand relationships between the underlying business processes of an organization.
3. Use decision-making tools/operations research techniques.
4. Use advanced analytical tools to analyse complex problems under uncertainty.
5. Manage business processes using analytical and management tools.

Unit I Business Statistics

- 1.1 Data
 - 1.1.1 Types of data
 - 1.1.2 Data Visualization
 - 1.1.3 Data summarization methods
 - 1.1.3.1 Tables and Graphs
 - 1.1.3.2 Charts: Histograms - Frequency distributions
- 1.2 Relative frequency measures of central tendency and dispersion
- 1.3 Box Plot
- 1.4 Chebychev's Inequality on relationship between the mean and the standard deviation of a probability distribution
- 1.5 Basic probability concepts
- 1.6 Conditional probability
- 1.7 Bayes Theorem
- 1.8 Probability distributions
- 1.9 Continuous and discrete distributions
- 1.10 Sequential decision-making

UNIT II Predictive Analytics

- 2.1 Simple linear regression
 - 2.1.1 Coefficient of determination
 - 2.1.2 Significance tests

- 2.1.3 Residual analysis
- 2.1.4 Confidence and Prediction intervals
- 2.2 Multiple linear regression
 - 2.2.1 Coefficient of multiple coefficient of determination
 - 2.2.2 Interpretation of regression coefficients
- 2.3 Categorical variables
- 2.4 Heteroscedasticity
- 2.5 Multi-collinearity
- 2.6 Outliers
- 2.7 Autoregression and Transformation of variables
- 2.8 Logistic and Multinomial Regression
 - 2.8.1 Logistic function
 - 2.8.2 Estimation of probability using logistic regression
 - 2.8.3 Deviance
 - 2.8.4 Wald Test
 - 2.8.5 Hosmer Lemshow Test
- 2.9 Forecasting
 - 2.9.1 Moving average
 - 2.9.2 Exponential smoothing
 - 2.9.3 Trend
 - 2.9.4 Cyclical and seasonality components
 - 2.9.5 ARIMA (autoregressive integrated moving average)
- 2.10 Application of predictive analytics in retail direct marketing
- 2.11 Health care
- 2.12 Financial services
- 2.13 Insurance
- 2.14 Supply chain

Unit III Optimization Analytics

- 3.1 Introduction to Operations Research (OR)
- 3.2 linear programming (LP)
- 3.3 Formulating decision problems using linear programming
- 3.4 Interpreting the results and sensitivity analysis
- 3.5 Multi-period LP models
- 3.6 Applications of linear programming in product mix
 - 3.6.1 Blending
 - 3.6.2 Cutting stock
 - 3.6.3 Transportation
 - 3.6.4 Assignment
 - 3.6.5 Scheduling
- 3.7 Planning and revenue management problems
- 3.8 Network models and project planning

- 3.9 Integer Programming (IP) problems
 - 3.9.1 Mixed-integer and zero-one programming
 - 3.9.2 Applications of IP in capital budgeting
 - 3.9.3 Location decisions
 - 3.9.4 Contracts

Unit IV Multi - Criteria Decision Making (MCDM) techniques

- 4.1 Goal Programming (GP)
- 4.2 Analytic hierarchy process (AHP)
- 4.3 Applications of GP and AHP in solving problems with multiple objectives
- 4.4 Non-linear programming
- 4.5 Portfolio theory

Unit V Stochastic Models

- 5.1 Introduction to stochastic models
- 5.2 Markov models
- 5.3 Classification of states
- 5.4 Steady-state probability estimation
- 5.5 Market share estimation and Customer lifetime value estimation Poisson process
- 5.6 Cumulative Poisson process - Applications of Poisson and cumulative Poisson in operations
- 5.7 Marketing and insurance Renewal theory
- 5.8 Applications of renewal theory in operations and supply chain management Markov decision process
- 5.8 Applications of Markov decision process in sequential decision-making

Theory 40%, Problems 60%

Books for Reference

1. Marc J. Schniederjans, Dara G. Schniederjans and Christopher M. Starkey, Business Analytics Principles, Concepts, and Applications What, Why, and How, Pearson Publication.
2. James R. Evans, Business Analytics with PHStat, University of Cincinnati, Pearson Publication, 2nd Edition, 2013.

SEMESTER – III
FINANCIAL ENGINEERING – I

CORE : XI

Hours : 6

Course Code : P18CM311

Credits : 5

Course Objective

At the end of the course, students shall be able to learn about

1. Risk and techniques and tools of managing risk
2. Derivatives market
3. Futures market
4. Currency futures
5. Interest rate futures and index futures

Unit I Risk and Management of risk

- 1.1 Introduction about risk
- 1.2 Meaning of Risk
- 1.3 Types of Risk
- 1.4 Managing the risk
- 1.5 Cost of risk
- 1.6 Risk management process
- 1.7 Risk management techniques
- 1.8 Risk management tools

Unit II Derivatives Market

- 2.1 Introduction to derivatives
- 2.2 History of derivatives
- 2.3 Classification of derivatives
- 2.4 Features of derivatives
- 2.5 Participants in derivatives market
- 2.6 Mechanics of derivatives market.

Unit III Futures markets

- 3.1 Introduction to Futures markets
- 3.2 History of future markets
- 3.3 Meaning and operation of futures
- 3.4 Difference between futures and forward
- 3.5 Clearing house mechanism
- 3.6 Types of margin
- 3.7 Orders in future market
- 3.8 Settlement procedure.

Unit IV Currency futures

- 4.1 Relationship between the Future price and cash price
- 4.2 Hedgeable and Non Hedgeable Risk
- 4.3 Optimal hedging ratio
- 4.4 Speculation
- 4.5 Arbitraging
- 4.6 Types of futures
- 4.7 Currency futures
- 4.8 Hedging with currency futures.

Unit V Interest rate future and index futures

- 5.1 Interest Rate future
- 5.2 Hedging interest rate with interest rate future
- 5.3 Index future
- 5.4 Hedging using index future
- 5.5 Commodity future.

Theory 60 %, Problems 40 %

Books for Reference

1. Study materials prepared by department staff
2. Vohra N.D and Bagri B.N (2009) , Futures and options, 9th edition, Tata McGraw Hill Publishing company, New Delhi
3. P.G. Apte (2008), International Finance Management, 5th edition, Tata McGraw Hill Publishing Company, New Delhi

SEMESTER - III
ACCOUNTING FOR MANAGERIAL DECISIONS

Elective : III
Hours : 6

Course Code : P18CM3:3
Credits : 4

Course Objectives

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

1. understand concepts of managerial accounting
2. enhance the practical application for managerial decision making
3. develop the students skill to analyze the financial statements

Unit I Introduction to Management Accounting

- 1.1 Meaning
- 1.2 Nature and scope
- 1.3 Functions
- 1.4 Role of Management Accountant
- 1.5 Emerging Concepts
 - 1.5.1 Life cycle costing
 - 1.5.2 Quality costing
 - 1.5.3 Kaizen costing
 - 1.5.4 Throughput costing
 - 1.5.5 Back flush costing
- 1.6 Activity Based Costing
 - 1.6.1 Introduction & Concepts
 - 1.6.2 Cost drivers and cost pools
 - 1.6.3 Steps to develop ABC System
 - 1.6.4 ABC System and Corporate Strategy

Unit II Accounting Plan and Responsibility

- 2.1 Meaning
- 2.2 Significance of Responsibility accounting
 - 2.2.1 Responsibility centre
 - 2.2.2 Objective and determinants of responsibility centre
 - 2.2.3 Cost centre, profit centre and investment Centre
- 2.3 Problem in transfer pricing
- 2.4 Budgeting
 - 2.4.1 Definition of budget
 - 2.4.2 Essentials of budgeting
 - 2.4.3 Types of budgets
 - 2.4.4 Functional masters

- 2.4.5 Fixed and flexible budgetary control
- 2.4.6 Zero base budgeting performance budgeting

Unit III Standard costing and variance Analysis

- 3.1 Standard costing as a control technique
- 3.2 Setting of standards and their revision
- 3.3 Variance analysis
 - 3.3.1 Meaning
 - 3.3.2 Importance kinds of variance and their uses
 - 3.3.3 Material Labour and overhead variance
 - 3.3.4 Disposal of variances
- 3.4 Relevance of variance budgeting to budgeting and standard costing

Unit IV Marginal costing and Break-even Analysis

- 4.1 Concept of marginal cost
- 4.2 Marginal costing and absorption costing
- 4.3 Marginal costing versus direct costing
- 4.4 Cost-volume-profit analysis
- 4.5 Break-even analysis
 - 4.5.1 Assumptions and practical applications of break-even analysis
- 4.6 Decisions regarding sales-mix make or buy decision and discontinuation of a product line etc.

Unit V Financial Statements Analysis

- 5.1 Ratio analysis
- 5.2 Cash flow analysis
- 5.3 Funds flow analysis
- 5.4 Return on Investment
- 5.5 Residual Income
- 5.6 Economic Value Added

Theory 20%, Problems 80%

Books for Reference

1. Ravi M Kishore, Advanced Management Accounting, Taxman Publication.
2. SP Jain and KL Narang, Cost and Management Accounting, Kalyani Publication.
3. SN Maheswari, Management Accounting and Financial control, Sultan Chand and Sons Publication.
4. Dr. R. Ramachandran and Dr, R. Srinivasan, Management Accounting theory, problems and solutions, Sriram Publications, Tiruchy, 16th Revised and enlarged edition 2013.

SEMESTER - III
BUSINESS VALUATION AND BUSINESS ANALYSIS

Elective : III

Hours : 6

Course Code : P18CM3:4

Credits : 4

Course Objectives

This course will have all the elements that would go into reviewing a potential investment opportunity. The path to evaluating the opportunity to its fullest after one has gone through basics of strategy, finance, and accounting.

Unit I Financial Models

- 1.1 Financial Models for project appraisal
- 1.2 Use of functions like Net Present Value (NPV)
- 1.3 Internal Rate of Return (IRR)
- 1.4 Forecasting techniques.

Unit II Business Valuation Basics:

- 2.1 Principles and techniques of valuation
- 2.2 DCF, Multiple methods
- 2.3 Accounting based valuation
- 2.4 Assets valuation, Earning valuation
- 2.5 Cash flow valuation: Other valuation basis.

Unit III Valuation in Mergers and Acquisitions:

- 3.1 Assets and cash flows
- 3.2 Strengths and weakness of various valuation method
- 3.3 Recognition of interest of various stakeholders
- 3.4 Selection of appropriate cost of capital for valuation
- 3.5 Synergistic benefits, forms of consideration and terms of acquisitions
- 3.6 Post-merger integration process.

Unit IV Fair value in Accounting Measurement:

- 4.1 Concept
- 4.2 Measurement techniques and standards
- 4.3 Challenges
- 4.4 Accounting treatment.

Unit V Valuation of Intangibles:

- 5.1 Intellectual property
- 5.2 Intangibles
- 5.3 Brand Valuation.

Theory 20%, Problems 80%

Books for Reference

1. Paul M Healy & Krishna G Palepu, Business Analysis Valuation : Using Financial statements
2. Study material by the faculty

SEMESTER - IV
SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT – II

Core : XII
Hours: 10

Course Code : P18CM412
Credits : 5

Course Objective

At the end of the course, students shall be able to learn the dynamics and SAPM and apply the techniques.

Unit I Introduction to Portfolio Management

- 1.1 Need for Portfolio Management
- 1.2 Portfolio Management Process
- 1.3 Efficient Portfolios and Efficient Frontier
- 1.4 Markowitz Model
- 1.5 Capital asset pricing model (CAPM)
- 1.6 Dominant portfolio
- 1.7 Separation theorem
- 1.8 Capital Market line
- 1.9 Security market line
- 1.10 Arbitrage pricing theory

Unit II Portfolio Risk and Return Analysis

- 2.1 Concept of portfolio risk and return
- 2.2 Systematic and unsystematic risk
- 2.3 Beta of a portfolio
- 2.4 Analyzing portfolio diversification

Unit III Investment Planning

- 3.1 Defining investment objectives
- 3.2 Risk and investor preferences
- 3.3 Investment constraints
- 3.4 Investment goals and constraints for institutional investors
- 3.5 Portfolio rebalancing
- 3.6 Portfolio up grading
- 3.7 Investment timings
 - 3.7.1 Formula plans
 - 3.7.2 Constant dollar value plan
 - 3.7.3 Constant ratio plan
 - 3.7.4 Variable Ratio plan
- 3.8 Selection and revision of equity portfolios

Unit IV Measuring and Evaluating portfolio performance

- 4.1 Meaning and importance
- 4.2 Methods of calculating rate of returns
 - 4.2.1 Money weighted rate of return
 - 4.2.2 Time weighted rate of return
 - 4.2.3 Linked internal rate of return
- 4.3 Performance measures
 - 4.3.1 Sharpe
 - 4.3.2 Treynor
 - 4.3.3 Jensen
 - 4.3.4 FAMA's measure of selectivity and net selectivity

Unit V Mutual Funds

- 5.1 Concepts
- 5.2 Objectives
- 5.3 Types and advantages
- 5.4 Services provided by the mutual fund
- 5.5 Organization and management of mutual funds
- 5.6 Indian Mutual Fund

Theory 25 %, Problems 75s %

Books for Reference

1. Prasanna Chandra, Investment analysis and Portfolio Management, Tata Mcgrawhill.
2. V. K. Bhalla, Investment Management – Security analysis and Portfolio Management, S. Chand.

SEMESTER - IV
BUSINESS ETHICS, CORPORATE SOCIAL RESPONSIBILITY
AND GOVERNANCE

Core : XIII

Hours : 10

Course Code: P18CM413

Credits : 4

Course Objectives

At the end of the course students will be able to understand

1. Concepts of ethics
2. Role of managers in ethical issues
3. Influences of political and legal environment on ethics
4. Influences of economic environment on ethics
5. Concepts corporate social responsibility and corporate governance

Unit I Introduction

- 1.1 Definition & nature of business ethics
- 1.2 Characteristics of business ethics
- 1.3 Utilitarianism theory
- 1.4 Causes of unethical behavior and Ethical abuses
- 1.5 Work ethics
- 1.6 Code of conduct
- 1.7 Code of ethics
- 1.8 Public good

Unit II Ethics Theory and Beyond

- 2.1 Introduction to Management of Ethics
- 2.2 Ethics analysis [Hosmer model]
- 2.3. Ethical dilemma
- 2.4. Ethical theories
 - 2.4.1 Categorical Imperative Theory
 - 2.4.2 Conventional theory
 - 2.4.3 Doctrine of Mean
 - 2.4.4 Might equal rights Theory
- 2.5 Ethics in practice
- 2.6 Ethics for Managers-Role and function of ethical managers-
- 2.7 Comparative ethical behaviour of Managers
- 2.8 Competitiveness, organizational size, profitability and ethics
- 2.9 Ethics in Corporate
- 2.10 Ethics evaluation
- 2.11 Business and ecological / environmental issues in the Indian context

Unit III Legal Aspects of Ethics

- 3.1 Political environment
- 3.2 legal environment
- 3.3 Provisions of the Indian constitution pertaining to Business
- 3.4 Political setup – major characteristics and their implications for business
- 3.5 Competition Act - prominent features of competitions act
- 3.6 FEMA- Features and importance
- 3.7 Social – cultural environment
 - 3.7.1 Social cultural impact on business operations
 - 3.7.2 Salient features of Indian culture and values

Unit IV Environmental Ethics

- 4.1 Economic Environment
- 4.2 Philosophy of economic grow and its implications for business
- 4.3 Main Features of Economic Planning with respect to business
- 4.4 Industrial policy and framework of Government contract over Business
- 4.5 Role of chamber of commerce and confederation of Indian Industries

Unit V Corporate Social Responsibility and Governance

- 5.1 Definition of CSR
 - 5.1.1 Evolution of CSR
 - 5.1.2 Need for CSR
 - 5.1.3 Theoretical perspectives of CSR
 - 5.1.4 Strategies for CSR
 - 5.1.5 Challenges and implementation
- 5.2 Concept of Corporate Governance - Evolution of corporate governance
- 5.3 Governance practices and regulation
- 5.4 Structure and development of boards
- 5.5 Role of capital market and government- Governance ratings
- 5.6 Future of governance- innovative practices
- 5.7 Case studies of BHEL, SBI, HCL, HUL, ICT, AMUL ETC.

Books for Reference

- 1. S.A. Sherlekar, Ethics in Management, Himalaya Publishing House.
- 2. William B. Werther and David B. Chandler, Strategic corporate social responsibility, SagePublications Inc.
- 3. Robert A.G. Monks and Nell Minow, Corporate governance, John Wiley and Sons.

SEMESTER – IV
FINANCIAL ENGINEERING – II

Core : XIV
Hours : 10

Course Code : P18CM414
Credits : 4

Course Objectives

At the end of the course, students shall be able to learn about

1. Options
2. Option Pricing models and volatility
3. Swaps
4. Sensitivity of option premiums and Value at Risk
5. Insurance

Unit I Options

- 1.1 Options
- 1.2 Concept of Options
- 1.3 American and European Options
- 1.4 Trading strategy with options
- 1.5 Types of position
- 1.6 Options Clearing Corporation.

Unit II Option Pricing models and volatility

- 2.1 Option Pricing Models
 - 2.1.1 Binominal option Pricing Model
 - 2.1.2 Black Scholes pricing model
- 2.2 Volatility
 - 2.2.1 Types of volatility.

Unit III Swaps

- 3.1 Swap
- 3.2 Concept of financial Swap
- 3.3 Interest rate Swap
- 3.4 Currency Swap
- 3.5 Valuation of Swap

Unit IV Sensitivity of option premiums and Value at Risk

- 4.1 Sensitivity of option premiums
 - 4.1.1 Delta, Theta, Vega, Gamma. And Rho
- 4.2 Weather derivatives
- 4.3 Value at Risk
 - 4.3.1 Uses of value at Risk

Unit V Insurance

- 5.1 Insurance
- 5.2 Nature of insurance
- 5.3 Classification of Insurance
- 5.4 Elements of Insurance contract
- 5.5 Various types of life and Non – life Insurance.

Theory 60 %, Problems 40 %

Books for Reference

1. Study materials prepared by department staff
2. Vohra N.D and Bagri B.N , Futures and options, Tata McGraw Hill Publishing company, New Delhi, 9th edition, 2009.
3. P.G. Apte, International Finance Management, Tata McGraw Hill Publishing Company, New Delhi, 5th edition, 2008.