(Formerly Uttarakhand Technical University, Dehradun Established by Uttarakhand State Govt. wide Act no. 415 of 2005)
Suddhowala, PO-Chandanwadi, Premnagar, Dehradun, Uttarakhand (Website- www.uktech.ac.in)



SYLLABUS

Approved in 13th Meeting of Executive Council held on 27th March 2023 subsequent to the 14th Meeting of Academic Council held on 20th March 2023

(For admission in 2022-23 and onwards)



<u>l Semester</u>

| S. No. | Subject Code | Category | Subject Name | Maximum Marks Allotted Theory | | Total Marks | Contact Hours per Week | | Total Credit | |
|-----------|-----------------|----------|--|-------------------------------------|----------|----------------|------------------------------|---|-----------------|----|
| | | | | External | Internal | | Г | Т | Р | |
| | | | | Marks | Marks | | | | | |
| 1. | MBT 101 | | Principles and Practices of Management | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 2. | MBT 102 | | Financial Accounting | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 3. | MBT 103 | | Quantitative Techniques & Operation Research | 70 | 30 | 100 | 3 | 2 | 0 | 4 |
| 4. | MBT 104 | | Managerial Economics | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 5. | MBT 105 | | Business Environment | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 6. | MBT 106 | | Business Laws | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 7 | MBT 107 | | Professional Business Communication | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 8. | MBT 108 | | Information System for Managers | 70 | 30 | 100 | 3 | 0 | 2 | 4 |
| | Total | | | 560 | 240 | 800 | 24 | 2 | 2 | 26 |
| | NSS/NCC | | | | No | n Credit | | | | |

II Semester

| S. No. | Subject Code | Category | Subject Name | Maximum Marks Allotted Theory | | Total Marks | Contact Hours per Week | | Total Credit | |
|-----------|-----------------|----------|---|-------------------------------------|-------------------|----------------|------------------------------|---|-----------------|----|
| | | | | External Marks | Internal Marks | | L | T | Р | |
| 1. | MBT 201 | | Organisational Behaviour | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 2. | MBT 202 | | Management Accounting | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 3. | MBT 203 | | Marketing Management | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 4. | MBT 204 | | Financial Management | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 5. | MBT 205 | | Human Resource Management | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 6. | MBT 206 | | Production and Operation Management | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 7 | MBT 207 | | Business Research Methods | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 8. | MBT 208 | | State of Art Seminar | 70 | 30 | 100 | 0 | 0 | 10 | 5 |
| | Total | | | | 240 | 800 | 21 | 0 | 10 | 26 |
| | NSS/NCC | | | Non Credit | | | | | | |



SEMESTER-I

MBT 101 PRINCIPLES AND PRACTICES OF MANAGEMENT

Unit1 Introduction

Nature and Purpose, Managing: Science or Art? The Evolution of Management Thoughts, The Function of Manager: Planning, Organising, Staffing, Leading and controlling: an overview. Coordination: The Essence of Management, System approach to Management Process.

Unit2 Planning

Types of Plans: Missions or Purpose, Objective or Goals, Strategies, Policies, Procedure, Rules Programmes and Budgets. Steps in Planning, Objectives. Management by Objectives. Strategies, Policies and Planning Premises, Strategic Planning Process, Presuming and Forecasting, Decision Making.

Unit3 Organising

Nature of Organising, Formal and Informal Organisation, Organisation Levels and the Span of Management. Structure and Process of Organisation. Principles of Organising, Line and Staff Authority. Empowerment, Decentralisation of Authority, Delegation of Authority, Organisation Charts.

Unit4 Staffing

Definition of Staffing, an overview of Staffing Function, The System Approach to Human Resource Management, Recruitment, Selection, Placement, Promotion, Separation, Performance Appraisal, The Peter's Principle.

Unit5 Leading and Controlling

- (a) **Motivation:** McGregor Theory of X and Y, Maslow Hierarchy of Needs Theory, Herzberg's Motivation- Hygiene Theory, Expectancy Theory, Equity Theory, Goal Setting Theory. Leadership: Definition, Ingredients, Styles, Committees and Group Decision Making.
- (b) Controlling: Concepts and Process, Controlling as a Feed Back System, Requirements for Effective Control, Major Controlling Techniques: Budgetary and Non Budgetary Control Devices, Statistical Data, Time-Event Network Analysis.

Suggested Readings

- 1. Heinz Weihrich, Mark V. Cannice and Harold Koontz, (2009). Management: A Global and Entrepreneurial Perspective, 13thed., TMH. New Delhi
- 2. Robbins, Management, 15e, 2022, Pearson Education, India
- 3. Harald Koontz and Heinz Weigh rich, Elements of Management. 9 ed., TMH. New Delhi 2012
- 4. Stoner James A. F. ,R. Edward Freeman and Daniel R, Gilbert Jr. Management,
- 5. Newman, Summer, Gilbert Management; PHI
- 6. J S Chandan, Management-Concepts and Strategies- Vikas Publication-NOIDA
- 7. Pravin Durai, Principal of Management, 2e, 2018 Pearson Education, India

| S. No. | Course Outcomes (CO's) |
|--------|---|
| 1 | To illustrate understanding of basic management concepts, principles and practices. |
| 2 | To develop strategic planning and decision making strategies in an organization. |
| 3 | To summarize the concept and process of organizing |
| 4 | To develop an understanding of staffing, leadership, motivation in an organization. |
| 5 | To predict the dynamics of controlling and its emerging issues in management. |

MBT 102 FINANCIAL ACCOUNTING

Unit1

Introduction to Financial Accounting

Concepts and Conventions and Postulates of Accounting- Accounting as a Language; Accounting as an Information System, Users of Accounting information, Role of Accounting in Economic Development.

Unit2

Accounting System and Process

Accounting Equation, Transactions and their effects on Accounting and Equation, Classification of Accounts: Owner's Equity, Revenues and Expenses.

Unit3

The Accounting Process

The Journal and its Sub-division, The Ledger, The Trial Balance, The Financial Statements, Computerized Accounting, Introduction to Tally Package, Rectification of Errors.

Unit4

Financial Statement Analysis

The Tools of Analysis, Horizontal Analysis, Vertical Analysis, Trend Analysis, Ratio Analysis, Funds Flow and Cash Flow Analysis, AS-3(Revised).

Unit5

- (a) Corporate Accounting: Financial Statement of Companies and Adjustment Entries (An overview of Corporate Finance)
- (b) Accounting: Assets and Liabilities: Depreciation and Amortisation Inventory Valuation and Accounting, Recent Trends in Corporate Reporting and Introduction to Indian Accounting Standards. International Financial Reporting Standards: An overview.



Suggested Readings

- 1. Dhamija, Financial Accounting for Managers, 3e, 2018, Pearson Education
- 2. Robert n Anthony, Hawkins and Merchant, Accounting TMH
- 3. Ambrish Gupta, Financial Accounting for Managers, 7e, 2022 Pearson Education
- 4. Ashish Bhattacharyya, Essentials of Financial Accounting, PHI
- 5. Maheshwari, S Nand Sunil "Financial Accounting: Sultan chand and Sons, New Delhi

| S.No | o. Course Outcomes (CO's) |
|------|---|
| 1 | To demonstrate the various concepts & steps that organization follow in Financial Accounting so that the organization can deliver the fair position or business to the interested parties and the measures that can be taken for economic development too. |
| 2 | To breakdown the accounting process and system through accounting equations so as to analyse the classifications of revenues and expenses. |
| 3 | To demonstrate and compare the various steps that we follow in chronologica order in which the accounting entries are recorded in books of accounts& the steps to rectify the errors made while recording using the technology as a tool. |
| 4 | To synthesize the performance of the organization and analysing the financial position in the market using various analysis models. And further summarise the actual results of the business so as to know how business has performed in the previous financial year. |



MBT 103 QUANTITATIVE TECHNIQUES AND OPERATION RESEARCH

Unit 1: Introduction to Statistics

Definition of Statistics, Types of Data, Functions, Importance and Limitations of Statistics, Uses of Statistics in Functional Areas of Management, Types of Measurement Scale, Diagrammatic and Graphical Representation of Data-Line, Bar, Rectangle and Pie Diagram, Histograms, Frequency Polygon, Cumulative Frequency Curves or Ogives.

Unit2: Measures of Central Tendency and Dispersion

Mathematical Averages: Arithmetic, Geometric, and Harmonic mean. Positional and Locational Averages: Median, Mode, Quartiles. Measures of Dispersion: Range, Quartile Deviation, Mean and Standard Deviation, Variance, Coefficient of Variance. Comparison of various measures of Dispersion. Skewness: Relative Measures of Skewness- Karl Pearson, Bowley, Kelly-Coefficient of Skewness. Kurtosis: Relative measures of Kurtosis.

Unit3: Regression Analysis and Forecasting

Correlation: Scatter Diagram, Karl Pearson's Coefficient of Correlation, Properties of Correlation Coefficient, Spearman's Coefficient of Rank Correlation. Concurrent Deviation. Regression: Method of Least Squares, Method of Regression Coefficient, Properties of Regression Coefficients. Partial and Multiple Correlation. Time Series Forecasting- Introduction, Objectives of time Series, Identification of Trend, Variation in Time Series, Secular Variation, Cyclical Variation, Seasonal Variation, and Irregular Variation, Methods of Estimating Trend, Choosing Appropriate Forecasting Model.

Unit4: Probability and Probability Distributions

Classical and Axiomatic Approach of Probability, Applications of Addition, Multiplication, Conditional and Bayes Theorems, Random variables and Concept of Probability Distributions. Theoretical Probability Distributions and their Applications. Discrete Distributions: Binomial and Poisson Distribution. Continuous Distribution: Normal and Exponential Distribution.

Unit 5: Introduction to Operation Research

Importance, Scope, Techniques and Characteristics, Concept of Optimization, Different Types of Models, Linear Programming Problem (LPP), Formulation of LPP: Structure of linear programming model. Advantage of using linear programming, Limitations of linear programming, The Graphical Method: Graphical solution methods of LPP. The Simplex Method: Introduction, Standard form of an LPP, Simplex algorithm (Maximization and Minimization Case), Types of linear programming solutions. Transportation Problem: Introduction, Mathematical model of transportation problem, Methods of finding initial solution. Assignment Problem: Introduction, Mathematical model of statement assignment problem, Solution methods of assignment problem (Hungarian Method).





TEXT BOOKS

- E. Narayanan Nadar, Statistics, PHI.
- J. K. Sharma, Operation Research Theory and Applications, Macmillan.
- Naval bajbai, Business Statistics, 3e, 2020, Pearson Education
- Hamdy A Taha, Operation Research: An Intro, 10e, 2018, Pearson Education

REFERENCE BOOKS

- P. N. Arora, S. Arora, Statistics, S. Chand.
- Richard A. Johnson & Gouri K. Bhattavharyya, Statistics Principles and Methods, Wilev.
- S. C. Gupta, V. K. Kapoor, Fundamentals of Mathematical Statistics, S. Chand & Sons.
- S. C. Gupta, V. K. Kapoor, Fundamentals of Applied Statistics, S. Chand & Sons.
- Ken Black, Applied Business Statistics, Wiley.
- Ravindran, Phillips & Solberg, Operation Research Principles & Practice, Wiley.
- R. Panneerselvam, Operations Research, PHI.
- Prem Kumar Gupta, D. S. Hira, Operations Research, S. Chand.

COURSE OUTCOMES

- To develop the student's ability to deal with numerical and quantitative issues in business.
- To enable the use of statistical, graphical, and algebraic techniques wherever relevant.
- To understand the importance of correlation and regression analysis and application of non-parametric tests in hypothesis testing.
- To comprehend the decision-making process under uncertainty using statistical tools and linear programming.
- To have a proper understanding of Statistical applications in Management.

MBT 104 MANAGERIALECONOMICS

Unit1 Introduction

Introduction to Managerial Economics, Evolution, Nature, Scope and Significance, Circular Flow in an Economy, Principles, Production Possibility Frontier, Managerial Economics: Micro and Macro Economics.



Unit2 Market Forces: Demand and Supply

- Demand Analysis: Theory of demand; Objectives of demand analysis and (a) determinants of demand; theory of consumer behavior; Elasticity of demand and its measurement methods; importance in decision-making.
- **Supply Analysis:** Objective of supply analysis; Determinants of supply, Elasticity **(b)** of Supply.

Unit3

Production Function and Cost Analysis

Theory of Production and Cost Analysis; Production Functions and its Managerial Uses; Cobb Douglous Production Function, Laws of Production and analysis :Empirical Estimates of Production and Cost; short run and Long run average cost curves and their analysis

:Economies and Diseconomies of scale.

Unit4

Organization of the Firm

Pricing Decision: Pricing under different Market Structures: Perfect and Imperfect (Monopoly, Duopoly, Monopolistic Competition, Oligopoly Markets), Pricing Policies and Strategies; Collusive and Non-Collusive Oligopoly; Baumol's Marries' and O. Williamsons Model.

Unit5

Introduction to Macro Economics

Introduction: Difference in Micro Macro Economics, Macro Economics environment, Monitory policy, uses and applications, fiscal policy uses and applications, changes in macro environment.

Text Books

- 1- Keat, Managerial Economics, 7e, 2017, Pearson Education
- 2- Salvatore Managerial Economics, 9e OUP
- 3- Vanita Agarwal, Managerial Economics, 1e Pearson Education

MBT 105 BUSINESS ENVIRONMENT

Unit1Introduction

Concept, Significance and Nature of Business Environment. Types of environment, Interaction between Internal and External environments, Nature and Structure of





Economy, Techniques for Environment Analysis, Approaches and Significance of Environment Forecasting.

Unit2

Economic Environment

History of Economic Systems, Market, Planned and Mixed Economy, Planning in India: Emergence and Objective; Planning Monetary Policy, Fiscal Policy. Union Budget as instrument of growth and its Impact on Business, Industrial Policy: Meaning Objective and Recent Development in economy and its Impact on Business.

Unit3

Politico-Legal Environment

Relationship between Business and Government, Economics, Planning, Regulatory, Promotional and Entrepreneurial Roles of Government, Constitutional Provisions affecting Business. An overview of major laws affecting business, Consumerism, Social Responsibility of Business.

Unit4

- (a) **Technological Environment:** Factors Influencing Technological Environment, Role and Impact of Technology on Business. Transfer of Technology -Channels, Methods and Limitations.
- (b) **Demographic and Socio-Cultural Environment:** Population Size, Falling Birth Rate, Changing age structure and its impact on business, Business and Society, Business and Culture, Culture and Organisational Behaviour.

Unit5

Foreign Investment and Trade Regulation

Foreign Direct Investment, Foreign Institutional Investment, WTO and India: an overview, Regulation of Foreign Trade, Disinvestment in Public Sector Units.

Suggested Readings

- Cherunilam, Francis –Business Environment, Himalaya Publishing House
- 2. Fernandez, Fernando's Business Environment, 2e, 2021, Pearson Education
- 3. Paul, Justin-Business Environment, Tata Mc Graw Hill, New Delhi
- 4. Aswathappa, K., Business Environment and Strategic Management, HP
- 5. I.C. Dhingra, Indian Economics: Environment and Policy,25 ed., Sultan Chand& Sons, New Delhi,2012
- 6. SKMishra and V K puri, 4thed., Economic Environment of Business, Himalaya Publishing House, Mumbai, 2011.
- 7. H.L. Ahuja, Economic Environment of Business-Macroeconomic Analysis, S. Chand

S.NO Course Outcomes (CO's)



| 1 | To analyze various categories that are constituting the business environment and apply various approaches that are helpful to manage both internal and the external business environment. |
|---|---|
| 2 | To apply the various types of policies in economic environment, by applying these policies change the structure of economy and the transition thereof from the past to the present scenario. |
| 3 | To apply various constitution provisions & how government play different roles for smooth functioning of an organization & evaluate the importance of CSR in an economy |
| 4 | To develop the understanding of technological, demographic social and cultural factors that play an important part for an organization functioning and to evaluate the recent trends in business environment. |
| 5 | To demonstrate the various policies of foreign institutions like world bank. Summarize the basics of foreign investments that are helpful for economy and interpret the terms that is related with trade and its regulation |



MBT 106 BUSINESS LAWS

Unit1

Laws of Contract (The Indian Contract Act, 1872)

Concept of Contract, Offer and Acceptance; valid contracts and its essential elements; void agreements; classification of contracts; Quasi contract; performance of contract; discharge of contract; remedies for breach of contract., Guarantee, Bailment, Pledge, and agency amendments made in Indian Contract Act 1872.

Unit2

The Sale of Goods Act, 1930

Nature of Contract of Sale; Formation of Contract of Sale, Agreement to Sell, Conditions and Warranties, Transfer of Property in Goods, Performance of the Contract of Sale, Remedies for Breach, Unpaid Seller and his rights ,rights of buyers, Sale by Auction.

Unit3

The Negotiable Instruments Act, 1881

Definition, Features and types of negotiable instruments; Methods of negotiation of Instruments; holder and holder-in-due Course; Endorsement and delivery of a negotiable instrument; Presentation of Negotiable Instrument. Banker and Customer: An introduction; Crossing of a cheque; Types of crossing; Bouncing of cheques; Obligations of Banker and Customer; Dishonour and discharge of negotiable instruments.

Unit4

- (a) The Consumer Protection Act, 1986: Basic Concepts: Complaint, Complainant, Consumer, Rights of Consumer, Right to information Act (RTI) and Right to Education Act (RTE) Consumer Forums: Their Role, Powers and Functions, Procedure for Consumer Grievance Redressal, Major Decided Cases.
- (b) Information Technology Act 2000: Overview of Cyber Crimes and Cyber Law, types of Cyber Crimes, prevention of cyber crimes, cyber crime and security, cyber security strategies- Eco system, Frame work, open standards, IT mechanism, egovernance, infrastructure, different between cyber crime and cyber security. IPC-1860, Sections related to cyber crime and cyber security, information technology rules,

Unit5

The Companies Act

An Overview; Nature and kinds of Companies; Formation of a company, Memorandum of Association and Articles of Association, Company Management; Company Meetings, Duties and obligations of Directors, rights of directors, overview of portfolio management and overview of shares and issue of shares under companies Act, winding up of company.

Suggested Readings

- 1. Tejpal Sheth, Business Law, 3e, 2017, Pearson Education
- M.C.Kuchhal –Business Law, Vikas Publishing House, Delhi



- RavindraKumar, Legal Aspects of Business, Cengage learning, New Delhi, 2011
- S.S. Gulsan, Mercantile Law, Excel Books.
- 5. N.D. Kapoor- Elements of Mercantile Law, Sultan Chand and Sons Publication
- 6. MC Kuchhal, Indian Company Law, Shri Mahavir Book Depot, Delhi, 2011
- 7. V.K.Agrawal, Consumer Protection: Law and Practice, Bharat Law House, New Delhi, 2012.

| S. No | Course Outcomes (CO's) |
|-------|---|
| 1 | To Assess and apply the fundamental legal rules regarding contractual agreements pertaining to the business world to manage businesses effectively. |
| 2 | To interpret and apply the law relating to the sale of goods as a legal advisor in as organisation. |
| 3 | To analyse and apply the fundamental legal principles behind negotiable Instruments. |
| 4 | To interpret and apply the law relating to consumer protection and competition Act 2000. |
| 5 | To demonstrate and apply the various legal matters related to the establishment, running and winding up of a company as legal advisor in an organisation. |

MBT 107 PROFESSIONAL BUSINESSCOMMUNICATION

Unit1

Importance of communication skills in Business Management. Types of communication :the media and tools of communication, Cross cultural communication, public speaking and presentation. The Communication Process. Barriers and Gateways to communication, cross cultural communication.

Unit2

Verbal and Non-verbal Communication

Para language and body language. Types of managerial speeches: occasional speech; thematic speech. Group Communication in: group discussions, meetings, seminars and conferences. Art of facing interviews in: selection or placement, appraisal, public speaking and presentation, disciplinary committees and exit interviews.

Unit3

Written Communication Skills

Formats for business letters and memos: routine type; sales promotion, bill collection, disciplinary action; persuasive messages; negative messages; job applications



.Preparing a professional resume and cover letter, follow-up messages and letters. Internal communication through: memos, minutes, notices, circulars. Writing effective Business Reports; Digital Communication. Power point preparation; Using Web as a source of knowledge Sharing.

Unit4

Recruitment and Employment Correspondence

Drafting the Employment Notice, Job Application Letter; Curriculum Vitae/ Resumes; Joining Interview; Offer of Employment; Job Description; Letter of Acceptance, Letter of Resignation and Promotion, Testimonials and References.

Unit5

Business and Social Etiquette

Professional conduct in a business setting: workplace hierarchy; proper way to make introductions; Use of courteous phrases and language in the workplace. Professional Image: appropriate business attire; Telephone Etiquette; Table etiquette.

Language lab class for practical in business communication.

Suggested Readings

- 1. Kitty O. Locker and Stephen Kyo Kaczmarck, (2007). Business Communication: Building Critical Skills, 3/e, TMH. New Delhi.
- 2. Chaturvedi and Chaturvedi, Business Communication, 4e, 2018, Pearson Education
- 3. Raymond V. Lesikar, Marie E. Flatley, Kathryn Rentz and Neeaja Pande(2009).Business Communication: Making Connections in a Digital World,11/e.TMH.New Delhi.
- 4. Booher, Dianna (2001). E Writing: 21st Century Tools for Effective Communication. New York: Pocket Books, Division of Simon & Schuster, Inc.
- 5. Randolph H. Hudson and Benard J. Selzler, (2006). Business Communication: Concepts and Applications in an Electronic Age,5/e., Jaico Reprint, Jaico, New Delhi.
- 6. Bovee, Thill and Schatzman, 'Business Communication Today', 15th, 2021, Pearson Education 2007(4ed.)

| S. No | Course Outcomes (CO's) |
|-------|---|
| 1 | Student applies the knowledge by speaking confidently and communicating effectively in different business situations. |
| 2 | Student creates correct business letters for both Internal and External business environment. |

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| 3 | The student creates and designs different letter formats effectively in a realistic |
|---|---|
| | way with reference to organizational goals. |
| 4 | The student analyses the situation shows professionalism and displays a good |
| | Code of conduct at the work place according to the need. |

MBT 108 INFORMATION SYSTEM FOR MANAGERS

Unit1 Introduction to MIS:

Overview, Importance and functions. Difference between data and information, concept of system, concept of information system, business process design, Role of IT in Business, Influencing parameters for use of IT in Business and Retailing, components of information technology advantages of information systems in business,

Unit 2 Information System in the Enterprise

Types of information system in the organization – TPS, DSS, MIS, ESS, Functional perspective of information systems – Sales and Marketing System, Manufacturing and Production System, Finance and Accounting Systems, HR Systems, Benefits of challenges of enterprise systems, strategic uses of information systems and information technology at Firm level and industry level.

Unit3 Office Tools for Business

Overview and Practical application of MS Windows, MSOffice - MS Word ,PowerPoint, Excel, Access and Outlook. This unit should be done in the computer lab on the systems with practice questions and case studies. *Unit4*

Information Systems in Global Business Today

The Role of Information Systems in Business Today, Concepts of MIS; Components of MIS, Role of Managers, Business and technology Trends; Management and Decision Levels; Foundation of information Technology: Information Systems as a Competitive Advantage, Managerial Challenges of information Technology, overview of DBMS.

Unit5

- Business Application of MIS: e-commerce, Electronic Payments Systems, Enterprise Resource Planning(ERP), Advantages of ERP, Challenges of ERP, ERP and Related Technologies: Customer Relationship Management(CRM), Supply Chain Management(SCM), Data Warehousing, Data Mining, Business Information System.
- (b) **Business Expert Systems:** Role of Expert Systems in Complex Decision, Building of Expert Systems, Management of Expert Systems.



Suggested Readings

- 1. Lucas Jr. H C, Information Technology for Management, McGraw Hill, New York, 1997
- 2. Kenneth C. Loudon and Jane P. Loudon, Management Information Systems, 16/E, 2022, Pearson Education
- 3. James A.O. Brien (200), Management Information Systems. 5/E, Tata Mcgraw -Hill.
- Saxena S, First Course in Computers; Vikas Publication, New Delhi, 2003 4
- 5. Sahil Raj, Management Information System, 2e, 2017, Pearson Education
- Leaon, Alexis & Mathews- Information Technology, Vikas Publications, 2006. 6. 6. Sinha, P K-Fundamentals of Computers, BPB Publications, New Delhi, 2011.



| S.No. | Course Outcomes(COs) |
|-------|---|
| 1. | To apply various terminologies used in the operation of computer systems in a business environment. |
| 2. | To apply various terminologies used in the operation of computer systems in a business environment. |
| 3. | To apply various terminologies used in the operation of computer systems in a business environment. |
| 4. | To develop or provide support for MIS according to business organizational needs |
| 5. | To provide support for MIS according to business organizational needs |



SEMESTER-II

MBT 201 ORGANISATIONAL BEHAVIOUR

UNIT 1 Introduction

Conceptual Foundation of Organisational Behaviour; Nature and Characteristics; Determinants; Contributing Disciplines; Challenges and Opportunities for Organisational Behaviour, Models and Approaches of Organizational Behaviour, OB and Emotional Intelligence.

Unit2

- (a) **Perception, Attitude, and Values:** Nature, Process, Importance, Factors Influencing Perception; Attribution Theory of Perception; Issues Involved in Perception: Selective Perception, Halo Effect, Contrast Effect, Projection, Stereotyping; Concept of Pygmalion Effect; an overview of Emotions, Values, Beliefs and Attitudes with Managerial Implications.
- (b) **Learning:** Concept; Theories of Learning: Conditioning, Social Learning, Managerial Implication of Learning Theories.

Unit3

- a) Personality: Concept and Determinates; Types and Traits; Major Personality
 Attributes Influencing Organizational Behavior; Locus of Control;
 Machiavellianism;
- b) **Self-Esteem**; Self-Monitoring; Risk-Taking; Personality; Proactive Personality' Personality and National Culture; Holland's Typology of Personality and Congruent Occupations.
- c) Leadership: Concept and Functions; Style and Theories of Leadership: Traits, Behavioural and Situational/ Contingency Groups of Theories; Inspirational approaches to Leadership; Charismatic Leadership, Transformational Leadership, and Transactional Leadership, Contemporary Leadership Roles; Challenges to the Leadership Construct; Substitutes and Neutralizers to Leadership.
- d) **Stress:** Concept; Consequences and sources; Stress Management: Approaches towards stress management.

Unit4

(a) **Group Behaviour:** Groups: Concept and Classification; Stages of Group Development; Group Structure; Roles and Norms; Premise and Issues; Group Decision-Making: Group vs Individual; Groupthink and Groups Shift; Group Decision Making Techniques and Process.



- (b) Interpersonal Relationships: Understanding Self and Others; Developing Interpersonal Relationships; Transactional Analysis; Johari Window.
- (c) **Conflict Management:** Concept; Causes; Types; Stages; Effects; Management of Conflicts.

Unit5

- (a) Organisation Power and Politics: Concept; Sources and Classification; Power Tactics; Coalitions; Organisational Politics: Concept and People's Response to Organisational Politics, The Concept of Impressing Management.
- (b) Organisational Culture: Concept; Dominant Culture; Strong vs Weak Cultures; Creating and Sustaining Culture; Employees Learning of The Culture; Creating a Customer-Responsive Culture, introduction to industrial psychology.
- (c) **Organisational Changes:** Concept and Forces for Change; Managing Planned Changes; Resistance to Change; Approaches to Manage Organisational Change; Organisational Development; Culture-Boundedness of Managing the Change.

Suggested Readings

- 1. Robbins, Stephen P., Timothy Judge Organisational Behaviour, (Updated) 18/e. 2022, Pearson Education
- 2. Fred Luthans, Organisational Behaviour, 11 ed., Mc Graw Hill, 2009.
- 3. W. Newstrom, John, Organisational Behaviour, 10 ed., Tata Mc Graw –Hill 2009.
- 4. Heresy, Paul, Kenneth H. Blanchard, and Dewey E. Johnson, Management of Organisational Behaviour, 8 India, Eastern Economy Edition, 2006.
- 5. SS Khanka, Organisational Behaviour, S. Chand & Co., New Delhi, 2008.
- 6. Sanghi Seema, Organisational Behaviour, Pearson, 2011.

| S. No. | Course Outcomes(COs) |
|--------|--|
| 1. | To apply the conceptual foundation of organisation behaviour. |
| 2. | To develop the working environment for individual for the smooth running of Organization |
| 3. | To analyse inefficiency in individual and apply various measures to improve it in the organization |
| 4. | To analyze how to develop the team work in the organisation. |
| 5. | To apply how to use organisation power and politics for efficient working |

MBT 202 MANAGEMENT ACCOUNTING

Unit 1 Introduction

Nature, Scope and Importance of Management Accounting; Difference between Financial Accounting and Management Accounting; Difference between Cost Accounting and Management Accounting; Cost Control, Cost Reduction, and Cost Management.



Unit2

Budgeting and Budgetary Control

Concept of Budget and Budgetary Control; Objectives, Merits and Limitations of Budget Administration; Types of Budget: Fixed and Flexible Budgets, Zero-Base Budget, Programme and Performance Budget.

Unit3

Standard Costing

Concept of Standard Coast and Standard Costing; Advantages, Limitations, and Application; Variance Analysis: Calculation of Material Variances, Labour Variances, and overhead Variances, Disposition of Variances.

Unit4

Marginal Costing and Decision-Making

Concept of Marginal Costing, Differential Costing and Absorption Costing, Break-Even Analysis, Use of above Costs in Decision-Making; Make or Buy, Change of Product-Mix, Pricing and Determination of Shut-Down Point.

Unit5

Responsibility Accounting

Concept and Approaches to Responsibility Accounting. Different Responsibility Centres Significance: Divisional Performance Measurement – Financial Measures.

Suggest Readings

- 1. Charles T. Horngren, Gray L. Sundem, and William O. Stratton, Introduction to Management Accounting, 16e, 2022, Pearson Education,
- 2. Khan, M.Y., and P.K. Jain, Management Accounting, 6 ed., Tata McGraw-Hill, New Delhi, 2009
- 3. Richard M. Lynch and Robert W. Williams, Accounting and Management: Planning and Control,
- 3. Tata McGraw-Hill, New Delhi, 2005
- 4. Anthony, Robert N., David f. Hawkins, and Kenneth A. Merchant, Accounting: Text and Cases, 13ed., Tata McGraw-Hill, New Delhi, 2010

| S. No. | Course Outcomes(CO's) |
|--------|--|
| 1 | To demonstrate the differences between management accounting, financial accounting and cost accounting |
| 2 | To develop and apply standards to various types of budget for planning and controlling |
| 3 | To understand standard costing and analysis of deviations |



| 4 | To apply the concept of marginal costing, and break even concept in various decision making process |
|---|---|
| 5 | To analyze cost-volume profit techniques for optimizing managerial decisions, responsibility accounting and importance of responsibility centres. |

MBT 203 MARKETING MANAGEMENT

Unit 1

Marketing Concept

- (a) Marketing Management; Nature and Scope; Evolution of Marketing; Selling vs Marketing; CRM; Emerging trends in marketing; Marketing Mix and its applications.
- (b) **Marketing Environment:** Concept; Need for Study; Major Elements and their Impact on Marketing Decisions.

Unit 2

- (a) Consumer Behaviour: Consumer vs. Organizational/Industrial Buyer; Their Characteristics; Importance of understanding Consumer Behaviour; Determinants of Consumer Behaviour; Theories of Consumer Behaviour; Various Buying Roles in Family; Types of Buying Behaviour; Consumer Decision-Making Process in Buying.
- (b) **Market Segmentation:** Nature and Importance of Segmentation; Pre-requisites for Effective Segmentation; Bases of Segmenting Consumer Markets; Market targeting Strategies; Positioning, Consumer and Industrial Market.

Unit 3

Product Decisions

Concept of Product; Classification of Products; Product Line and Product Mix; Branding, Product Support Packaging and Labeling; Customer Services; Development of New Product; Product Life Cycle; The New Product (Consumer); Adoption Process.

Unit 4

- (a) **Price Decisions:** Pricing as a Marketing Variable-its Role and Importance; Price vs. Non-Price Competition; Factors Influencing Price Determination; Price Setting in Practice; Price Policies and Strategies.
- (b) Distribution Channels and Physical Distribution Decisions: Why are Marketing Intermediaries Used? Marketing Channel Functions; Selecting Channels Distribution; Determining The Intensity of Distribution; Channel Management Decisions- Selection, Motivation and Evaluation of Individual Middlemen; Manufacturer-Distribution Relationship; Retailing and Wholesaling; Logistics of Distribution.





Unit 5

- (a) **Promotion Decisions:** Nature; Objectives and Importance of Promotion; Communication Process; Promotion Mix and Methods; Advertising; Personal Selling; Public Relations and Sales Promotion.
- (b) Legal, Ethical and Social Aspects of Marketing: Consumerism; Consumer Protection Measure in India; Recent Developments in Consumer Protection in India.

Suggested Readings

- 1. Kotler Philip, Principles of Marketing, 17e, 2018, Pearson Education
- 2. Kotler Philip: Marketing Management, 16e, 2022, Pearson Education
- 3. Ramaswami, V.S and Namakumari, S: Marketing Management Mac Millan India New Delhi
- 4. Stanton, Shallian J. and Charles Futrell: Fundamentals of Marketing Mc Graw hill New York
- 5. Rajan Saxena, Marketing Management, 3 ed, Tata MCGraw Hill, New Delhi, 2009

| S. No. | Course Outcomes (CO's) |
|--------|---|
| 1 | To evaluate marketing environment concepts and its evolution |
| 2 | Compare and contrast among market segmentation and consumer behaviour concepts |
| 3 | To critically analyze the role and concepts of product decisions – Product life cycle, new product development, product pricing |
| 4 | To develop the ability of pricing decisions, channel of distribution and physical distribution |
| 5 | Helps the students to analyze and develop the understanding of Legal, Ethical and Social Aspects of Marketing |

MBT 204 FINANCIAL MANAGEMENT

Unit 1 Introduction

Nature, Objectives and Scope, Modern Concept of Finance, Financial Decision- Types of Financial Decisions, Role of Finance Manager, Risk Return Framework for Financial Decision Making, Time Value of Money.

Unit 2

- (a) **Cost of capital:** Concept of Value, Present Value, Basic Valuation Models.
- (b) Capital Structure: Concept, Financial Leverage and its Impact on the Valuation of Firm, Theories of Capital Structure- Net Income Approach, Operating Income Approach, Miller Modigliani Approach, Determinants of Capital Structure.

Unit 3

Investment Decisions





Nature and kinds of Capital Budgeting, Techniques of Evaluating Capital Budgeting Decisions, Capital Budgeting under Risk and Uncertainty, Analysis of Real Life Capital Budgeting Decisions

- Some Case Studies.

Unit 4

- (a) **Dividend Decisions:** Dividend and its Form, Theories of Dividend Policy and their Impact on the Value of a Firm, Determinants of Dividend Policy.
- (b) Working Capital Management: Meaning and Concepts of Working Capital. Estimating Working Capital Requirements. Management of Cash Receivables and Inventory.

Unit 5

Corporate Restructuring

Merger and Acquisitions -Types, Sources of Takeover Gains, Valuation and Financing of Acquisitions, Analysis of some Case Studies. The Empirical Evidences on Theories and the Case Studies relevant for above Topics are required be Discussed.

Suggested Readings

- 1. Van Horne James C.: Financial Management and Policy,12e, 2011, Pearson Education
- 2. Prashna Chandra: Financial Management. McGraw Hill
- 3. Pandey, I.M: Financial Management, 12e, 2022 Pearson Education
- 4. Khan and Jain: Financial Management. McGraw Hill.
- 5. Ross S.A., R.W: Westerfield and J. Jaffe, Corporate Finance, 7 Ed. McGraw Hill.
- 6. Brealey R.A. and S.C. Myers: Principles of Corporate Finance, McGraw Hill, 6
- 7. V.Saran, Financial Management, PHI.

| S.No | Course Outcomes (CO's) |
|------|---|
| 1 | To students analyze the basic concept, conventions and postulates as a important tools for decision making for manager. |
| 2 | To students apply various accounting equation by the Manager. |
| 3 | To students Develop various accounting statement in organisation by the manager. |
| 4 | To students analyze the various accounting statement by the manager. |
| 5 | To students apply the knowledge of Indian accounting standards by the managers in corporate. |

MBT 205 HUMAN RESOURCE MANAGEMENT

Unit 1

Introduction to Human Resource Management

(a) Evolution of HRM (b) Objectives and Function of HRM (c) Role and Responsibilities of HR Manager (d) Relevance of HRM (e) Systems approach to HRM.



Unit 2

Acquisition of Human Resource Management

(a) Human Resource Planning: Purpose and Process (b) Recruitment and Selection: Source of Recruitment, Stages in Selection Process (c) Placement, Goals Analysis: Job Description and Job Specification.

Unit3

Developing Human Resources

(a) Training and Development: Training Needs, Training Methods, Application of Computers in Training, Developing Effective Training Programmes (b) Concept of HRD (c) Management Development Programmes.

Unit 4

Performance Appraisal

(a) Concept and Objectives of Performance Appraisal (b) Process of Performance Appraisal (c) Criteria for Performance Appraisal (d) Benefits of Performance Appraisal (e) Limitation and Constraints (f) 360 Degree Performance Appraisal(g) Promotion-Degree, Transfer Air Separation: Promotion, Purpose, Principles and Types; Transfer: Reasons, Principles and Types; Separation: Lay-Off, Resignation, Dismissal, Retrenchment, Voluntary, Retirement Scheme.

Unit5

Motivating Human Resources

- (a) Motivation at Work, Major Motivation Theory: An overview (b) Participative Management
- (c) Compensation Management, Major Elements of Compensation Management (d) Incentives: Concepts, Types of Incentives; Incentives schemes in Indian Industries; Fringe Benefits (e) Discipline and Employees' Grievance Redressal.

Suggested Readings

- 1. Dessler, Gray, and Biju Varkkey, Human Resource Management, 16e, 2020, Pearson Education
- 2. David S. Decenzo and Stephen P. Robbins, Personal/Human Resource Management, 3edition, Prentice-Hall of India, New Delhi, 2006
- 3. K. Aswathappa, Human Resource and Personnel Management, Tata McGraw-Hill
- 4. RS Dwivedi, Managing Human Resources in Indian Enterprises, Galgotia Publishing Co., New Delhi, Latest ed.
- 5. Biswajeet Pattanayak, Human Resource Management, 3rd ed., Prentice-Hall of India, New Delhi
- 6. Gomez-Mejia, et al., Managing Human Resources, 8e,2015, Pearson Education
- 7. Ivancevich, Human Resource Management, Tata McGraw-Hill

S. No Course Outcomes(CO's)

1 Examine and apply human resource planning in an organization.



| 2 | Understand and develop career planning & development related activities in the organization |
|---|---|
| 3 | Apply the basic concepts of HRD, different approaches to HRD, HRD styles, Structure and competencies for the growth of an organization. |
| 4 | Examine the impact of HRD in an organization with the help of various data collecting techniques. |
| 5 | Develop organization culture by implementing HRD techniques in Organizations |

MBT 206 PRODUCTION AND OPERATIONS MANAGEMENT

Unit 1 Introduction

Nature and Scope of Production and Operations Management, its Relationship with other Systems in the Organisation, Factors Affecting System and Concept of Production and Operation Management. Facility Location, Types of Manufacturing Systems, Lean Manufacturing, Lastudentt Planning and A n a l y s i s .

Unit 2

Production System and Related Concepts

Functions of Production and Material Management, Types of Production Systems, Productivity Variables, and Productivity Measurement, Production Planning and Control in Mass Production, Batch Production, Job Order Production, Selection, Product Design and Development, Process Selection, Capacity Design, Determination of Material Required, Procedure for Purchasing, Stocking and Distribution of Materials.

Unit3

Scheduling and measuring Production Activities

Scheduling, Maintenance Management Concepts, TPM, Work Study, Method Study, Work Measurement, Work Sampling, Work Environment and Safety, Material Management.

Unit4

Material and Inventory Management

An overview of Material Management, Material Planning and Inventory Control, Inventory Models, (Classical EOQ, Model with Shortages), JIT, Budgeting and Material Planning, Purchase Management, Store Management, Safety Management.

Unit5

Quality in Production and Operations Management

Quality Assurance, Accepting Sampling, Statistical Process Control, Total Quality Management, QMS and ISO Standards.

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards

Suggested Readings



- Adamand Ebert, Ronald J, Production and Operation Management- Concepts, 1. Models & Behaviour, PHI New Delhi
- 2. Charry SN. Production and Operation Management-Concepts Methods and Strategy, PHI New Delhi 2005
- Baff .ES, Modern Production Management; John Willey, New York 1993 3.
- 4. Garg, Ajay-Production and Operations Management, TMH, Delhi
- Chase, B Richard, Shankar, R ., Jacobs, F.R., Aguilano, N.J.-Operations and 5. Supply Management TMH, Delhi
- Pannesseluam, R., Production and Operations Management, PHT, Delhi 6.
- Martinich, J.S., Production and Operations Management, TMH, Delhi 7.
- Aswathappa, K, Production and Operations Management, TMH, Delhi 8.
- 9. Madan, Pankaj; Production and Operation Management; New Delhi; Global Vision Publishing2010
- 10. William J Stvenson, Operation Management, TMH, NewDelhi2009 10.

| S.NO | Course Outcomes(CO's) |
|------|---|
| 1 | Analyze the basics of production management and the relevant and responsible factors |
| 2 | Demonstrate & apply the various types of production processes, the essentialities of a product such as its selection, various procedures and its stocking |
| 3 | Create the various activities relating to scheduling and measuring of production take place and how control can be obtained on both product and quality |
| 4 | Develop various models that deal with inventory, its control, safety and security management in production process. |
| 5 | Create supply and logistics, distribution networks and its management |

MBT 207 BUSINESS RESEARCH METHODS

Unit 1 Introduction

Concept, Nature, Scope, Need and Role of Business Research, Characteristic of Research, Types of Research, the Research Process: An overview.

Unit 2

Research Design

Types of Research Design, Including Exploratory, Descriptive Experimental, Research Design Process.

Unit 3

Questionnaire Design and Schedule

Concept of Questionnaire and Schedule, Principles of Designing Questionnaire and Schedule, Limitations of Questionnaire, Reliability Validity of Questionnaire.





Unit 4

Sampling Theory

Concept, Need and Importance of Sampling, Types of Sampling Methods, Sampling and Non Sampling Errors, Sample Design, Determinants of Sample Size, Steps in Designing the Sample.

Unit5

Data Analysis

Tabulation and Processing of Data, Basic Aspects of Statistical Inference Theory including Hypothesis Testing, Type I and Type II Errors, Applications of T-Test, Z-Test, F-Test, Chi- square Test and ANOVA, Introduction to Computerized Statistical Packages.

Suggested Readings

- Zikmund: Business Research Methods, Cengage Learning 2011-12
- Naval Bajpai, Business Research Methods, 2e, 2017, Pearson Education 2.
- Cooper and Schindler: Business Research Methods, Tata Mc GrawHill, 2011 3.
- 4. Saunders: Research Methods for Business, 5e, 2011, Pearson Education
- Cooper and Schindler (2010). Business Research Methods, 10th edition. Tata 5. McGraw Hill, New Delhi.
- Kothari, C.R. (2004).Research Methodology Methods, 2nd edition. New Age 6. Publications, New Delhi.
- Mishra, Anil K. (2012). A Hand Book of Research in SPSS, 1st edition. Himalayan 7. Publishing House, Mumbai.
- Field, A. (2013). Discovering Statistics using IBM SPSS. 4th edition. Sage 8. Publications London.
- 9. Naresh Malhotra, Marketing Research, 7e, 2019, Pearson Education

| S. No. | Course Outcomes(COs) |
|--------|---|
| 1. | To understand the purpose of research. |
| 2. | To identify and understand potential ethical, empirical and analytical problems plaguing the research process and ways to overcome them. |
| 3. | To identify a business problem/ need, translate it into a research question, and design an appropriate way. |
| 4. | To develop an understanding on various kinds of research, objectives of doing research, research process, research designs and sampling. |
| 5. | To have adequate knowledge on measurement & scaling techniques as well as the quantitative data analysis and hypothesis testing procedures. |

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards

MBT 208 State of Art Seminar :

Practical/Presentation Sessions for Conducting the Seminar on Various Topics Related To Business Management.

Note: MBT 208 will be an internal assessment exam for colleges. They are required to make the students aware about seminars and presentations. Form a committee from the faculty members and conduct live seminars for 30 marks which will be followed by viva of 70 marks by external examination including presentation on any topic by individual students.



III - Semester

| | | ubject Category Subject Name | | Maximum Marks Allotted | | | Contact Hours po | | | Total Credit |
|-----------|-----------------|------------------------------|--|---------------------------|-------------------|------|---------------------|---|---|---------------------|
| S. No. | Subject Code | | • | | Total Marks | Week | | | | |
| | | | | External Marks | Internal Marks | | L | Т | P | |
| 1. | MBT 301 | | Strategic Management | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 2. | MBT 302 | | International Business | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 3. | MBT 303 | | Universal Human Values and Professional Ethics | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 4. | MBT 304 | | Total Quality Management | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 5. | MBT 305 | | Major 1 | 70 | 30 | 100 | 2 | 0 | 0 | 2 |
| 6. | | | Major 2 | 70 | 30 | 100 | 2 | 0 | 0 | 2 |
| 7 | | | Minor 1 | 70 | 30 | 100 | 2 | 0 | 0 | 2 |
| 8. | MBT 306 | | Summer Internship Project Report and Viva- Voce (Training Report and Presentation* followed by viva voce**) | 70** | 30* | 100 | 0 | 0 | 6 | 3 |
| Total | | • | · | 560 | 240 | 800 | 18 | 0 | 6 | 21 |
| NSS/ | NCC | | | | • | • | | | • | • |

Select any two subjects as major from any one group and minor from another group.

List of Electives

| FINANCE | | | | | | | |
|--------------|--|---|---|---|---|--|--|
| Subject Code | Elective | L | T | P | C | | |
| MBT 305 F1 | Security Analysis and Portfolio Management | 2 | 0 | 0 | 2 | | |
| MBT 305 F2 | Working capital Management | 2 | 0 | 0 | 2 | | |
| MBT 305 F3 | Corporate Tax Planning | 2 | 0 | 0 | 2 | | |
| MBT 305 F4 | Financial Markets and Institutions (MINOR) | 2 | 0 | 0 | 2 | | |

| MARKETING | | | | | |
|--------------|------------------------------------|---|---|---|---|
| Subject Code | Elective | L | T | P | C |
| MBT 305 M1 | Integrated Marketing Communication | 2 | 0 | 0 | 2 |
| MBT 305 M2 | Marketing Research | 2 | 0 | 0 | 2 |
| MBT 305 M3 | Digital Marketing | 2 | 0 | 0 | 2 |
| MBT 305 M4 | Consumer Behavior (MINOR) | 2 | 0 | 0 | 2 |

| HUMAN RESOU | JRCE MANAGEMENT | | | | |
|--------------|---|---|---|---|---|
| Subject Code | Elective | L | Т | P | С |
| MBT 305 HR1 | Industrial Relations and Labour Laws | 2 | 0 | 0 | 2 |
| MBT 305 HR2 | Training & Development | 2 | 0 | 0 | 2 |
| MBT 305 HR3 | HR Analytics | 2 | 0 | 0 | 2 |
| MBT 305 HR4 | Counselling Skills for Managers (MINOR) | 2 | 0 | 0 | 2 |

| AGRIBUSINESS I | MANAGEMENT | | | | |
|----------------|------------------------------------|---|---|---|---|
| Subject Code | Elective | L | Т | P | С |
| MBT 305 AM1 | Agribusiness and Rural Environment | 2 | 0 | 0 | 2 |
| MBT 305 AM2 | Farm Business Management | 2 | 0 | 0 | 2 |
| MBT 305 AM3 | Agribusiness Financial Management | 2 | 0 | 0 | 2 |
| MBT 305 AM4 | Agriculture Economics (MINOR) | 2 | 0 | 0 | 2 |

| BUSINESS ANALYTICS | | | | | | | |
|--------------------|----------------------------|---|---|---|---|---|--|
| Subject Code | Elective | L | 7 | Γ | P | С | |
| MBT 305 BA1 | Business Intelligence | 2 | (|) | 0 | 2 | |
| MBT 305 BA2 | Block Chain Technology | 2 | (|) | 0 | 2 | |
| MBT 305 BA3 | Data Visualization | 2 | (|) | 0 | 2 | |
| MBT 305 BA4 | Business Analytics (MINOR) | 2 | (|) | 0 | 2 | |

| RURAL DEVELOPMENT | | | | | | | |
|-------------------|---|---|---|---|---|--|--|
| Subject Code | Elective | L | T | P | C | | |
| MBT 305 RD1 | Principles and Practice in Cooperatives | 2 | 0 | 0 | 2 | | |
| MBT 305 RD2 | Cooperative laws | 2 | 0 | 0 | 2 | | |
| MBT 305 RD3 | Cooperative credit and banking | 2 | 0 | 0 | 2 | | |
| MBT 305 RD4 | Rural Development (MINOR) | 2 | 0 | 0 | 2 | | |

| INTERNATIONAL BUSINESS | | | | | | |
|------------------------|---|---|---|---|---|--|
| Subject Code | Elective | L | T | P | C | |
| MBT 305 IB1 | Import Export Management | 2 | 0 | 0 | 2 | |
| MBT 305 IB2 | International Business Laws and Treaties | 2 | 0 | 0 | 2 | |
| MBT 305 IB3 | Management of Multinational corporation | 2 | 0 | 0 | 2 | |
| MBT 305 IB4 | Cross Cultural Business Management(MINOR) | 2 | 0 | 0 | 2 | |

| | SUPPLY CHAIN MANAGEMENT | | | | |
|--------------|---|---|---|---|---|
| Subject Code | Elective | L | T | P | C |
| | | | | | |
| MBT 305 SC1 | Fundamentals of Logistics & Supply Chain | 2 | 0 | 0 | 2 |
| MBT 305 SC2 | International Logistics | 2 | 0 | 0 | 2 |
| MBT 305 SC3 | Lean Six Sigma | 2 | 0 | 0 | 2 |
| MBT 305 SC4 | Designing & Managing Supply Chain (MINOR) | 2 | 0 | 0 | 2 |



| HEALTH CARE AND HOSPITAL MANAGEMENT | | | | | |
|-------------------------------------|--------------------------------------|---|---|---|---|
| Subject Code | Elective | L | T | P | C |
| | | | | | |
| MBT 305 HCHM 1 | Healthcare Environment Management | 3 | 0 | 0 | 3 |
| MBT 305 HCHM 2 | Operations Management in Healthcare | 3 | 0 | 0 | 3 |
| MBT 305 HCHM 3 | Patient Care Management | 3 | 0 | 0 | 3 |
| MBT 305 HCHM 4 | International Health Systems (MINOR) | 3 | 0 | 0 | 3 |

| DATA SCIENCE | | | | | |
|--------------|-------------------------------------|---|---|---|---|
| Subject Code | Elective | L | Т | P | С |
| MBT 305 DS 1 | Introduction to Data Science with R | 3 | 0 | 0 | 3 |
| MBT 305 DS 2 | Data Mining and Data Analysis | 3 | 0 | 0 | 3 |
| MBT 305 DS 3 | Regression Methods | 3 | 0 | 0 | 3 |
| MBT 305 DS 4 | Inferential Statistics (MINOR) | 3 | 0 | 0 | 3 |

| Fin-Tech | | | | | | |
|--------------|----------------------------|---|---|---|---|---|
| Subject Code | Elective | I | L | T | P | C |
| MBT 305 FT 1 | Introduction to Fin-Tech | 3 | 3 | 0 | 0 | 3 |
| MBT 305 FT 2 | Financial Modelling | 3 | 3 | 0 | 0 | 3 |
| MBT 305 FT 3 | Financial Derivatives | 3 | 3 | 0 | 0 | 3 |
| MBT 305 FT 4 | Trading Strategies (MINOR) | 3 | 3 | 0 | 0 | 3 |

MBT 301 STRATEGIC MANAGEMENT

Unit1 Introduction

Meaning, Scope and Importance of Strategic Management

Nature of Strategic Management, Characteristics, Strategic Management Process, Strategic Management Model. Dimension and Levels of Strategy. Role of strategists in business Policy

Unit2

Strategy Formulation

Corporate Planning, Concept of Planning, Planning Process, Types of Planning, Strategic Planning, Strategic Decision Making, Vision, mission and purpose, objectives and goals of a business organisation-Types of strategies –Guidelines for crafting successful business strategies.

Unit3

Environmental Appraisal

External Analysis: Industry analysis, remote environment analysis, competitive analysis, global environment analysis. Internal Analysis: Resource based view of the firm, Capabilities, core competence, value chain analysis, VRHN analysis, distinctive competency, sustainable competitive advantage and profitability. SWOT Analysis. , Synergy.

Unit4

Strategic Analysis and Choice Environmental Threat and Opportunity Profile (ETOP); BCG, **TOWS, GE, Directional Policy** Matrix- Organizational Capability Profile -Strategic Advantage Profile Corporate Level strategies-growth, stability, renewal, corporate portfolio analysis, grand strategies, McKinsey's7s Frame work. Business Level Strategies- Michael Porter's Generic strategies. Functional level strategies.

Unit5

Strategy Implementation and Evaluation

Strategy Implementation: Structure, Systems and People, issues in implementation, Model of Strategic Implementation, Project implementation, Procedural implementation, Resource Allocation, Budgets, Organization Structure, Strategy and Organisation Structure, Different Types of Organisational Structure, Social responsibilities and Ethics-Building a capable organization-Functional issues. Symptoms of malfunctioning of strategy-Operations Control and Strategic Control, An overview of Strategic Evaluation and Control- Measurement of performance- Analyzing variances- Role of organizational systems in evaluation. Strategic Management for non-profit organizations.

Suggested Readings

- 1. Thomas L. Wheelen Strategic Management and Business Policy, 15e 2018 Pearson Education India
- 2. Michael A. Hitt, R. Duane Ireland, Robert E. Hoskisson Management of Strategy-Concepts and Cases,4/e, Cengage Learning,New Delhi.
- 3. John. A. PearceII, Richard B. Robinson Jr, Amita Mital, StrategicManagement—Formulation, Implementation and Control,1/e, Tata McGraw-Hill, New Delhi.



- 4. Charles.W.L Hill, Gareth R Jones Strategic Management-An Integrated Approach, 6/e, Biztantra, New Delhi.
- 5. Thompson A Jr, A. J. Strickland, Strategic Management, Tata McGraw-Hill Publishing, New Delhi.
- Upendra Kachru, Strategic Management-Concepts and Case. Excel Books, New Delhi. 6.
- Adrian Haberberg, Alison Rieple . Strategic Management–Theory and Application, Oxford University 7. Press, New Delhi.
- 8. David & David Strategic Management Concepts: A Competitive Advantage Approach, 16e, 2018 Pearson Education India

| S.No. | Course Outcomes(COs) |
|-------|---|
| 1. | To apply strategies and analyze the role of strategist in business policy of an |
| | Organization |
| 2. | To formulate strategic policies, plans to take decisions in business related problems |
| 3. | To analyse the internal and external environment of business for the purpose of |
| | effective strategic planning. |
| 4. | To evaluate various strategies to develop effective strategies for an organization. |
| 5. | To devise and implement strategic approaches to manage a business successfully in a |
| | global context |



MBT 302 INTERNATIONAL BUSINESS

Unit I

Introduction: Meaning, Nature and Scope of International Management, Driving and Restraining Forces, Domestic to Transnational Business, Modes of Entry. Globalization—Forces, Meaning, dimensions and stages in Globalization, Characteristics and role of MNCs. International Business Environment—The economic environment; social and cultural environment, political, legal and regulatory environment, natural environment, technological environment.

Unit 2

International Trade Theories: Mercantilism; Absolute Cost theory, Comparative Cost theory, Factor endowment theory, International Product life Cycles Theory, International Investment Theories: Theory of Capital Movements, Market Imperfections theory; Internationalization Theory; Location Specific Advantage Theory; Eclectic Theory Free Trade: Advantages and Disadvantages, Forms of Protection: Tariffs, Subsidies, Import Quotas, Voluntary Export Restraints, Administrative Policy, Anti-dumping Policy

Unit 3

International Marketing: Nature & significance, International Marketing Orientations, International Segmentation, International Product Life Cycle International HRM: International Staffing Approaches, Expatriate Management, International Labor Relations.

Unit 4

Foreign Exchange Determination Systems: Basic Concepts Relating to Foreign Exchange, Various types of Exchange Rate Regimes, Factors Affecting Exchange Rates, Brief History of Indian Rupee

Unit 5

International Institutions: Objectives and Functions of WTO, IMF, IBRD, UNCTAD, Regional Economic Integration: Introduction, Levels of Economic Integration, Objectives and Functions of EU, NAFTA, ASEAN, SAARC, BRICS

SUGGESTED READINGS

- 1. Joshi, R M: International Business, OUP
- 2. Ricky W. Griffin and Michael W. Pustay: International Business, 8e, 2017, Pearson Education India
- 3. Sumati Verma: International Business Updated 2e, 2021, Pearson Education India
- 4. Hill International Business, McGraw-Hill2.Cherunilam F- International Business: Text and Cases, PHI Reference Books1.Aswathappa- International Business, McGraw-Hill
- 5. Cherunilam, F International Trade and Export Management, Himalaya
- 6. Daniels International Business, 16e, 2018 Pearson Education India
- 7. Albaum Duerr International Marketing and Export management (Pearson, 7th Ed.)
- 8. Cavusgil International Business, 4e, 2017 Pearson Education India

Websites: www.ibef.orgwww.cia.gov.inCourse

Course Outcome

| S.N | Course Outcome |
|-----|--|
| CO1 | To give the student an exposure to the dynamic environment of International Business |
| CO2 | To understand the impact of environment on the International Business Operations of the firm |
| CO3 | To explain the functions and form of the global monetary system |
| CO4 | To explain the role of International organizations and Regional Trade |



MBT 303 UNIVERSAL HUMAN VALUES AND PROFESSIONAL ETHICS

UNIT-1

Course Introduction - Need, Basic Guidelines, Content and Process for Value Education Understanding the need, basic guidelines, content and process for Value Education, Self- Exploration—what is it? - its content and process; 'Natural Acceptance' and Experiential

Validation- as the mechanism for self exploration, Continuous Happiness and Prosperity- A look at basic Human Aspirations, Right understanding, Relationship and Physical Facilities- the basic requirements for fulfillment of aspirations of every human being with their correct priority, Understanding Happiness and Prosperity correctly- A critical appraisal of the current scenario, Method to fulfill the above human aspirations: understanding and living in harmony at various levels.

UNIT-2

Understanding Harmony in the Human Being - Harmony in Myself Understanding human being as a co-existence of the sentient 'I' and the material 'Body', Understanding the needs of Self ('I') and 'Body' - Sukh and Suvidha, Understanding the Body as an instrument of 'I' (I being the doer, seer and enjoyer), Understanding the characteristics and activities of 'I' and harmony in 'I', Understanding the harmony of I with the Body: Sanyam and Swasthya; correct appraisal of Physical needs, meaning of Prosperity in detail, Programs to ensure Sanyam and Swasthya.

UNIT-3

Understanding Harmony in the Family and Society- Harmony in Human-Human Relationship Understanding harmony in the Family- the basic unit of human interaction, Understanding values in human-human relationship; meaning of Nyaya and program for its fulfillment to ensure Ubhay- tripti; Trust (Vishwas) and Respect (Samman) as the foundational values of relationship, Understanding the meaning of Vishwas; Difference between intention and competence, Understanding the meaning of Samman, Difference between respect and differentiation; the other salient values in relationship, Understanding the harmony in the society (society being an extension of family): Samadhan, Samridhi, Abhay, Sah-astitva as comprehensive Human Goals, Visualizing a universal harmonious order in society- Undivided Society (Akhand Samaj), Universal Order (Sarvabhaum Vyawastha)- from family to world family!.

UNIT-4

Understanding Harmony in the Nature and Existence - Whole existence as Co-existence Understanding the harmony in the Nature, Interconnectedness and mutual fulfillment among the four orders of nature-recyclability and self-regulation in nature, Understanding Existence as Co- existence (Sah-astitva) of mutually interacting units in all-pervasive space, Holistic perception of harmony at all levels of existence.

UNIT-5

Implications of the above Holistic Understanding of Harmony on Professional Ethics Natural acceptance of human values, Definitiveness of Ethical Human Conduct, Basis for Humanistic Education, Humanistic Constitution and Humanistic Universal Order, Competence in Professional Ethics: a) Ability to utilize the professional competence for augmenting universal human order, b) Ability to identify the scope and characteristics of people-friendly and eco- friendly production systems, technologies and management



models, Case studies of typical holistic technologies, management models and production systems, Strategy for transition from the present state of Universal Human Order: a) At the level of individual: as socially and ecologically responsible engineers, technologists and managers, b) At the level of society: as mutually enriching institutions and organizations.

Suggested Readings: :

- 1. RR Gaur, R Sangal, G PBagaria, 2009, A Foundation Course in Human Values and Professional Ethics.
- 2. Ivan Illich, 1974, Energy & Equity, The Trinity Press, Worcester, and Harper Collins, USA
- 3. A Nagraj,1998, Jeevan Vidya Ek Parichay, Divya Path Sansthan, Amarkantak.P L Dhar, RR Gaur, 1990, Science and Humanism, Commonwealth Publishers.
- 4. A N Tripathy, 2003, Human Values, New Age International Publishers.
- 5. E G Seebauer & Robert L. Berry, 2000, Fundamentals of Ethics for Scientists & Engineers , Oxford University Press
- 6. M Govindrajran, S Natrajan & V. S. Senthil Kumar, Engineering Ethics (including Human Values), Eastern Economy Edition, Prentice Hall of India Ltd.
- 7. B P Banerjee, 2005, Foundations of Ethics and Management, Excel Books.

| S.No | Course Outcomes (CO's) |
|------|---|
| 1 | To understand the significance of value inputs in a classroom, distinguish between values and skills, understand the need. |
| 2 | To understand the meaning of Harmony in the Self the Co-existence of Self and Body and distinguish between the Self and the Body, |
| 3 | Understand the harmony in nature and existence, and work out their mutually fulfilling participation in the nature. |
| 4 | Distinguish between ethical and unethical practices, and start working out the strategy to actualize a harmonious environment wherever they work. |
| 5 | To understand the universal human values and morals for social harmony and holistic understanding of harmony on Professional Ethics. |



MBT 304 TOTAL QUALITY MANAGEMENT

Unit 1

Total Quality Management (TQM) Concept and Fundamentals

Approaches to Quality Management, TQM Framework and Features, Principle of TQM, Philosophies of Quality Gurus: Deming's 14 Points, Crosby's Four Absolutes, Juran's Trilogy, Feigenbaum's Total Quality Control, The Total Quality Triad, Evolution of TQM.

Unit 2

Human Aspect of Total Quality Management (TQM)

TQM Human Elements, Motivating People for Total Quality, Resistance to Change, Characteristics of Quality Leaders, Role of Quality Leaders, Teams for TQM, On-th-Job satisfaction and quality, Participative Management, Compensation System, Ergonomics.

Unit 3

Quality Management System

Strategic Quality management, Quality Statement, Culture, Product Quality cycle, TQM Planning Environment, Role of Quality Control Department, Planning for Productivity, Quality and reengineering, Introduction to Business Process Re-engineering (BPR), The Cost of Quality (Direct and Indirect Cost), Evaluating the cost of TQM, Quality Index, The Total Quality Cost Curve, Standardization

Unit 4

Total Quality Management (TQM) Practices

TQM Technologies and TQM Practices: Policy Deployment, Benchmarking, Backtracking, CrossFunctional Teams, QFD, Taguchi Method, Failure-Mode and Effect Analysis, The Poka-Yoke Concept, Concurrent Engineering, Malcolm Baldrige Award Model, TQM Implementation Process, Introduction to World Class Manufacturing.

Unit 5

Quality Management Standards

Concept and need of Quality Standards, National Quality Standard Organisations: Bureau of Indian Standards (BIS), Agmark Grading of Agriculture and Allied Commodities, Quality Council of India; International Ogranisation for Standardisation (ISO), ISO Standards: ISO 9000 and 14000 Series, Integration of ISO 14000 with ISO 9000, Process of ISO Certification, Implementing the System, Post Certification.

Suggested Readings

- 1. Dale H Besterfield, Carol Besterfield, Glen, Mary, Total Quality Management, 5e, 2018 Pearson Education
- 2. Charantimath Total Quality Management, 4e, 2022 Pearson Education India
- 3. Ross, Total Quality Management: Text, Cases, and Readings, 2nd ed. St. Lucie Press.
- 4. H Lal, Total Quality Management: A Practical Approach, New Age International, New Delhi.
- 5. Hand Book for ISO certification.



SYALLABUS OF ELECTIVE PAPERS SEMESTER 3

FINANCE (MAJOR) SUBJECTS

MBT305 F1 SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

Unit1

Introduction of Investment

Meaning and Objective of Investment, Investment Decision Process, Categories of Investment, Steps of Security Analysis, Investment Avenues, Speculation and Gambling.

Unit2

Capital Market

Meaning and Nature of Capital Market, Types, Functions and limitations of Capital Market, Trading of Securities, (Including BOLT), SEBI guidelines IPO, Book Building and Qualified Institutional Placement.

Unit3

Security Analysis

Fundamental & Technical Analysis and Efficient Market Hypothesis, Economic, Industrial and Company Analysis.

Unit4

Portfolio Analysis

Portfolio Analysis and Selection ,Risk and Return Analysis, Beta, Markowitz and Sharpe Model, Capital Asset Pricing Model, Arbitrage Pricing Theory.

Unit5

Portfolio Revision and Evaluations

Portfolio Revision and Portfolio Evaluation, Constant Rupee Value Plan, Constant Ratio Plan, Sharpe and Treynor Measures, Mutual Fund Industry.

Suggested Readings

- 1. Fischer, Donald, E. And Ronald J. Jordan, Security Analysis and Portfolio Management, 7e. 2018 Pearson Education India.
- 2. Ale Chandra, Prasanna, *Investment Management*, Tata McGraw Hill, New Delhi
- 3. Sharpe, William Kevin, S. Portfolio Management, Prentice Hall India, New Delhi.
- 4. Avadhani, V.A, *Investmentand Security Marketin India*, Himalaya Publishing House,
- 5. Pandey, I. M. Financial Management, 12e 2021, Pearson Education India



| S.no | Course Outcomes (CO's) |
|------|--|
| 1 | To develop the understanding of the concept of investment and security analysis. |
| 2 | To demonstrate various securities and the market they trade in and to observe the investment regulations and related ethics and professional conduct. |
| 3 | To apply fundamental, technical, economical, industrial and company analysis in the real world and the theories and evidence for and against the efficient market hypothesis. |
| 4 | To develop the ability to understand the concept of portfolio management, models and risk-return relationship for better investment and for interpreting various portfolio performance measures. |
| 5 | To analyze various models of portfolio evaluation. |

MBT 305 F2 WORKING CAPITAL MANAGEMENT

Unit 1

Concept and meaning of working capital – Liquidity and profitability – identification of factors affecting working capital requirements – theories of working capital

Unit 2

Approaches to estimation of working capital – operating cycle approach.

Management of inventories – determination of optimum inventory – lead time – Safety stock – EOQ approach

Unit 3

Management of receivables – credit and Collection policy – Credit standards – Credit terms – Credit analysis – management of payables – Maturity matching.

Unit 4

Management of cash – Accelerating cash inflows – Managing collections – Concentration banking – lock box system – Control of disbursements – models for determining optimum level of cash – inventory model, stochastic – Cash budgeting – Investment of surplus cash.

Unit 5

Sources of working capital finance – Approaches to optimum mix of funds – trade credit, accrual accounts – money market instruments, commercial paper, Certificate of deposits – Bill discounting and factoring – Inter corporate loans – short term bank loans.

SUGGESTED READING MATERIALS:

- 1. Working Capital Management by Hrishikes Bhattacharya, PHI publication.
- 2. Financial Management by I.M. Pandey, 12e, 2021 Pearson Education India
- 3. Working Capital Management by R.P. Rustagi, Taxman Publication.
- 4. Financial Management by Prasanna Chandra, McGraw Publications.

| SN | Course Outcome |
|----|--|
| 1 | Identify working capital management considerations for permanent components, the impact of sales/production schedules and liquidity versus risk. |
| 2 | Solve financial ratios that measure profitability, asset utilization, liquidity, and debt utilization. |
| 3 | Prepare a cash budget and explain its various uses by a firm |
| 4 | Identify the cash flow cycle of the firm |
| 5 | Differentiate the risks and profitability of financing assets in terms of hedging |
| 6 | Analyze the major elements of cash management |

MBT 305 F3 CORPORATE TAX PLANNING

Unit1

Basic Concepts

Tax Planning; Tax Evasion: and Avoidance; Money Laundering; An overview of Taxation in India: Direct and Indirect Taxes; Customs Act; Central Excise Act; Service Tax; Sales Tax; VAT and Goods and Services Tax (GST); Income Tax; Wealth Tax; Gift Tax; and Central Gain Tax; GAAR.

Unit2

Corporate Tax in India

Residential status of companies and tax incidence; Tax liability; Taxation of Not-for profit organisations; Tax on distributed profits.

Unit3

Tax Planning

Tax Planning with Reference to Setting Up of a New Business: Location Aspect, Nature of Business, Form of organization; Tax Planning with Reference to Financial Management Decision- Capital Structure, Divided Including Deemed Dividend and Bonus Shares; Tax Planning with Reference to Specific Management Decisions-Make or Buy, Owner Lease, Repair or Replace; Tax Planning with Reference to Employees' Remunerations; Tax Planning with Reference to Sale of Scientific Research Assets; Tax Planning with Reference to Receipt of Insurance Compensation; Tax Planning with reference to Distribution of Assets at the time of Liquidation.

Unit4

Special Provisions Relating to Non-Residents

Double Taxation Relief; Provisions Regulating Transfer Pricing; Advance Ruling Direct Tax Code 2009 and Tax Planning.

Unit5

Tax Planning with Reference to Business Restructuring

Merger, Amalgamation, Acquisition, Demerger, Slump sale, Conversion of sole proprietary concern/partnership firm into company, Transfer of assets between holding and subsidiary companies.

Suggested Readings

- 1. Ahuja, Grish, and Ravi Gupta, Corporate Tax Planning and Management, Bharat Law House, Delhi.
- 2. Singhania, Vinod K., Kapil Singhania, and Monica Singhania, *Direct Taxes Planning and Management*, Taxmann Publications Pvt.Ltd., New Delhi.
- 3. Pagare, Dinkar, Direct Tax Planning and Management, Sultan Chandand Sons, New Delhi.
- 4.S P Goyal, Direct Tax Planning, Sahitya Bhawan, Agra 5. Bare Acts of Relevant Enactments



| S.N | Course Outcome |
|-----|---|
| 1 | Identify the relevant provisions of the Income Tax Act as it applies to the taxation of corporations |
| 2 | Prepare a reconciliation of accounting income and income for tax purposes |
| 3 | Apply the relevant sections of the Income Tax Act to compute taxable income and tax payable for a corporation |
| 4 | Prepare computerized Corporate income tax returns for a wide variety of situations |
| 5 | Describe the issues and apply the appropriate provisions related to the taxation of corporate investment income |
| 6 | Identify tax planning opportunities and challenges for corporations |

FINANCE (MINOR) SUBJECT

MBT 305 F4 FINANCIAL MARKETS AND INSTITUTIONS

Unit1

Financial System NatureandRoleofFinancialSystem; Structure/organizationoffinancialsystem; Functions of financial sector; Indian overview: Globalisation of Financial Financial Systeman Markets.Regulatory FrameworkforNon-

bankingFinancialInstitutions;Primarymarkets;Secondarymarkets;MoneyMarkets.

Unit2

Management of Commercial Banks An overview, Management of Banking Institutions; Negotiable Instruments; Working Capital Management; Project Financing, including Infrastructure Projects; Prudential Norms Prescribed by Regulators; Non-Performing Assets; Capital Adequacy Norms; Basel IIF ramework and Basel-III; Risk-Rating Agencies; Regulatory framework for Banks.

Unit3

Risk of Financial Inter-Mediation

Introduction; Interest Rate Risk; Re-financing Risk; Re-investment Risk; Market Risk; Credit Risk; Operational Risk; Liquidity Risk.

Unit4

Risk Management in Financial Institutions

Managing Credit Risk; Liability and Liquidity Management; Managing Interest Risk; Managing Operational Risk; Managing Risk through Sale of Assets and Securitisation, Derivatives.

Unit5

Management of Non-Banking Financial Institutions and Depositories

Securitisation: Concept, nature, scope, and the implications; DFIs in India: NABARD, State Level Institutions- PCF,



IDFC, REC, IFCI, IDBI, SIDBI, Functions and objectives of Depository.

Suggested Readings

- 1. Mishkin, Eakins, Financial Markets and Institutions, 8e, 2017 (Indian Adaptions) Pearson Education India
- 2. K Sasidharan, Financial Services and System (2008), McGraw-Hill Publishing Company New Delhi.
- 3. Clifford Gomez, Financial Markets Institutions and Financial Services, Prentice-HallofIndia, 2008.
- 4. Anthony Saunders, Financial Markets and Institutions, 4ed., Mc Graw-Hill Publishing Company, New Delhi.
- 5. Bharti Pathak, Indian Financial System, 5e, 2017, Pearson Education India
- 6.M.Y.Khan, Financial Services, 4thed., McGraw-HillPublishing Company, NewDelhi 2008.th 5. Anthony Saunders, Financial Institutions Management-A Risk Management Approach, 6 ed., McGraw-Hill Publishing Company, New Delhi.
- 7.M.Y.Khan, *Indian Financial System*, 6 ed., McGraw-Hill Publishing Company, New Delhi, 2008.
- 8. Sharma, Management of Financial Institutions: With Emphasis on Bank and Risk Management, Prentice-Hall of India, New Delhi.
- 9.L.M. Bhole, *Financial Institutions and Markets*, 4 ed., Mc Graw-Hill Co., NewDelhi, 2008. 9. Economic-Surveys, Govt. Of India.
- 10 RBI Bulletins

| S.No | Course Outcome | | | | | | |
|------|---|--|--|--|--|--|--|
| 1 | Defines the functions of financial markets and intermediary institutions. | | | | | | |
| 2 | Explains why interest rates changes. | | | | | | |
| 3 | Explains Efficient Market Hypothesis. | | | | | | |
| 4 | Explains effects of asymmetric information on financial markets | | | | | | |
| 5 | Explains the reasons of financial crisis. | | | | | | |
| 6 | Explains functions of Banks. | | | | | | |
| 7 | Distinguishes effects of money market tools on the financial system. | | | | | | |
| 8 | Explains the structure of banking industry. | | | | | | |
| 9 | Explains functions of investment banks. | | | | | | |

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards



MARKETING (MAJOR) SUBJECTS

MBT 305 M1 INTEGRATED MARKETING COMMUNICATIONS

Course Objective: This course introduces students to the basic concepts of marketing communication which includes advertising and sales promotion and how business organisations and other institutions carry out such activities.

UNIT I

INTRODUCTION TO ADVERTISEMENT -Concept and definition of advertisement – Social, Economic and Legal Implications of advertisements – setting advertisement objectives – Ad. Agencies Selection and remuneration – Advertisement campaigns.

UNIT II

ADVERTISEMENT MEDIA - Media plan - Type and choice criteria - Reach and frequency of advertisements – Cost of advertisements - related to sales – Media strategy and scheduling.

UNIT III

DESIGN AND EXECUTION OF ADVERTISEMENTS - Message development – Different types of advertisements – Layout – Design appeal – Copy structure – Advertisement production – Print – Radio. T.V. and Web advertisements – Media Research – Concept Testing– Measuring impact of advertisements.

UNIT IV

INTRODUCTION TO SALES PROMOTION - Scope and role of sale promotion – Definition – Objectives of sales promotion - sales promotion techniques - Trade oriented and consumer oriented.

UNIT V

SALES PROMOTION CAMPAIGN - Sales promotion - Requirement identification - Designing of sales promotion campaign – Involvement of salesmen and dealers – Out sourcing sales promotion national and international promotion strategies – Integrated promotion – Coordination within the various promotion techniques – Online sales promotions

TEXT BOOKS:

- Kenneth Clow. Donald Baack, Integrated Advertisements, Promotion and Marketing Communication, Pearson Education India, 6th edition, 2013.
- Semenile, Allen, O'Guinn, Kaufman Advertising and Sales Promotions An Integrated Brand Approach -6 th Bedition, Cengage Learning. (2012).
- Wells and Moriarity, Advertising & IMC: Principles and Practice, 11/e, 2021 Pearson Education
- Rajeev Batra, Myers, Advertising Management, 5e, 2022, Pearson Education 4.
- S. H. H. Kazmi and Satish K Batra, Advertising & Sales Promotion, Excel Books, New Delhi, 2nd 5. edition, 2008.
- George E Belch and Michel A Belch, Advertising & Promotion, McGraw Hill, Singapore, 7th edition, 2011.
- 7. Julian Cummings, Sales Promotion, Kogan Page, London 2003.
- Jaishri Jefhwaney, Advertising Management, Oxford, 2013.
- V.S.Padmanabhan, H.S.Murthy. Advertising and Sales Promotion (An Indian Perspective) Anes Books Pvt.Ltd -2011.



Course Outcome:

- 1. This course introduces students to the basic concepts of marketing communication which includes advertising and sales promotion and how business organisations and other institutions carry out such activities.
- 2 Insight into the importance of marketing communications planning and objective setting in relation to consumer decision making processes.
- 3. Insight into the importance of marketing communications planning and objective setting in relation to consumer decision making processes.

MBT 305 M2 MARKETING RESEARCH

Unit 1 Introduction

Importance and Role of research in Marketing; the marketing research industry; Approaches to Marketing intelligence. Types of Market research; research approaches; significance of Market research, Market research process, criteria of good marketing research, problems encountered by marketing research in India.

Unit 2

Marketing Research Design

Research design- Pre-test, Post-test, Control group and Solomon four group design, Causal Research; observation techniques, experiments and test markets.

Unit 3

Data Collection

Primary and secondary data; Questionnaire Design and issues; Interviews; Comparative and non-comparative attitude measurement scaling techniques, sampling design: Sampling procedure, types of sampling, sample size determination.

Unit 4

Data Analysis and Interpretation

Analyzing qualitative data collected through interviews and open ended questions – salient features of different methods. Non-parametric tests: One Sample tests (Kolmogorov-Smirnov One Sample Test; Runs test for Randomness; One Sample Sign Test; chi-square test); Two Sample tests (Sign test; Median test; Mann-Whitney U test; Wilcoxon Matched-Pairs Signed Rank test); K Sample tests (Median test; Kruskal-Wallis Test); Multidimensional Scaling, Discriminant analysis.

Unit 5

Reporting the Results and Ethical Issues in Marketing Research

Preparing Marketing research report and presentation: written report, format of report, common problems in preparing report, the critical nature of report, Graphical presentation of reports. Ethical Issues: Ethical issues related clients, respondents, sampling, questionnaire design, reporting.



Suggested Readings

- 1. Naresh K Malhotra, Satyabhushan Dash, Marketing Research-An Applied Orientation, 7/e, Revised Edition, 2019 Pearson Education, New Delhi.
- 2. Naval Bajpai, Business Research Methods, 2e, 2017, Pearson Education India
- 3. Donald S. Tull, Del I. Hawkins, (2009). Marketing research—Measurement & Method, PHI Private Limited, NewDelhi.
- 4. Donald R. Cooper, Pamela S Schindler, (2007). Marketing Research-Concepts and Cases. Tata McGraw-Hill Publishing Company Limited, NewDelhi.
- 5. Hair, Bush, Ortinau, (2006). *Marketing Research*, 3/e, Tata McGraw-Hill Publishing Company Limited, NewDelhi.
- 6. Nigel Bradley, (2007). *Marketing research—Tools and Techniques*. Oxford University Press, New Delhi.

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards

7. Burns, Marketing Research, 8e, 2017, Pearson Education India

Course Outcome:



MBT 305 M3 Digital Marketing

Unit 1

Introduction to Digital Marketing: The new digital world - trends that are driving shifts from traditional marketing practices to digital marketing practices, the modern digital consumer and new consumer's digital journey. Marketing strategies for the digital world - latest practices.

Unit 2

Social Media Marketing -Introduction to Blogging, Create a blog post for your project. Include headline, imagery, links and post, Content Planning and writing. Introduction to Face book, Twitter, Google +, LinkedIn, YouTube, Instagram and Pinterest; their channel advertising and campaigns.

Unit 3

Acquiring & Engaging Users through Digital Channels: Understanding the relationship between content and branding and its impact on sales, search engine marketing, mobile marketing, video marketing, and social-media marketing. Marketing gamification, Online campaign management; using marketing analytic tools to segment, target and position; overview of search engine optimization (SEO).

Unit 4

Designing Organization for Digital Success: Digital transformation, digital leadership principles, online P.R. and reputation management. ROI of digital strategies, how digital marketing is adding value to business, and evaluating cost effectiveness of digital strategies Unit 5

Digital Innovation and Trends: The contemporary digital revolution, digital transformation framework; security and privatization issues with digital marketing Understanding trends in digital marketing — Indian and global context, online communities and co-creation,

Suggested Readings

- 1- Moutsy Maiti: Internet Marketing, Oxford University Press India
- 2- Puneet Bhatia: Fundamental of Digital Marketing, 2e, 2019, Pearson Education India
- 3- Liana Li Evans; Social Media Marketing, 1/e, 2011, Pearson Education India
- 4- Vandana, Ahuja; Digital Marketing, Oxford University Press India (November, 2015).
- 5- Eric Greenberg, and Kates, Alexander; Strategic Digital Marketing: Top Digital Experts Share the Formula for Tangible Returns on Your Marketing Investment; McGraw-Hill Professional (October, 2013).
- 6- Ryan, Damian; Understanding Digital Marketing: marketing strategies for engaging the digital generation; Kogan Page (3rd Edition, 2014).
- 7- Tracy L. Tuten & Michael R. Solomon : Social Media Marketing (Sage Publication)



Course Outcome

- a. Students will develop an understanding of digital and social media marketing practices.
- b. Students will develop understanding of the social media platforms
- 3. Students will acquire the skill to acquire and engage consumers online.
- 4. Students will develop understanding of building organizational competency by way of digital marketing practices and cost considerations.
- 5. Students will develop understanding of the latest digital practices for marketing and promotion.

MARKETING (MINOR)

MBT 305 M4 CONSUMER BEHAVIOUR

Unit 1

Introduction

Defining Consumer Behaviour; Reasons for Studying Behaviour, Applying Consumer Behaviour Knowledge; Scope of Consumer Behaviour; Market Segmentation; Bases of Segmentation, Criteria for Effective Targeting of Market Segments.

Unit 2

Consumer as an Individual

Consumer Motivation; Consumer Involvement, Personality and Self- Concept; Perception, Consumer Learning and Memory, Attitudes and Changing Attitudes, information Porcessing.

Unit 3

Consumer in Social and Cultural Settings

Reference groups and family influences; Social class, cultural; sub cultural and cross cultural influences on consumer behaviour; personal influences and diffusion of innovation; Impact of Media and Globalisation.

Unit 4

Consumer Decision Process

Problem recognition; search and evaluating; purchasing processes; post purchase behaviour; consumer behaviour models; consumerism; organizational buying behaviour.

Unit 5

Consumer Satisfaction

Measurement of consumer satisfaction and dis-satisfaction, repeat buying, brand switching and loyalty, opinion leadership, complaining behaviour.

Suggested Readings

- 1. Schiffman and Kumar: Consumer Behavior, 12e, 2019 Pearson Education India
- 2. Varsha Jain; Consumer Behavior: A Digital Native, 1e, 2019, Pearson Education India
- 3. Engle, Blackwell and Minriad: Consumer Behaviour
- 4. Zaltman and Wallendorf: Consumer Behaviour
- 5. Mellot, Douglas W. Tr. : Consumer Behaviour
- 6. Loudon and Della Bitta: Consumer Behaviour
- 7. Benneton: Consumer Behaviour

Course Outcome:-

HUMAN RESOURCE MANAGEMENT (MAJOR)

MBT 305 HR-1 INDUSTRIAL RELATION AND LABOUR LAWS

UNIT 1

Introduction

Overview of Industrial Relations: Concept of Industrial Relations; Nature of Industrial Relations; Objectives of IR; Role of State; Trade Unions; Employers' Organization; ILO in IR; ILO its Role, Functioning and Contributions, Industrial Relations machinery in India

UNIT 2

Trade Unionism: Trade Union: origin and growth, unions after independence, unions in the era of Liberalization; Concept, objectives, functions and role of Trade Unions in collective bargaining; Problems of Trade Unions

UNIT 3

Labour problems: Discipline and misconduct; Grievance handling procedure; Labourturnover; Absenteeism; Workers' participation in management; Industrial accidents and Industrial Unrest, Strikes and Lock-Out, Settlement of Industrial Dispute, Consultative Bodies (Bipartite, Tripartite) and IR Strategies, Worker Development and Worker participation in management (WPM), Conciliation, Arbitration, Adjudication, Collective Bargaining.

UNIT 4

Labour legislations: Historical perspective; Impact of ILO; Indian constitution Abolition of Bonded and Child Labor, Important provisions of: Payment of Wages Act, Workmen's Compensation Act, Employees' State Insurance Act, Payment of Gratuity Act, Employees Provident Fund Act, Important Provisions of Industrial Dispute Act and Factories Act.

SUGGESTED READINGS:

- 1) P.R.N. Sinha Industrial Relations, Trade Unions and Labour Legislations, 3e, 2017, Pearson Education
- 2) Monappa A- Industrial Relations (Tata McGraw-Hill, 2002)
- 3) C.S. VenkataRatnam- Industrial Relations (OxfordPub., 2008)
- 4) Srivastava S C- Industrial Relations and Labour Laws (Vikas, 4th edition) 2000.
- 5) Mamoria CB, Mamoria, Gankar-Dynamics of Industrial Relations (Himalayan Publication, 2003)
- 6) Bare Acts

Course Outcome:-



MBT 305 HR 2 TRAINING & DEVELOPMENT

Unit I: Training and Learning Training: Concept, Need and Importance of Training in Modern Organizations, Training Vs Development Learning: Principles of Learning, Conditions for Effective Learning, Learning Cycle, Learning Process, Learning Curve Training Process: Training Needs Assessment- Components of Training Needs Analysis, Sources of Data for Training Needs Analysis.

Unit II: Design of Training Programme Principles of Training Design, Training Design Process, Outlining Programme Sequences and Themes, Approaches to Programme Design

Unit III: Implementation of Training Programme Training Delivery Competencies, Trainers and Training Styles, Trainers Role, Trainers Skills, Post Training Support for Improved Performance at Work; Training Methods, Training Aids

Unit IV: Training Evaluation Stages of Evaluation, Different Evaluation Models, Donald Kirkpatrick's Evaluation Model; Recent Trends in Training and Development

Suggested Readings:

- 1. Lynton, R.P. & Udai Pareek (2011). Training for Development. New Delhi: Vistaar Publications.
- 2. Raymond, A. N. (2010). Employee Training and Development. New Delhi: Tata McGrawHill Publications.
- 3. Rao, P.L. (2008). Enriching Human Capital through Training and Development. New Delhi: Excel publications.
- 4. Naik, G.P. (2008). Training and Development: Text, Research and Cases. New Delhi: Excel Books.
- 5. Sahu, R. K. (2010). Training for Development. New Delhi: Excel Books.

Course Outcome:

c. The objective of the course is to make the students understand the importance of training and development of individuals in modern organizations and familiarize with the process involved in training and development.

MBT 305 HR-3 HR ANALYTICS

UNIT I

Introduction to HR Analytics:

Basics of HR Analytics: Concept and Evolution of HR Analytics & data sources - HCM: 21Model. Use of workforce analytics to improve decision making. Analytics and

Prediction. Introduction to HR Metrics and predictive analytics. Importance of HR Analytics. Data Analytic techniques using software packages. Future of Human Resource Analytics.HR Metrics and HR Analytics; Intuition versus analytical thinking.



UNIT II

Creating business understanding for HR initiatives: Workforce segmentation and search for critical job roles; Statistical driver analysis – association and causation; Linking HR measures to business results; choosing the right measures for scorecards; Identifying and using key HR Metrics.

UNIT III

Forecasting budget numbers for HR costs: Workforce planning including internal mobility and career pathing; training and development requirement forecasting and measuring the value and results of improvement initiatives; optimizing selection and promotion decisions

UNIT IV

Predictive modelling in HR: Employee retention and turnover; workforce productivity and performance; scenario planning.

UNIT V:

Communicating with data and visuals: Data requirements; identifying data needs and gathering data; HR data quality, validity and consistency; Using historical data; Data exploration; Data visualization; Association between variables; Insights from reports; Root cause analysis of HR issues

TEXT BOOK:

- 1. Nishit Uppal, Human Resource Analytics, 1e 2020, Pearson Education
- 2. Jac Fitz-Enz , The New HR Analytics: Predicting the Economic Value of Your Company's Human Capital Investments, Amacom.
- 3. Gene Pease, Boyce Byerly and Jac Fitz-enz, Human Capital Analytics: How to Harness the Potential of Your Organization's Greatest Asset, John Wiley & Sons

Course Outcomes:

- 1 It helps to analyse appropriate internal and external human resource metrics benchmarks and indicators.
- 2 Operate relational databases and make recommendations regarding the appropriate HRIS to meet organization's human resource needs.
- 3 Employ appropriate software to record, maintain, retrieve and analyse human resources information (e.g., staffing, skills, performance ratings and compensation information).
- 4 Apply quantitative and qualitative analysis to understand trends and indicators in human resource data; understand and apply various statistical analysis methods



HUMAN RESOURCE MANAGEMENT (MINOR) MBT 305 HR-4 COUNSELLING FOR MANAGERS

Course Contents

Unit I Counselling: Introduction, Approaches to Counselling, Goals and Process of Counselling; Counselling Procedures and Skills, Organizational Application of Counselling Skills.

Unit II Changing Behaviours through Counselling; Specific Techniques of Counselling; Role conflicts of Managers and Counselling. Application of Counselling in Specific Organizational Situations: Dealing with problem Subordinates; Performance Management; Alcoholism and Other Substance Abuse. Ethics in Counselling.

Unit III Negotiation: Introduction, Nature and need for negotiation, negotiation process, Types and styles of negotiation; strategies and tactics; barriers in effective negotiation, Communication Style, Breaking Deadlocks

Unit IV Role of trust in negotiations; negotiation and IT; ethics in negotiation; cultural differences in negotiation styles; gender in negotiations; context of mediation; negotiation as persuasion.

Unit V Changing role of counseling skills in managers : soft skills for managers, presentation skills, negotiation skills, challenges faced by mangers, developing counseling skills.

Readings

- 1. Singh Kavita Counselling Skills for Managers (PHI)
- 2. Carroll, M.: Workplace counseling, Sage Publication.
- 3. Kottler, J. A., & Shepard, D. S.: Introduction to counselling: voices from the field, USA: Cengage Learning.
- 4. Moursund, J.: The Process of counselling and therapy, New Jersey: Prentice Hall.
- 5. Patterson, L. E., & Welfel, E. R.: The counselling process: A multitheoretical integrative approach, New York: Brooks Cole.
- 6. Kolb, D., & Williams, J.: The Shadow Negotiation. UK: Simon & Schuster.
- 7. Korobkin, R.: Negotiation theory and strategy, Aspen Publisher.
- 8. Lewicki, R.: Essentials of negotiation. Alexandria V. A.: Society of HRM.
- 9. Robert L Gibson, Introduction to Counseling and Guidance, 7e, 2015, Pearson Education
- 10. Samuel T. Gladding, Counseling: A Comprehensive Profession, 8e, 2018, Pearson Education

Course Outcomes:-

AGRI BUSINESS MANGEMENT (MAJOR)

MBT 305 AM1

<u>AGRIBUSINESS AND RURAL ENVIRONMENT</u>

Unit1

Introductiontoagribusinessenvironment, Keyfactorsofagribusinessenvironment-finance, infrastructure, legalandregulatory framework, Stakeholders in the establishment of enabling environments-public as well as private roles.

Unit2

Importance of rural community in Indian economy, Status of Employment, Income and ConsumptioninRuralIndia, CharacteristicsofIndianRuralcommunity. Roleof Agriculture in Indian Economy.

Unit3

StructureofAgriculture-Linkagesamongsub-sectorsoftheAgribusinesssector; economicreformsandIndianagriculture;impactofliberalization,privatizationand globalization on Agri business sector.

Unit4

Rural Socio- economic change, Land Reforms, Agrarian transition-Pre-green revolution and postgreen revolution, rural financial inclusion as well as exclusion, Rural technological Inclusion as well as Exclusion. Rural Urban Migration and distinguation agriculture, Globalization and rural economy, Impact of Media on Rural Culture.

Unit5

Emerging trends in production, processing, marketing and exports; policy controls and regulations relating to the industrial sector with specific reference to agro-industries.

Suggested readings:

- 1. Deshpande, R. S. and Arora, S., 2010, Agrarian crisis and farmer suicides. Sage publications, Delhi.
- 2.Gupta,K.B.,Siddiqui,F.andAlam,I.,2014,RuralManagement,CBS Publishers and Distributors Pvt .Ltd., Delhi.
- 3. Konig,G.,DaSilva,C.A.andMhlanga,N.,2013,Enabling environments for agribusiness and agroindustries development: Regional and country perspectives ,FAO, Roma(Italia).
- 4. Palanithurai, G. and Ramesh, R., 2011, Globalisation and rural development. Concept publishing company, Delhi.
- 5. Sabharwal, D., 2002, New Technologyand Agrarian Change, Sanjay Publication, Delhi.
- 6. Singh,K.,2009,RuralDevelopment:Principles,PoliticsandManagement, Sage Publications India Pvt. Ltd. .Delhi.



| S.no | Course Outcomes (CO's) |
|------|--|
| 1 | To illustrate understanding of basic agribusiness concepts, principle practices. |
| 2 | To understand Importance of rural community in Indian economy |
| 3 | To summarize the concept and process of agribusiness |
| 4 | To develop an understanding of Structure of Agriculture |
| 5 | To predict the dynamics of Rural Socio-economic change and Land Reform and to focus on emerging trends in agribusiness with aspect to production, marketing and exports. |

MBT 305 AM2 FARM BUSINESS MANAGEMENT

Unit1

Nature, scope, characteristics and role of farm business management; farm management decisions; farm management problems, Types and Systems of Farming.

Unit2

Principles of farm management decisions –principle of variable proportion, cost principle, principle of factor substitution, law of equi marginal returns, opportunity cost principle, etc.

Unit3

Tools of farm management and farm business analysis- farm planning and budgeting; Farm records and accounts, types and problems in farm records and accounts, net worth statement, farm efficiency measures.

Unit 4

Farm machinery selection for different farm size and for different agro climatic conditions, scheduling of farm operations for higher efficiencies, indices of machine performance.

Unit5

Management of farm resources—Land, Labour, Farm machinery, Farm building, etc.; Risk and uncertainty in farming- sources of uncertainty in farming, management strategy to counteract uncertainty and decision making process in farm business management under risks and uncertainty.



Suggested Readings:

- 1. Heady, E.O. and Jensen, H., 1960, Farm Management Economics, Prentice Hall.
- 2. Johl, S. S. and Kapoor, T.R., 1973, Fundamentals of Farm Business Management, Kalyani Publ.
- 3. Kahlon, A.S. and Singh, K., 1992, Economics of Farm Management in India. Allied Publ
- 4. Panda, S.C., 2007, Farm Management and Agricultural Marketing, Kalyani Publ.
- 5. Raju, V.T. and Rao, D.V.S., 2015, Economics of Farm Production and Management, Oxford and IBH Publ.

| S.no | Course Outcomes (CO's) | | | | | | | | |
|------|--|--|--|--|--|--|--|--|--|
| 1 | To illustrate characteristics and role of farm business management | | | | | | | | |
| 2 | to apply the farm management decisions | | | | | | | | |
| 3 | To summarize the concept of Tools of farm management and farm business analysis | | | | | | | | |
| 4 | To know the selection criteria of farm machinery, size under various agro climatic | | | | | | | | |
| 5 | To predict the Management of farm resources | | | | | | | | |

MBT 305 AM3 AGRIBUSINESS FINANCIAL MANAGEMENT

Unit 1

Role and Importance of Agricultural Finance. Financial Institutions and credit flow to rural /priority sector. Agricultural lending—Direct and Indirect Financing-Financing through Co-operatives.

Unit2

NABARD and Commercial Banks and RRBs .District Credit Plan and lending to agriculture/ priority sector. Micro-Financing and Role of MFI's- NGO's, and SHG's.

Unit3

Lending to farmers—The concept of 3C's,7P's and 3R's of credit. Estimation of Technical feasibility, Economic viability and repaying capacity of borrowers and appraisal of credit proposals. Understanding lenders and developing better working relationship and supervisory credit system. Credit inclusions—credit widening and credit deepening.

Unit4

Risks in financing agriculture. Risk management strategies and coping mechanism. Crop Insuranceprogrammes—reviewofdifferentcropinsuranceschemes-yieldlossand weather based insurance and their applications.

Unit 5

Precautions and procedural formalities of financing: pre, progress and post financing requirements, Reserve Bank of India (RBI) guidelines

Suggested Readings:

1.Chandra, P., 2000, Financial Management. Tata McGraw Hill. 2.Khan,M.Y.and Jain,P.K.,2004,Financial Management: Text, Problems and

Cases. Tata McGraw Hill.

- 3. Nelson, A.G.andMurrey, W.G., 1988, Agricultural Finance, Kalyani Publ.
- 4. Pandey, I. M., 1997, Financial Management, 12e, 2021, Pearson Education
- 5. Rais, A., 2012, Agriculture, Rural Banking and Micro Finance in India. New Century Publ.
- 6. Reddy,S.,Ram,R.,Sastry,N.T.V.and Devi,B.,2009,Agricultural Economics. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.

| S.no | Course Outcomes (CO's) |
|------|---|
| 1 | To illustrate Role and Importance of Agricultural Finance |
| 2 | To understand the applications of NABARD |
| 3 | To summarize theconceptof3C's,7P'sand3R's |
| 4 | To predict the Risks in financing agriculture |
| 5 | To understand various precautions and formalities of financing also and guidelines given by RBI |

AGRI BUSINESS MANAGEMENT (MINOR)

MBT 305 AM-4 AGRIBUSINESS ECONOMICS

UNIT 1. Introduction to AgriBusiness Economics

Introduction, scope, concept of Micro & Macro Economics in Agribusiness, applications, functions & limitations.

UNIT 2 Agriculture and economic development

Role of agriculture in economic development, Difference between agriculture and industry. Interrelationship between agriculture and industry. Nature of agricultural business, Agricultural development and poverty, environment and Employment.

UNIT 3. Land Reforms

Types of farm organization, principle of land utilization, tenancy and crop sharing – forms. Green revolution, land reforms measures and performance traditional and modern agriculture, problems of small and marginal farmers.

UNIT 4. Agricultural Production

Agricultural production, factor combination and resource substitution, resource use and efficiency, production function analysis in agriculture, size of farm and law of returns. Agricultural inputs on shifts in production function.

UNIT 5. Agricultural Productivity

Concept of cost, farm budgeting, response of individual and aggregate supply, Regional disparities in Indian agriculture. Regional variation in agricultural productivity. Resource use efficiency in traditional agriculture, cropping pattern

Course Outcome:-

BUSINESS ANALYTICS (MAJOR)

MBT 305 BA 1 BUSINESS INTELLIGENCE

Course Objective: Business Analytics is a set of techniques and processes that can be used to analyze data to improve business performance through fact-based decision-making. The objective of this subject is to introduce the Business Intelligence methods that support the decision process in business operations.

Unit 1 Introduction

Business Intelligence: definition, concept and need for Business Intelligence, Case studies BI Basics: Data, information and knowledge, Role of Mathematical models

Unit 2

Analytics Strategy

Business Analytics at the strategic level: Strategy and BA, Link between strategy and Business Analytics, BA supporting strategy at functional level, dialogue between strategy and BA functions, information as strategic resource.

Unit 3

Data Mining

Business Analytics at Analytical level: Statistical data mining, descriptive Statistical methods, lists, reports, automated reports, hypothesis driven methods, data mining with target variables, cluster analysis, Discriminate analysis, logistic regression, principal component analysis.

Unit 4

Data Warehousing

Business Analytics at Data Warehouse Level, Designing physical database, Deploying and supporting DW/BI system

Unit 5

Business Intelligence

Business Intelligence Architectures: Cycle of Business Intelligence Analysis, Development of Business Intelligence System, spread sheets, concept of dashboard, CLAP, SQA, decision engineering. BI Tools: Concept of dashboard. BI Applications in different domains- CRM, HR, Production

Text Books:

1. Turban, Sharda, Business Intelligence and Decision Support System, Pearson Education, 10th Edition, 2018



References:

- 1. Evans, Business Analytics, 3e, 2021, Pearson Education
- 2. Olivia Parr Rud, Business Intelligence Success Factors Tools for aligning your business in the global economy, John Wiley and Sons, 2009
- 3. Steve Williams and Nancy Williams, The Profit impact of Business Intelligence, Morgan Kauffman Publishers! Elsevier, 2007
- 4. Gert H.N. Laursen, JesperThorlund, Business Analytics for Managers: Taking Business Intelligence beyond reporting, Wiley and SAS Business Series. 2010
- 5. Mathew, Business Analytics for Decision making, 1e, 2020, Pearson Education

| S.no | Course Outcomes (CO's) |
|------|---|
| 1 | To understand the concept of business intelligence. |
| 2 | To understand the role of business analytics at strategic and functional level. |
| 3 | To understand use of business analytics and Statistical tools for future goals. |
| 4 | To understand the role of data warehousing and designing of physical database. |
| 5 | To study the development of business intelligence in different domains CRM, HR, Production. |

MBT 305 BA2 BLOCK CHAIN TECHNOLOGY

UNITI INTRODUCTION

Distributed Database, Two General Problem, Byzantine General problem and Fault Tolerance, Hadoop Distributed File System, Distributed Hash Table, ASIC resistance, Turing Complete. Cryptography: Hash function, Digital Signature-ECDSA, Memory Hard Algorithm, Zero Knowledge Proof.

UNITII BLOCKCHAIN & APPLICATIONS

Introduction to Block chain, Gartner's Hype Curve and Evolution of Block chain Technology, Block chain Need & Genesis, Key Characteristics of Blockchain, Blockchain Structure, Blockchain types and Network, Mining and Consensus, How Blockchain Works, Bitcoin Whitepaper, Understanding Bitcoin, Components of a Block, Forks: soft & hard forks, Ummer blocks, Different forks from Bitcoin, Wallets, Transactions, Public & Private keys, Blockchain Applications: Internet of Things, Medical Record Management System, Do-main Name Service and future of Blockchain.

UNITIII CRYPTOCURRENCY

History, Distributed Ledger, Bitcoinprotocols –Mining strategy and rewards, Ethereum- Construction, DAO, Smart Contract, GHOST, Vulnerability, Attacks, Sidechain, Namecoin. Cryptocurrency Regulation: Stakeholders, Roots of Bitcoin, Legal Aspects-Cryptocurrency Exchange, Black Market and Global Economy.



UNITIV ETHEREUM

Need of Ethereum, Ethereum Foundation, Ethereum Whitepaper, How Ethereum Works, Ethereum network, Ethereum Virtual Machine, Transactions and Types, Mining & Consensus, Smart Contracts.

UNITY HYPER LEDGER FABRIC

Hyperledger, Hyperledger Fabric, Comparison between Fabric & Other Technologies, Fabric Architecture, Components of Hyperledger Fabric, Advantages of Hyperledger Fabric Blockchain, How Hyperledger Fabric Works.

Suggested Readings:

- 1. Imran Bashir, Mastering Blockchain, PacktPublishing, March2017
- 2. Jai Singh Arun, Blockchain for Business, 1e, 2020, Pearson Education
- 3. Debajani Mohanty, BlockChain: FromConcepttoExecution,BPBPublications,2nd edition, 2018
- 4. ArtemisCaro, Blockchain:Bitcoin,Ethereum & Blockchain: The Beginners Guide to Understanding the Technology Behind Bitcoin & Cryptocurrency, 2017
- 5. Andreas M. Antonopoulos, GavinWood, Mastering Ethereum: Building Smart Contracts and D Apps, O'REILLY, 2018
- 6. Nitin Gaur, LucDesrosiers, Venkatraman Ramakrishna, Petr Novotny, Dr. Salman A.Baset and AnthonyO'Dowd, Hands-on Blockchain with Hyper ledger, Packt Publishing, 2018.

Course OUTCOMES:

- 1. Ability to apply the concepts of FinTech and critically evaluate its role in financial services. 2. Ability to apply the concept of new generation commerce and new operating models for banks.
- 3. Knowledge to use the concepts of FinTech in wealth management, personalfinance management, crowdfunding and crowd investing.
- 4. Apply the concept of cryptocurrencies, risk associated with crypto market and cost involved.
- 5. Critically evaluate the role of FinTech in financial services and understand recent developments such as Distributed ledger for identification, Identification for Unbanked-Unique identification system in India, Cybercrime, Cybersecurity categories



MBT 305 BA3 DATA VISUALIZATION

Course Objectives:

This course enables the students:

- To interpret data plots and understand core data visualization concepts such as correlation, linear relationships, and log scales.
- To explore the relationship between two continuous variables using scatterplots and line plots.
- To translate and present data and data correlations in a simple way, data analysts use a wide range of techniques charts, diagrams, maps, etc.

Unit I

Introduction of visual perception, visual representation of data, Gestalt principles, information overloads.

Unit II

Creating visual representations, visualization reference model, visual mapping, visual analytics, Design of visualization applications.

Unit III

Classification of visualization systems, Interaction and visualization techniques misleading, Visualization of one, two and multi-dimensional data, text and text documents

Unit IV

Visualization of groups, trees, graphs, clusters, networks, software, Metaphorical visualization

Unit V

Visualization of volumetric data, vector fields, processes and simulations, Visualization of maps, geographic information, GIS systems, collaborative visualizations, evaluating visualizations.



Course Outcomes:

Upon successful completion of this course, Students will be able to:On the successful completion of the course, students will

| CO1: | Demonstrate understanding of Data Visualization and keyTerms |
|------|---|
| CO2: | Design Effective Data Visualization for viual Mapping and Design |
| CO3: | Will demonstrate skills on creating visual representation of Data |
| CO4: | Will demonstrate understanding of Visualization classification and its techniques |
| CO5: | Will demonstrate skills in creating different types of Representation |

Mapping with Programme Outcomes

| | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| CO1 | S | S | M | S | M | S | M | L | L | S | S |
| CO2 | S | S | S | M | M | L | M | S | S | M | M |
| CO3 | S | S | M | S | L | M | L | L | M | S | S |
| CO4 | S | M | S | S | M | M | M | L | M | M | S |
| CO5 | S | S | S | S | S | L | S | S | M | S | S |

S- Strong; M-Medium; L-Low

Textbooks:

- 1. Ward, Grinstein Keim, Interactive Data Visualization: Foundations. Techniques, and Applications. Natick: A K Peters, Ltd, 1st Edition, 2010
- 2. Kieran Healy, Data Visualization: A Practical Introduction, 1st Edition, 2018
- 3. Andy Krik, Data Visualization: a successful design process 1st Edition, 2012
- 4. Corey Lanum, Visualizing Graph Data 1st Edition, 2016

References:

- 1. E. Tufte, The Visual Display of Quantitative Information, GraphicsPress.2nd Edition, 2001
- 2. Ward, Grinstein Keim, Interactive Data Visualization: Foundations, Techniques, and Applications. Natick: A K Peters, Ltd. 1st Edition, 2014
- 3. Kieran Healy, Data Visualization: A Practical Introduction, sew Edition, 2013.

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards

4. Andy Krik, Data Visualization: a successful design process 1st Edition, 2016



BUSINESS ANLAYTICS (MINOR)

MBT 305 BA4 BUSINESS ANALYTICS

Unit 1

Introduction To Business Analytics(BA)

Business Analytics - Terminologies, Process, Importance, Relationship with Organisational Decision Making, BA for Competitive Advantage.

Unit 2

Managing Resources For Business Analytics

Managing BA Personnel, Data and Technology. Organisational Structures aligning BA. Managing Information policy, data quality and change in BA.

Unit 3

Descriptive Analytics

Introduction to Descriptive analytics- Visualising and Exploring Data- Descriptive Statistics- Sampling and Estimation- Probability Distribution for Descriptive Analytics- Analysis of Descriptive analytics

Unit 4

Predictive Analytics

Introduction to Predictive analytics- Logic and Data Driven Models- Predictive Analysis Modeling and procedure-Data Mining for Predictive analytics. Analysis of Predictive analytics

Unit 5

Prescritive Analytics

Introduction to Prescriptive analytics-Prescriptive Modeling-Non Linear Optimisation-Demonstrating Business Performance Improvement.

SuggestedReadings

- 1. Marc J.Schniederjans, Dara G.Schniederjans and Christopher M.Starkey, "Business Analytics Principles, Concepts and Applications- What, Why, and How", Pearson Ed, 2014
- 2. Christian Albright S and WayneL. Winston, "Business Analytics-Data Analysis and Decision Making", Fifth edition, Cengage Learning, 2015.
- 3. James R. Evans, "Business Analytics- Methods, Models and Decisions" 3e, 2021, Pearson Education

COURSE OUTCOMES:

- 1. Ability to understand the role of Business Analytics in decision making 2. Ability to identify the appropriate tool for the analytics scenario
- 3. Ability to apply the descriptive analytics tools and generate solutions 4. Understanding of Predictive Analytics and applications
- 5. Knowledg of Prescriptive Analytics and demonstrating business process improvement

COOPERATIVE AND RURAL DEVELOPMENT (MAJOR)

MBT - 305(RD1) -PRINCIPLES & PRACTICES IN COOPERATIVES

Unit 1 - Introduction

Concept of Co-operation – Meaning & definition – Why Cooperatives – Nature of Cooperatives – Historical evolution – Pioneers of Cooperative movement – Robert Owen, Rochdale Pioneers, Raiffeissien, Shulze. – Values & Principles of co-operation.

Unit 2 - Cooperative movement in India & Abroad

Evolution, Growth and current status. Genesis of Cooperative movement in India – Cooperative legislation of 1904 & 1912. Development of Co-operative movement in post – independence, 97th Constitutional Amendment Act. Progress of Co-operative movement under 5 year plans (last 3 plans), present status of Co-operative movement in India.

Unit 3 - Major recommendations of committees & successful co-operative models abroad.

Recommendation of Vaidyanathan Committee in 2009, High power committee on cooperation (Sri Shivajirao G Patil), Consumer cooperatives in Britain & Sweden, Credit cooperatives in Germany, Italy & Thailand. Dairy cooperative in Denmark. Farming cooperatives in Russia & Israel. Cooperative Education and training through NCCT & RICMs/ICMs – role of various federal bodies – ICA, NCUI and state federation. Cooperative governance – interface with elected representatives.

Unit 4 - Agriculture

World agriculture, Indian Agriculture, Economic activities, Resources – concept and their classification. Farming organization and farming systems. Crop groups – Important cooperatives, types of cultivation, Cropping and land use pattern, Agriculture input requirements (Credit/Fertilisers/Pesticides/Seeds), Agencies in marketing of Agriculture produce – Functioning of Commission for Agriculture cost and prices(CACP) – contract farming.

Unit 5- Role of Information & Communication of Rural Infrastructure-

Technology missions for Rural development: Immunization, Drinking water, Sanitation, Communication, Rural Infrastructure, Bharat Nirman, Prime Minister's Grameen Sadak Yojana, Oilseeds and Pulses, Financial Inclusion.

References:-

Co-Operative Management & Administration B.B.Goel Industrial Cooperatives in India S.C. Mehta Co-Operative Management Patterns A.A.Ansari Professional Management for the Cooperatives A.K.Sah

Course Outcome:-

MBT 305 RD 2 **COOPERATIVE LAWS**

UNIT 1 Cooperative legislation –

Historical evolution – evolution of cooperative legislation India – importance of cooperative act and rules to meet the specific need of the cooperative movement. Organisation and registration of cooperative societies – need and importance – procedure to be followed – assessing the viability norms – requirement – conditions to be fulfilled. Bye-laws – nature and scope of byelaws – preparation of bye-laws – assessing the bye-laws, amendment of bye-laws – requirement – conditions to be fulfilled and procedure to be followed. Amalgamation or transfer of assets and liabilities, or division of a cooperative society, conversion of cooperative society, change of liability, floating of subsidiaries, forging of partnerships & collaboration by cooperatives.

UNIT 2 **Cooperative Governance –**

Management – general body meetings – conduction of annual general meetings and special general meetings – powers and functions of general body. Constitution of management committee – MC meetings – Drafting of minutes of Board Meeting and General Body Meeting-powers and function of managing committee – disqualification of MC members and their removal - devolution of the powers and functions of the President or Vice-president - no confidence motion against the President and Vice-president. Cooperative elections – authority to conduct election, disqualifications to vote in election and to contest elections, disqualifications for contesting in elections or for continuing as a member of the managing committee, composition of MC, reservations and division of constituencies, mode of election, conduct of elections, election of office bearers, postponement of elections, nomination by Registrar, custody and preservation of records.

UNIT 3 Rights & privileges of cooperative societies –

First charge of a cooperative society on certain movable assets of a member for the amount due by member-charge on the immovable property of a member for the loans borrowed – deduction from salary or wages – charge and set-off in respect of shares or interest of members in the capital etc., of a society – share or interest, etc., not liable to attachment – exemptions from certain taxes, duties, fees and compulsory registration of instruments. Properties and funds of cooperative societies – funds other than net profits not to be divided among members – constitution and utilization of cooperative education fund – disposal of profits – investment of funds – restriction on borrowings and loans – restriction on other transactions with nonmembers – provident fund and reserve fund.

Supervision and inspection – authority to hold an inspection – basis for inspection – time limit for completion of inspection – powers of the inspection officer – communication of the inspection report along with findings and follow up action by MC – inspection by financing bank or federal cooperative society.

UNIT 4 **Settlement of disputes –**

Authorities for settling of disputes – disputes which may be taken up for arbitration – parties to the disputes – action to be taken by registrar on receipt of arbitration reference – procedure of hearing and deciding the disputes – limitation – time limit - for completion - powers of the arbitrator. Execution of decrees, orders and awards - execution of non-monetary decision or orders – procedure of seizure / attachment of movable and immovable assets – attachment before award – recovery of govt. dues from cooperative societies etc.

Winding up – opportunity before winding up order – appointment of liquidator – functions and powers of the liquidator – discharge of liabilities & disposal of surplus assets – final closure report – cancellation of registration – restoration of a society wound up – termination of liquidation proceedings.



UNIT 5 **Other Important Cooperative Laws**

Cooperative tribunals – appeal – an appeal lies to tribunal against the orders passed in the following matters – revision – review. Offences and penalties – offences and corrupt electoral practices – cognizable and non-cognizable offences. Developments in cooperative legislation – movement towards ensuring autonomy and independence to cooperatives – parallel legislation – formation of cooperative companies – MSCS act 2002 conferment of constitutional status on cooperatives. Parallel Acts and Producers Companies Act.

MBT 305 RD 3 COOPERATIVE CREDIT AND BANKING

UNIT 1 Meaning of Credit -

Need for Production and Development Credit. Importance of Agricultural Credit and its Characteristics. Type of Credit Short- Term, Medium and Long Term Credit. Need for the Institutional Credit for Agricultural and Rural Development. Structure of Credit Cooperatives Federal/Unitary and Mixed Type. Need for the Integration of Short Term, Medium Term and Medium Term Credit Structure (Single Window) National Federation of State Cooperative Banks, National Federation of Agriculture and Rural Development Banks and their Role in development of Cooperative Banking.

UNIT 2 **Classification of Credit Cooperatives**

Agricultural Credit Cooperatives and Non-Agricultural Credit Cooperatives. Agricultural Credit Coops -PACS, FSS, LAMPS, DCC Banks and State Cooperative Banks. Non-Agricultural Credit Cooperative - Urban Cooperative Banks, Salary Earners Cooperative Credit Societies/ Banks, Industrial Cooperative Banks and other Non- Agricultural Credit Societies

UNIT 3 **Cooperative Banks**

Organisation, Membership Management, Objectives, Functions and the Working. Mobilisation of Resources. Lending different Types of Loans, Agricultural Lending and Non-Farm Sector Finance Procedure of obtaining loan from State Cooperative Banks, NABARD. RBI and other agencies. Seasonalities in lending, Scale of Finance. Minimum Involvement and Non Overdue cover. Disbursement of Loan, Supervision and Recovery of Loan, Latest Progress. Problems and Remedies to overcome them. Development Action Plan.

State Cooperative Banks (Apex Banks) Organisation, Management, Objectives, Functions and Working. Role of Apex Banks in the development of Cooperative Movement in the State. Latest Progress, Problems and Remedies to overcome them. Cooperative Agriculture and Rural Development Banks, Need, Objectives Functions Sources of Finance and Working. Floating of Debentures, Types of Debentures and Procedure of Floating Debentures- Project Approach and Schematic Lending -Latest Progress Achieved. Primary Coop. Agriculture and Rural Development Banks functions, management and working, problems of long-term lending coops and remedial measures.

UNIT 4 **Cooperative Banking**

Meaning and Definition of Bank, Banker and Banking, Functions of Banks. Banker Customer Relationship. Productivity in Banks -Social Aspect of Banking -Concept of Development Banking. Banking Operations - Mobilisation of resources -Acceptance of Various Types of Deposits Procedure for opening and operation of Various Types of Accounts and Various Types of Customers Documentation for Various Loans

Management of Funds in Banks (Cost of yield on Assets, Cost of Management, Risk Cost, Miscellaneous Income, Average Working Fund, Gross Margin, Net Margin, Average Cost of Deposit), Break Even Point- Prime Lending Rate-Principles of



Good Lending and Investment, Profit Planning Consortium Schemes, Merchant Banking.

UNIT 5 Banking Services in Cooperatives

ATM, Credit Cards, Debit Cards, Collection, Remittance, Agency Services, Administrative Services, Trusteeship *Clearing* House - (RTGS) Real Time Gross Settlement – (NEFT) National Electronic Fund Transfer –ECS – Debit and Credit – Cheque Truncation- IFSC Code. National Payment Corporation of India (NPCI). Deposit Insurance and Credit Guarantee Corporation. Introductory session on EXIM Bank, FEDAI (Foreign Exchange Development Authority of India). Latest Concepts - Common Accounting System (CAS) and Management Information System (MIS) and Core Banking Solutions (CBS)-Basel Standards

COOPERATIVE AND RURAL DEVELOPMENT (MINOR)

MBT 305 RD 4

RURAL DEVELOPMENT

Unit 1 – Concept & significance of Rural Development-

Philosophical and Sociological aspects of RD – Approaches to Rural Development in India Various Rural Development programs, Concept & structure of Panchayati Raj system. Role of Panchayati Raj, Institutions in the development of Rural Economy, Important provisions Panchayati Raj Act of the State concerned. Social forestry and Wasteland/Dry land development- various programs/policies of Rural Development of state concerned.

Unit 2 – Cooperative Credit -

Introduction: Meaning of Credit, Structure of Credit Cooperatives, Classification of Credit Cooperative Societies, Primary Agriculture Cooperative Societies (PACS), Role of NABARD, Kissan Credit Cards Scheme (KCCS). Priority Sector Lending.

Unit 3 - Cooperative banking-

Banking Functions, Banker Customer Relationship, Social Development Banking, Management of Funds in Banks, Banking Regulation Act 1949, District Central Cooperative Bank (DCCB), Agriculture and Rural Development Banks, Urban Cooperative Banks(UCCBs), Deposit Insurance and Credit Guarantee Corporation, EXIM Bank and FEDAI

Unit 4- Cooperative Laws and Administration

Co-operative Legislation, Need, History and Evaluation. Registration of Cooperative Societies. Membership of Cooperative Societies. Meetings and Management of Societies.

Privilege of Co-Operative Societies, Settlement of Disputes, Offences and Penalties, Recent Developments in Cooperative Legislation.

Unit 5 – Gratification of Cooperative Corporate of India & Ethics of Cooperative

AMUL, IFFCO, KRIBHCO, LIJJAT, Important powers of Registrar and Government, Audit of Cooperative



society, Winding Up and Dissolution of Co-Operative society, Extract from Negotiable Instrument act, 1881.

References:-

Governing Co-Operatives
Ends and Means of Co-Operative Development
Hand book of Industrial Co-Operation
Hundred Years of Cooperative Development in India

- Yashavantha Dongre

- S.S.Puri

- M.V.N.Pillai

- Dr.R.C.Diwedi

Course Outcome:-



ITERNATIONAL BUSINESS (MAJOR)

MBT 305 IB 1 IMPORT EXPORT MANAGEMENT

UNIT 1 Import-Export Management: Overview

Import Export Management Introduction; Concept Key Feature; Foreign Trade - Institutional Framework and Basics; Trade Policy; Foreign Trade; Simplification of Document; Reduction in Document to Five for Custom Purpose; Exporting; Importing Counter Trade; the Promise and Pitfall of Exporting; Improving Export Performance; Counter Trade.

UNIT 2 International Marketing: Environmental and Tariff Barrier

International Marketing: Definition, Components of International Marketing Management; Trade Barrier Definition: Components of Trade Barrier, Objectives of Trade Barrier.

Non Tariff Barriers; Government Participation in Trade; Quota; Advalorem Duty; Specific Duties and their Differences

UNIT 3 Export and Import Financing, Procedure, and Primary Consideration

Export and Import Financing Procedures; 14 Steps for Conducting Export Transaction; Export Assistance; Export-Import Primary Consideration. Import and Export Documentation: Introduction, Freight Forwarder's Powers of Attorney, Bill of Lading, Certificates of Origin, Letter of Credit.

Processing of Export Order; Nature and Format of Export Order; Examination and Confirmation of Export Order; Manufacturing or Procuring Goods; Central Excise Clearance; Pre Shipment Inspection; Appointment of Clearing and Forwarding Agents; Transportation of Goods to Port of Shipment; Port Formalities and Customs Clearance; Dispatch of Documents by Forwarding Agent to the Exporter; Certificate of Origin and Shipment Advice; Presentation of Documents to Bank; Claiming Export Incentives; Excise Rebate; Duty Drawback.

UNIT 4 Export Assistance of India

Export Assistance of India: Introduction, Importance of Export Assistance, Export Promotion Measure in India, Expansion of Production Base for Exports; Relaxation in Industrial Licensing Policy / MRTP / FERA / Foreign Collaborations; Liberal Import of Capital Goods; Export Processing Zones (EPZ); Export Oriented Units (EOU); Special Economic Zones (SEZs); Electronic Hardware Technology Parks (EHITP) and Software Technology Park Units (STP); Assured Supply of Raw-Material Imports; Eligibility for Export / Trading / Star Trading / Super Star Trading Houses; Export Houses Status for Export of Services: Rendering Exports Price Competitive; Fiscal Incentives; Financial Incentives; Strengthening Export Marketing Effort Export Promotion Organization; its Objectives; Importance of Institutional Infrastructure; Govt. Policy Making and Consultations; Indian Trade Promotion Organization (ITPO); Indian Institute of Foreign Trade (IIFT); Indian Institute of Packaging (IIP); Indian Counsel of Arbitration (ICA); Federation of Indian Export Organization (FIEO); Marine Products Exports Development Authority (MPEDA); Export Processing Zones (EPZ); 100% Export Oriented Units (EOUs); Facilities for Units in EOUs, EPZs, EHTPs & STPs; M. Visvesvaraya Industrial Research & Development Center (MVIRDC); Chamber of Commerce (COC).

UNIT 5 Export Import Policy of India

Export Import Policy of India; its Meaning; General Objectives; Highlight and Implication of Export-Import Policy 1997-2000 and Export-Import Policy 2002-2007. Risk Management and Business Continuity Meaning of Risk Management; its Principle; Process; Identification; Assessment; Potential Risk Treatment; Risk Avoidance; Risk Reduction; Risk Retention; Risk Transfer; Creating a Risk Management Plan; Implementation; Review and Evaluation of the Plan; Area of Risk Management; Enterprise Risk Management; Risk Management and Business Continuity; UCP600: Opportunity or Challenges.



Suggested Readings:

- 1. Export Import Policy, Publisher: Ministry of Commerce, Government of India, New Delhi.
- 2. Electronic Commerce by N. Janardhan, Publisher: Indian Institute of Foreign Trade, New Delhi.
- 3. Nabhi's Exporters Manual and Documentation, Publisher: Nabhi Publication, New Delhi.
- 4. Nabhi's New Import Export Policy, Publisher: Nabhi Publication, New Delhi.
- 5. Export-What, Where, How by Ram Paras, Publisher: Anupam, Delhi.

MBT 305 IB 2 CROSS CULTURAL BUSINESS MANAGEMENT

Unit 1

Globalization and Culture

Globalization in Cross Cultural Context, Factors that promoted Globalization.

Unit 2

Introduction to Culture

Meaning; Levels of culture; Variables of cultures; Culture and Behavior; Dimensions of culture: Hofstede's, Attitudinal, Trompenaar's, GLOBE Project; Managing Multiculturalism: Problems and its Management.

Unit 3

Cross Culture Communication

Cross Cultural Communication; Dimension of Cross Cultural Communication; Cross Cultural Negotiation Process and Style; Variables of Cross Cultural Negotiations.

Unit 4

International HRM and Cross Cultural Issues

International HRM: Selection, Training and Development for Global Assignments, Compensation, Reward Practices; Motivation and Leadership; Managing Multi-cultural Teams.

Unit 5

Comparative Management

Methods of Comparative Management; Management Styles and Practices in US, Japan, China, Korea, India, Saudi Arabia. Other contexts like Work Timings, Style of Dressing, National Festivals and Food Habits.

Suggested Readings

- Deresky Helen, International Management: Managing Across Borders and Cultures, 9th Ed, 2018, 1. Pearson Education
- EsennDrlarry, Rchildress John: The Secret of a Winning Culture Building High-Performance Teams, Prentice Hall India, NewDelhi



Cashby Franklin, Revitalize Your Corporate Culture: Powerful Ways to Transform YourCompany Into A High-Performance Organization, Cashby Franklin, Prentice Hall India, NewDelhi

- 3. Journals-International Journal of Cross CulturalManagement
- 4. Hodgetts, Richard M. and Luthans, Fred: *International Management*. Tata McGraw Hill, New Delhi.
- 5. Cullen, John B: International Management a Strategic Perspective, Cengage Learning, Delhi
- 6. Browaeys, Understanding Cross-cultural Management, 1e 2009, Pearson Education India

Course Outcome:-



MBT 305 IB 3 MANAGEMENT OF MULTINATIONAL CORPORATIONS

Unit1

International Management

Internationalization: Trends, Challenges and Opportunities; Different Schools of Thought of International Management; Regional Trade Blocs.

Unit2

Growth and Development of MNCs

Role and Significance of MNCs; Pattern of Growth; Concept of Country of Origin; Different Management Styles.

Unit3

Organizational Design and Structure of International Corporations

Global Organization Structure; Locus of Decision Making and Control; Head quarter and Subsidiary Relations in International Firms; Managing the Portfolio Composition.

Unit4

International Business Strategy

Strategic Alliances: Acquisitions and mergers, Management of Joint-Ventures and other International Strategic Alliances; Assessing the Global Environment: Economical, Political, Legal and Technological Environment; Strategy Formulation and Implementation International Business; Political Risk Assessment and Management.

Unit5

Indian Perspectives and Policy

Case Studies for Internationalization of Indian Business Firms and their operations abroad; changing government policy on entry of FIs and FIIs.

Suggested Readings

- 1. Hodgetts, Richard M. And Luthans, Fred: International Management. Tata McGraw Hill, New Delhi. 2. Koonts and Whelrich: Management: The Global Perspective, Tata McGraw Hill, New Delhi.
- 3. Nagandhi ,Anant .R: International Management, Prentice Hall of India Ltd., New Delhi.
- 4. Thakur, Manab, Gene E. Burton and B.N. Srivastava: International Management: Concepts and Cases, Tata McGraw Hill, New Delhi.
- 4. Christoppher, Bartlett and Sumantra Ghoshal, Transnational Management: Text and Cases, Tata McGraw Hill. New Delhi
- 5. Deresky, Helen: International Management: Managing Across Borders and Cultures, 9e, 2009 Pearson Education India

Course Outcomes

- 1 To understand the implications of operating across national borders
- 2 To analyse different combinations of international strategies and organisational structures
- 3 To analyse how different aspects of the organisational environment affects knowledge development and transfer
- 4 To tackle problems related to controlling and managing foreign operations
- To understand the roles of, and challenges facing, MNC subsidiaries and headquarters



INTERNATIONAL BUSINESS (MINOR)

MBT 305 IB 4 INTERNATIONAL BUSINESS LAWS AND TREATIES

Unit 1

Legal Framework of International Business

Nature and Complexities; Code and Common Laws and their Implications to Business; International Business Contract – Legal Provisions; Payments Terms; International Sales Agreements; Rights and Duties of Agents and Distributors

Unit 2

Regulatory Framework of WTO

Basic Principals and Charter of GATT/WTO; GATT/WTO provisions relating to Preferential Treatment of Developing Countries; Regional Groupings, Subsidies, Technical Standards, Antidumping Duties and other Non-Tariff Barriers, Custom Valuation and Dispute Settlement.

Unit 3

Implications of WTO to Important Sectors

GATS, TRIPs and TRIMS, Regulations and Treaties Relating to Licensing; Franchising; Joint Ventures, Patents and Trade Marks; Technology Transfer, Telecommunications. Frame work relating to Electronic Commerce.

Unit 4

Regulatory Framework and Taxation

Electronic Commerce – Cross Border Transactions – On-Line Financial Transfers – Legal Safeguards – International Business Taxation – Tax Laws – Multilateral and Bi-lateral treaties – Sharing of Tax Revenues.

Unit 5

Indian Laws and Regulations Governing International Transactions

FEMA; Taxation of Foreign Income; Foreign investments; Setting up Offices and Branches Abroad; Restrictions on Trade in Endangered Species and other Commodities.

Suggested Readings

- 1. Lew, Julton D.M and Clive Stand brook (ed.), *International Trade Law and Practice*, Euromoney Publications, London.
- 2. Daniels, John, Emest W. Ogram and Lee H. Redebungh: *International Business*, Environments and operations.
- 3. Schmothoff C.R: Export Trade *The Law and Practice of International Trade*.

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards

- 4. Motiwal OP, awasthi HIC: International Trade *The law and Practice*: Bhowmik and company, New Delhi.
- 5. Kapoor ND: *Commercial Law*; Sultan Chand & Co. NewDelhi.
- 6. Subarao: "International Business" Himalaya Publishing House, NewDelhi.

Course Outcome:-



SUPPLY CHAIN MANAGEMENT (MAJOR) SUBJECT MBT 305 SC1 FUNDAMENTAL OF LOGISTICS AND SUPPLY CHAIN

Course Outcomes:

- 1. To understand the strategic role of logistics management
- 2. To study the important modes of logistics operations
- 3. To Know supply chain techniques in an international perspective.
- 4. Able to understand the strategic role of Logistics and Supply chain Management in the cost reduction and offering improved service to the customers.
- 5. Combining the traditional physical distribution activity with modern Information Technology to have sustainable competitive advantage to the organization globally.

Unit 1

Logistics management and Supply Chain management - Definition, Evolution, Importance. The concepts of logistics and Supply Chain Management, Key Drivers of Supply Chain Management and Logistics relationships.

Unit 2

Basics of Transportation, Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; International Air Cargo Transport; Coastal and Ocean transportation, Characteristics of shipping transport- Types of Ships.

Unit 3

Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR;

Unit 4

Packing and Packaging: Meaning, Functions and Essentials of Packing and Packaging, Packing for Storage-Overseas ShipmentInland-Transportation- Product content Protection, Packaging Types: Primary, Secondary and Tertiary- Requirements of Consumer Packaging, Channel Member Packaging and Transport Packaging - Shrink packaging – Identification codes, bar codes, and electronic data interchange (EDI)- Universal Product Code- GS1 Standards- package labels- Symbols used on packages and labels.

Unit 5

Special Aspects of Export logistics: Picking, Packing, Vessel Booking [Less-than Container Load(LCL) / Full Container Load (FCL)], Customs, Documentation, Shipment, Delivery to distribution centers, distributors and lastly the retail outlets- Import Logistics: Documents Collection- Valuing- Bonded WarehousingCustoms Formalities- Clearing , Distribution to Units.



Text Books:

- 1. Bowersox, Closs, Cooper, Supply Chain Logistics Management, McGraw Hill.
- 2. Burt, Dobbler, Starling, World Class Supply Management, TMH.
- 3. Donald J Bowersox, David J Closs, Logistical Management, TMH
- 4. Pierre David, "International Logistics", Biztantra.
- 5. Sunil Chopra, Peter Meindl, Supply Chain Management, Pearson Education, India.

Course Outcome

- 1. To understand the importance of logistics in supply chain management
- 2. To understand the tools and techniques of logistics management
- 3. To understand the challenges in logistics management



MBT 305 SC2 INTERNATIONAL LOGISTICS

Unit1 Global Logistics

Concept, Objectives, Functions and Scope; Relevance of Logistics in International Marketing; Evolution of Logistics; Integrated Logistics.

Unit2 Components of Logistics

CustomerService; Warehousing: Types, Importance, Factors affecting choice of awarehouse facility; Inventory: Types, Functions, Control; Transportation: Modes, Routing and Scheduling, Multi-Modal Transportation; Packaging and Material Handling

Unit3

General Structure of Shipping and Developments in Ocean Transportation

Characteristics; Linerand Trampoperations; Code of conduct for Liner Conferences; Freight structureandpractices; UNconventiononshipping; Maritime Frauds; Containerization; CFS andInlandContainerDepots;PortTrusts;RoleofIntermediaries;CONCOR;IndianShipping Industry: Problems and Prospects.

Unit4

Air Transportation Characteristics; Advantages; Totalcostconcept; Freight Structure and Operations; Carrier Consignee Liabilities; Indian Air Industry: Problems and Prospects.

Unit5

Supply Chain Management

Meaning, Objectives, Importance; Value Chain Analysis; 3PL and 4PL; Pushand Pull Strategies, BullwhipEffect; SupplierSelection and Evaluation; Demand Forecasting; Use of IT: Logistics Information System, MRP, DRP, ERP, PDM, and CPFR

Suggested Readings

- Asopa, V.N: Shipping Management: Cases and Concepts, Macmillan, New Delhi.
- Desai, H.P: Indian Shipping Perspectives, Anupam Publications, Delhi.
- 3.Khanna, K.K.: *Physical Distribution*, Himalaya Publishing, Delhi.
- Bowersox ,Donal J and Closs, David J: Logistical Management, Tata McGraw Hill, New Delhi.
- Shipping Documents and Reports, UNCTAD 6. Sople, VV: Logistics Management, Pearson, New Delhi
- 7. Agarwal, DK: TextBookofLogistics and Supply Chain Management, Macmillian, New Delhi
- Muthiah, Krishnaveni: Logistics and World Sea Borne Trade, Himalaya Publishing House, Mumbai
- 9. Chopra, Sunil. Meindl, Peterand Kalra, DV: Supply Chain Management, Pearson, New Delhi

Course Outcome

- 1. To understand the importance of logistics in supply chain management
- 2. To understand the tools and techniques of logistics management in the international scenario

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards

3. To understand the challenges in international logistics management



MBT 305 SC 3 LEAN SIX SIGMA

Unit1

Lean Manufacturing: Principle and tools

Evolution of Just-In-Time and Lean Manufacturing – Principle – Seven wastes – Just-In-Time (JIT) – One-Piece or Continuous Flow – Kanban or Pull System – Basic tools such as 5S, Kaizen, Poka-Yoke and Single-Minute Exchange of Dies (SMED)

Unit 2

Technique: Value stream mapping

Value Stream Mapping (VSM) – Material and Information Flow – VSM symbols – Identification of Product or Product Family – Current-State Mapping – Future-State Mapping by key questions – Plan and Implementation.

Unit 3

Six sigma

Evolution – TQM vs. Six Sigma – What is Six Sigma – Six Sigma methodologies Such as DMAIC, DFSS – Six Sigma Belts.

Unit 4

DMAIC: TOOLS

Define – Measure – Analyze – Improve – Control – SIPOC model – VOC – CTQ – Seven Quality or SPC tools such as Pare Analysis, Cause and Effect Diagram, Control Charts etc. – Process Capability Analysis such as C_p , C_{pk} – Design of Experiments (DoE).

Unit 5 Lean six Sigma

The Synergy of Six Sigma and Lean – Lean Six Sigma – Principle – Lean tools in DMAIC – Implementation of Lean Six Sigma.

Text Books:

- 1. Feld, W.M., Lean Manufacturing tools, Techniques and How to Use Them, St. Lucie Press, Florida, 2000.
- Michael L. George, et al., The Lean Six Sigma Pocket toolbook: A Quick REFERENCES Guide Nearly 100 tools for Improving Process Quality, Speed, and Complexity, McGraw-Hill, 2005.



References:

- 1. Rother, M. and Shook, J., Learning see: Valuestrean mapping create value and eliminate muda, The lean enterprises institute Brookline, Massachusetts, USA, 1999.
- 2. Liker, J., The yota Way: 14 Management Principles from the World's Greatest Manufacturer, McGraw-Hill Education, 2004.
- 3. Pyzdek, T. and Keller, P. A., The Six Sigma Handbook, Fourth Edition, McGraw-Hill Professional, 2014.
- 4. George, M. L., Rowlands, D. and KastleB., What is Lean Six Sigma 1st Edition, McGraw-Hill Education, 2003.

Course Outcomes

- 1) Illustrate the seven principles of Lean Six Sigma
- 2) Gain and extensive knowledge base of Six Sigma
- 3) Distinguish between the importance of eliminating waste, reducing defects, and improving process flow.
- 4) Apply DMAIC thinking to improvement
- 5) Gather, analyze, and interpret data using flow charts, Ishikawa and SIPOC diagrams, and value stream maps



SUPPLY CHAIN MANAGEMENT (MINOR) SUBJECT

MBT 305 SC4 DESIGNING & MANAGING SUPPLY CHAIN

Course Outcomes:

- 1. To understand the strategic role of supply chain management
- 2. To study the importance of designing and managing supply chain
- 3. To Know supply chain techniques in an international perspective

Unit 1

Development of SCM concept and deifications

Key decision areas, Key components of SCM, External drivers of change, dimentions of logistics, the micro perspective and the micro dimension, logistics system analysis, logistics network configuration

Unit 2

Sourcing Strategy

Manufacturing management – make or buy decision, capacity management, materials management, procurement planning, value of information, inventory management and risk pooling

Unit 3

Distribution Strategy

Choice of market, Network design, warehouse design, operation and distribution planning, transportation and packaging

Unit 4

Inventory Strategy and channels of distribution

Demand forecasting for inventory planning, warehouse location allocation, warehouse design and operations, customer service strategy, channels of distribution, identification of service needs, cost of services, revenue management

Unit 5

Modern concept of supply chain design

Strategic alliances, coordinated product and supply chain design, customer value and supply chain management, information technology for supply chain management, decision support system for supply chain management, international issues in SCM.

References:

1. Simchi – Levi, Devid – Designing and managing the supply chain, MCgraw – Hill higher education

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards



Course Outcomes

- 1. Illustrate the importance of SCM design
- 2. Gain and extensive knowledge base of Supply chain
- 3. Distinguish between the importance of eliminating waste, reducing defects, and improving process flow.



HEALTHCAREAND HOSPITAL MANAGEMENT (MAJOR)

MBT 305 HCHM 1 HEALTHCARE ENVIRONMENT AND MANAGEMENT

Objectives: To familiarise with the healthcare environment & to understand the concepts of management with relevance to hospitals

UNIT I

Introduction – Theoretical frame work - Environment - Internal and External – Environmental Scanning – Economic Environment – Competitive Environment – Natural Environment – Politico Legal Environment – Socio Cultural Environment - International and Technological Environment.

UNIT II

A Conceptual Approach to Understanding the Health Care Systems – Evolution – Institutional Setting - Out Patient services – Medical Services – Surgical Services – Operating department – Pediatric services – Dental services – Psychiatric services – Casualty & Emergency services – Hospital Laboratory services – Anesthesia services – Obstetrics and Gynecology services – Neuro – Surgery service – Neurology services.

UNIT III

Overview of Health Care Sector in India – Primary care – Secondary care – Tertiary care – Rural Medical care – urban medical care – curative care – Preventive care – General & special Hospitals-Understanding the Hospital Management – Role of Medical, Nursing Staff, Paramedical and Supporting Staff - Health Policy - Population Policy - Drug Policy – Medical Education Policy

UNIT IV

Health Care Regulation – WHO, International Health regulations, IMA, MCI, State Medical Council Bodies, Health universities and Teaching Hospitals and other Health care Delivery Systems

UNIT V

Epidemiology – Aims – Principles – Descriptive, Analytical and Experimental Epidemiology - Methods - Uses

REFERENCES

Seth, M.L. MACROECONOMICS, Laksminarayana Agrawal, Edu, Pub. Agra. 1996 Peter, Z & Fredrick, B. HEALTH ECONOMICS, Oxford Pub., New York, 1997 Shanmugansundaram, Y., HEALTH ECONOMICS, Oxford Pub. New York,



MBT 305 HCHM 2 OPERATIONS MANAGEMENT IN HEALTHCARE

Objectives: This course is designed to help the students understand the role of operations in improving the efficiency of a health care organization and also help them appreciate the linkage of operations with corporate strategy and other functional domains including marketing and finance. It would help them understand the health care challenges relating to operations and equip them with the application of appropriate tools and techniques for addressing the same. The course would also seek to familiarize the students with the contemporary challenges being faced by the health care organizations in the domain of operations and supply chain.

UNIT I

Front Office - Admission - Billing - Medical Records - Ambulatory Care- Death in Hospital Brought-in Dead - Maintenance and Repairs Bio Medical Equipment

UNIT II

Clinical Services - Clinical Departments - Out patient department (OPD) - Introduction Location - Types of patients in OPD - Facilities - Flow pattern of patients - Training and Coordination; Radiology - Location - Layout - X-Ray rooms - Types of X-Ray machines - Staff - USG - CT - MRI - ECG.

UNIT III

Supporting Services – House Keeping –Linen and Laundry, - Food Services - Central Sterile Supply Department (CSSD)

UNIT IV

Facility Location and Layout importance of location, factors, general steps in location selection -Types of lay outs – product, process, service facility layout-Work standards, techniques of work measurement-Work sampling, calibration of hospital equipments. Productivity measures, value addition, capacity utilization, productivity – capital operations, HR incentives calculation, applications in hospital.

UNIT V

Purchasing strategy process – organizing the purchasing function – financial aspects of purchasing – tactical and operational applications in purchasing, Inventory Management: valuation and accounting for inventory – physical location and control of inventory – planning and replenishment concepts – protecting inventory; Value Management, Value engineering, value analysis.

Suggested Readings:

- 1. Borolo S., Fitzsimmons, J.A., Fitzsimmons, M.J. 'Service Management: Operations, Strategy and Information Technology', McGraw Hill, 9th edition, New Delhi 2019.
- 2. Brandeau, M.L., Sainfort, F. and Pierskalla, W.P., 'Operations Research and Health Care:
- A Handbook of Methods and Applications' (Ed. Book), Springer, Massachusetts, 2004.
- 3. Cachon, G. and Terwiesch, 'Matching supply with demand', McGraw Hill, 2nd edition, New Delhi, 2013.
- 4. Denton, Brian T., 'Handbook of Health Care Operations Management: Methods and Applications' (Ed. Book), Springer, New York, 2013.
- 5. Haksever, C., Render, B., 'Service Management: An integrated approach to supply chain management and operations' Pearson Education, New Jersey, 2013.
- 6. Hollins, B., Shinkins, S., 'Managing Service Operations: Design and Implementation',



Sage Publications, London, 2013.

- 7. Metters, R., King-Metters, K., Pullman, M., Walton, S., 'Successful Service Operations Management', Cengage Learning, 2nd edition, New Delhi, 2007.
- 8. Ozcan, Y.A., 'Quantitative Methods in Health Care Management: Techniques and Applications', Jossey-Bass, A Wiley imprint, 2nd edition, San Francisco, 2009.



MBT 305 HCHM 3 PATIENT CARE MANAGEMENT

Objectives:

To understand the importance of patient care management & to be acquainted with the disaster and safety & Security Management in Hospitals

UNIT I

Patient centric management-Concept of patient care, Patient-centric management, Organization of hospital departments, Roles of departments/managers in enhancing care, Patient counseling & Practical examples of patient centric management in hospitals-Patient safety and patient risk management.

UNIT II

Quality in patient care management-Defining quality, Systems approach towards quality, Towards a quality framework, Key theories and concepts, Models for quality improvement & Variations in practice

UNIT III

Patient classification systems and the role of case mix-Why do we need to classify patients, Types of patient classification systems, ICD 9 (CM, PM), Case mix classification systems, DRG, HBG, ARDRG, Casemix innovations and Patient empowering classification systems.

UNIT IV

Medical ethics & auditory procedures-Ethical principles, Civic rights, Consumer Protection Act, Patient complaints powers & procedures of the district forum, State and National commission, Patient appeals, Autopsy, Tort liability, Vicarious liability, Medical negligence, Central & state laws, Use of investigational drugs, Introduction/need & procedures for medical audit, Audit administration & Regulating committees-Confidentiality and professional secrecy, ethics of trust and ethics of rights – autonomy and informed consent, under trading of patient rights – universal accessibility – equity and social justice, human dignity

UNIT V

Disaster preparedness-Policies & procedures for general safety, fire safety procedure for evacuation, disaster plan and crisis management. Policies & procedures for maintaining medical records, erecords, legal aspects of medical records, its safety, preservation and storage.

REFERENCES:

- 1. Goel S L & Kumar R. HOSPITAL CORE SERVICES: HOSPITAL ADMINISTRATION OF THE 21ST CENTURY 2004 ed., Deep Deep Publications Pvt Ltd: New Delhi
- 2. Gupta S & Kant S. Hospital & Health Care Administration: Appraisal and Referral Treatise 1998 ed., Jaypee, New Delhi



HEALTHCAREAND HOSPITAL MANAGEMENT (MINOR) MBT 305 HCHM 4 INTERNATIONAL HEALTH SYSTEMS

Course Objectives:

The objectives of this course are to enable the participants to - develop an understanding of basic healthcare delivery models of various developed and developing countries; to understand in detail about different approaches to the organization, financing and delivery of health services in these countries; to understand the health care reform programs and perform a strengths, weaknesses, opportunities, and threats (SWOT analysis) of healthcare delivery system of a country; and, to develop and understanding of healthcare reform strategies in different countries. Course Content:

Unit I:

Introduction to basic determinants of healthcare delivery model; understanding basic statistics (Population Statistics/demographic indicators, Macroeconomic indicators), Healthcare providers, Healthcare Services, Organizational hierarchy, healthcare Reforms, SWOT analysis.

Unit II:

Healthcare delivery models of India; understanding basic statistics (Population Statistics/ demographic indicators, Macroeconomic indicators), Healthcare providers, Healthcare Services, Organizational hierarchy, healthcare Reforms, SWOT analysis. Discussion on newer initiatives and strategies of Govt. of India in healthcare delivery to create a healthy, capable and content new India that includes Ayushman Bharat Yojana or National Health Protection Scheme.

Unit III: Healthcare delivery models of communist nations – China, Cuba and Russia; understanding basic statistics (Population Statistics/ demographic indicators, Macroeconomic indicators), Healthcare providers, Healthcare Services, Organizational hierarchy, healthcare Reforms, SWOT analysis.

Unit IV: Healthcare delivery models of developed nations - Canada, Germany, Sweden, UK and USA; understanding basic statistics (Population Statistics/ demographic indicators, Macroeconomic indicators), Healthcare providers, Healthcare Services, Organizational hierarchy, healthcare Reforms, SWOT analysis.

Unit V: World Health Organization (WHO); its composition and function.

Suggested Readings

- 1. World Health Organization- http://www.who.int/countries/en/
- 2. The Organization for Economic Co-operation and Development (OECD)-http://www.oecd.org/countries/
- 3. Health systems around the world a comparison of existing health system rankings: J Glob Health. 2018 Jun; 8(1): 010407; accessed at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5857204/
- 4. Multinational Comparisons of Health Systems Data, 2017: accessed at:

https://www.commonwealthfund.org/publications/publication/2017/nov/multinational comparisons-health-systems-data-2017



DATA SCIENCES (MAJOR)

MBT 305 DS 1 INTRODUCTION TO DATA SCIENCE WITH R

Unit-1:

Introduction to Data Science- Introduction- Definition - Data Science in various fields - Examples - Impact of Data Science - Data Analytics Life Cycle - Data Science Toolkit - Data Scientist - Data Science Team Understanding data: Introduction - Types of Data: Numeric - Categorical - Graphical - High Dimensional Data - Classification of digital Data: Structured, Semi-Structured and UnStructured - Example Applications. Sources of Data: Time Series - Transactional Data - Biological Data - Spatial Data - Social Network Data - Data Evolution.

Unit-2:

Introduction to R- Features of R - Environment - R Studio. Basics of R-Assignment - Modes - Operators - special numbers - Logical values - Basic Functions - R help functions - R Data Structures - Control Structures. Vectors: Definition- Declaration - Generating - Indexing - Naming - Adding & Removing elements - Operations on Vectors - Recycling - Special Operators - Vectorized if- then else-Vector Equality - Functions for vectors - Missing values - NULL values - Filtering & Subsetting.

Unit-3:

Matrices - Creating Matrices - Adding or Removing rows/columns - Reshaping - Operations - Special functions on Matrices. Lists - Creating List - General List Operations - Special Functions - Recursive Lists. Data Frames - Creating Data Frames - Naming - Accessing - Adding - Removing - Applying Special functions to Data Frames - Merging Data FramesFactors and Tables.

Unit- 4:

Input / Output — Reading and Writing datasets in various formats - Functions - Creating Userdefined functions - Functions on Function Object - Scope of Variables - Accessing Global, Environment - Closures - Recursion. Exploratory Data Analysis - Data Preprocessing - Descriptive Statistics - Central Tendency - Variability - Mean - Median - Range - Variance - Summary - Handling Missing values and Outliers - Normalization Data Visualization in R : Types of visualizations - packages for visualizations - Basic Visualizations, Advanced Visualizations and Creating 3D plots.

Unit- 5:

Inferential Statistics with R - Types of Learning - Linear Regression- Simple Linear Regression - Implementation in R - functions on Im() - predict() - plotting and fitting regression line. Multiple Linear Regression - Introduction - comparison with simple linear regression - Correlation Matrix - F-Statistic - Target variables Vs Predictors - Identification of significant features - Implementation of Multiple Linear Regression in R.

Suggested Readings

- Nina Zumel, John Mount, "Practical Data Science with R", Manning Publications, 2014.
- Jure Leskovec, Anand Rajaraman, Jeffrey D.Ullman, "Mining of Massive Datasets", Cambridge University Press, 2014.
- Mark Gardener, "Beginning R The Statistical Programming Language", John Wiley & Sons, Inc., 2012.
- W. N. Venables, D. M. Smith and the R Core Team, "An Introduction to R", 2013.
- Tony Ojeda, Sean Patrick Murphy, Benjamin Bengfort, Abhijit Dasgupta, "Practical Data Science Cookbook", Packt Publishing Ltd., 2014.
- Nathan Yau, "Visualize This: The FlowingData Guide to Design, Visualization, and Statistics", Wiley, 2011
- Boris lublinsky, Kevin t. Smith, Alexey Yakubovich, "Professional Hadoop Solutions", Wiley, ISBN: 9788126551071, 2015.



MBT 305 DS 2 DATA MINING AND DATA ANALYSIS

Unit-I

Data mining - KDD Vs Data Mining, Stages of the Data Mining Process-Task Primitives, Data Mining Techniques – Data Mining Knowledge Representation. Major Issues in Data Mining – Measurement and Data – Data Preprocessing – Data Cleaning - Data transformation- Feature Selection - Dimensionality reduction Unit-II:

Predictive Analytics Classification and Prediction - Basic Concepts of Classification and Prediction, General Approach to solving a classification problem- Logistic Regression - LDA - Decision Trees: Tree Construction Principle – Feature Selection measure – Tree Pruning - Decision Tree construction Algorithm, Random Forest, Bayesian Classification-Accuracy and Error Measures- Evaluating the Accuracy of the classifier / predictor-Ensemble methods and Model selection.

Unit-III:

Classification and Descriptive Analytics Rule Based Classification – Classification by Back propagation – Support Vector Machines – Associative Classification – Lazy Learners – Other Classification Methods – Prediction.

Descriptive Analytics - Mining Frequent Itemsets - Market based model – Association and Sequential Rule Mining Unit - IV:

Cluster Analysis Cluster Analysis: Basic concepts and Methods – Cluster Analysis – Partitioning methods – Hierarchical methods – Density Based Methods – Grid Based Methods – Evaluation of Clustering – Advanced Cluster Analysis: Probabilistic model based clustering – Clustering High – Dimensional Data – Clustering Graph and Network Data – Clustering with Constraints- Outlier Analysis.

Unit-V:

Factor Analysis Factor Analysis: Meaning, objectives and Assumptions, Designing a factor analysis, Deriving factors and assessing overall factors, Interpreting the factors and validation of factor analysis.

Suggested Readings

- Adelchi Azzalini, Bruno Scapa, "Data Analysis and Data mining", 2 nd Ediiton, Oxford University Press Inc., 2012.
- Jiawei Han and Micheline Kamber, "Data Mining: Concepts and Techniques", 3 rd Edition, Morgan Kaufmann Publishers, 2011.
- Alex Berson and Stephen J. Smith, "Data Warehousing, Data Mining & OLAP", 10th Edition, TataMc Graw Hill Edition, 2007.
- G.K. Gupta, "Introduction to Data Mining with Case Studies", 1st Edition, Easter Economy Edition, PHI, 2006
- Joseph F Hair, William C Black etal, "Multivariate Data Analysis", Pearson Education, 7 th edition, 2013.



MBT 305 DS 3 REGRESSION METHODS

Unit I -

Simple Linear Regression - Model, Least Squares Estimation, Hypothesis Testing, Interval Estimation, Prediction of new observations, Coefficient of Determination, Regression through Origin, Estimation by Maximum Likelihood, Application examples

Unit II -

Multiple Linear Regression - Models, Estimation of model parameters, Hypothesis Testing, Confidence Intervals, Prediction of new observations, Hidden Extrapolation, Standardized Regression Coefficients, MultiCollinearity, Application examples

Unit III -

Model Adequacy Checking - Residual Analysis, Press Statistic, Detection and treatment of Outliers, Lack of fit **Unit IV** –

Model Adequacy Correction - Variance stabilizing transformations, Transformations to Linearize, Analytical methods for selecting a transformation, Generalized and Weighted Least squares

Unit V -

Generalized Linear Models - Logistic Regression, Poisson Regression, Generalized Linear Model **Suggested Readings:**

- Introduction to Linear Regression Analysis by Douglas C. Montgomery, Elizabeth A. Peck and G. Geoffrey Vining, 5th Edition, Wiley.
- Applied Regression Analysis Norman Draper and Harry Smith, 3rd Edition



DATA SCIENCES (MINOR)

MBT 305 DS 4 INFERENTIAL STATISTICS

Unit I -

Central Limit Theorem - Expectations of Continuous Random Variables, General Definition of Expectation, Moments of Continuous Random Variables, Conditional Expectation, Central Limit Theorem - Normal Approximation, Applications to Sampling

Unit II –

Basic Principles & Estimation - Types of Problems, Risk Function, Mean Risk, Choice of Loss functions, Unbiased Estimates, Efficiency, Asymptotic Efficiency, Maximum Likelihood Estimation, Vector Parameters, Confidence Intervals

Unit III -

Testing Hypotheses - Neyman-Pearson Lemma, Composite Hypotheses, Sequential Tests, Likelihood ratio tests, Goodness of fit tests

Unit IV -

Linear Models – Estimation - Linear Regression, Nonlinear Regression, Multiple Linear Regression, Matrix Methods, Properties of Least Squares Estimators, Analysis of Variance mode

Unit V -

Linear Models – Testing - General Linear Hypothesis, Confidence Intervals for regression coefficients, Simple Linear Regression, Multiple Linear Regression, Analysis of Variance

Suggested Readings:

- Introduction to Probability Theory by Paul G. Hoel, Sidney C. Port, Charles J. Stone
- Introduction to Statistical Theory by Paul G. Hoel, Sidney C. Port, Charles J. Stone



FIN – TECH (MAJOR)

MBT 305 FT 1 INTRODUCTION TO FIN-TECH

Unit I:

Introduction to financial system Meaning-Structure- Functions-Components of financial system -Financial system and economic development- Reforms in Financial Sector in India Capital Market and Money Market Meaning — Classification- Functions- Types-Primary market-Secondary market-functioning of various stock exchanges-NSE, BSE, OTCEI-Derivatives Market- Government Securities market- SEBI-Reforms in capital markets. Money Market Meaning-Significance-Structure-Features of money market—Money market instruments-Reforms in money market.

Unit II

Banking and Financial Services-Banking Service Deposit Schemes- Loan Schemes and Other Modern Services-Mechanism of E-Banking & Internet Banking, Mobile Banking & Telephone Banking, ATM & Electronic Money (Credit Cards) ,Electronic Funds Transfer System (RTGS and NEFT) & Modern Banking Services Meaning & Functions -Banking institutions-Scheduled commercial banks and scheduled cooperative banks-Functions of commercial banks, Capital Structure of commercial banks, BASEL Norms. Non-Banking Institutions-NBFCs and Development Finance institutions-Insurance and Housing Finance Companies -IRDA RBI-Functions-Monetary policy-Credit Policy Financial Services Meaning-Types-Leasing- Hire purchase- Mutual funds- Factoring -Credit rating- Venture CapitalRecent developments in financial services industry, GIFT.

Unit III:

Introduction to FinTech What is FinTech Industry? Evolution of FinTech, FinTech Evolution 1.0: Infrastructure, FinTech Evolution 2.0: Banking industry, FinTech Evolution 3.0 & 3.5: Startups and Emerging Markets, Importance of FinTech, Global FinTech Investment, Main FinTech Hubs FinTech in Payment Industry-Multichannel digital wallets, applications supporting wallets, onboarding and KYC application, FinTech in Lending Industry- Formal lending, Informal lending, P2P lending, POS lending, Online lending, Payday lending, Microfinance, Crowdfunding, FinTech in Wealth Management Industry-Financial Advice, Automated investing, Socially responsible investing, Fractional Investing, Social Investing. FinTech in Insurance Industry- P2P insurance, OnDemand Insurance, On-Demand Consultation, Customer engagement through Quote to sell, policy servicing, Claims Management, Investment linked health insurance.

Unit IV:

Technology Disruptions enabling FinTech Innovations 4G and 5G networks fuelling FinTech Opportunities, transforming customer experience using Mobile Applications and smart phones, embedded sensors and social media, Cloud computing, Web 2.0, Rapid Web Design, JavaScript Technologies, IoT, Big Data, analytics and AI and Blockchain,

Unit V:

International Financial Markets Nature, Organization and Participants- Offshore Financing Instruments- Foreign Exchange market – International Financial Tech Cities The state of FinTech globally US-The revolution starter, Europe and UK-The fintech hub, Germany, Sweden, France, China-The FinTech dragon awakens, India-The tiger is roaring, Africa-A young FinTech continent, Australia, New Zealand and Brazil-the emerging FinTech countries, Regulatory and Policy Assessment for Growth of Fintech. Fin Tech as disruptors, Financial institutions collaborating with FinTech companies, The new financial world

Suggested Readings:

• Pathak, B. (2013) Indian Financial System. New Delhi: Pearson education.



- Desai, V. (2010)Indian Financial System. Mumbai: Himalaya publishers.
- Gordon, N. (2014). Indian Financial System. Mumbai: Himalaya publishers.
- Khan, M.Y. (2009). Indian Financial System. New Delhi: McGraw-Hill.
- Parag Y Arjunwadkar (2018), FinTech: The Technology Driving Disruption in the financial service industry CRC Press.
- Sanjay Phadke (2020), Fintech Future: The Digital DNA of Finance Paperback. Sage Publications
- Pranay Gupta, T. Mandy Tham (2018). Fintech: The New DNA of Financial Services Paperback
- RBI(2017). Report of working group on FinTech and Digital Banking
- Arner D., Barbers J., Buckley R (2015) The evolution of FinTech: a new post crisis paradigm, University of New South Wales Research Series.
- Susanne Chishti, Janos Barberis (2016). The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries (Wile01) Paperback, Wiley Publications
- Richard Hayen (2016). FinTech: The Impact and Influence of Financial Technology on Banking and the Finance Industry



MBT 305 FT 2 FINANCIAL MODELLING

Unit I

Advanced Excel Functions on financial datasets Lookups and Searches (within table, across tables), Multiple Lookups and Reverse Lookups, Applications of Sumifs and Countifs, Conditional Sumproducts and dashboarding, Usefuls functions - string / statistical / date-time / financial, Error Handling Functions, Formula Auditing

Unit II

Advanced Lookups and Searches on financial datasets Reverse lookups, dynamic searches, Multiple Lookups with applications to financial data sets, Multidimensional searches in Excel, Applications on financial time series and datasets

Unit III

Data Aggregation techniques in Excel for financial datasets Data Aggregation methods, Dynamic modeling using Named Ranges, Using Tables as a powerful way to build dynamic formulae, Aggregation using Pivot Tables & Techniques, Filtering Techniques, Conditional aggregation techniques (using datasets)

Unit IV

Using Excel for Advanced functionalities in Finance Solver & Optimization Techniques, Scenario Analysis, Sensitivity Analysis, Goal Seek, Examples from various finance and banking domains on applications of above principles

Unit V

Dashboard creation Applications from Finance for aggregating financial datasets and financial time series, Writing Complex Logic and applied examples

Unit VI

Macros Introduction to VBA environment, Programming elements, Control Structures for building financial applications, Creating macros for complex logic, Writing user-defined Functions (UDF) for building financial pricing libraries, Debugging Techniques

Unit VII

Building Integrated Financial Model Understanding and creating a financial model template, Calculating Growth Drivers and Future Assumptions, Revenue Build-Up - Projecting the Future Revenues, Cost Build-Up - Projecting the Future Cost, Modeling historical & projected financial statements - P&L and B/S, Building cash flow statement, Asset and Depreciation Schedule, Debt and Interest Schedule, Building an integrated model for valuation using DCF, Sensitivity/Scenario Analysis, Incorporating other accounting details like revenue recognition, deferred taxes etc.

Suggested Readings:

- Simon Benninga Financial Modeling with Excel (4th edition), MIT Press Cambridge, Massachusetts London, England
- Chandan Sengupta Financial Analysis and Modeling Using Excel and VBA (2nd edition), John Wley & Sons
- Jackson and Staunton Advanced Modeling in Finance using Excel and VBA, (1st edition), John Wley & Sons



MBT 305 FT 3 FINANCIAL DERIVATIVES

Unit I

Derivatives - Introduction Derivatives - Introduction, economic benefits of derivatives - Types of derivatives -Features of derivatives market - Factors contributing to the growth of derivatives - functions of derivative markets -Exchange traded versus OTC derivatives - traders in derivatives markets - Derivatives market in India. (Only Theory)

Unit II

Forwards and Futures Difference between forwards and futures -valuation of futures, valuation of long and short forward contract. Mechanics of buying & selling futures, Hedging using futures - specification of futures -Commodity futures, Index futures, interest rate futures – arbitrage opportunities. (Practical Problem)

Interest rate markets Type of rates, Determining Zero rates, Forward rate agreements (FRA), and Interest rate derivatives. (Practical Problem)

Unit IV

Swaps Swaps - features and uses of swaps - Mechanics of interest rate swaps - valuation of interest rate swaps currency swaps – valuation of currency swaps. (Practical Problem)

Unit V

Options Types of options, option pricing, factors affecting option pricing – call and put options on dividend and non- dividend paying stocks put-call parity - mechanics of options - stock options - options on stock index - options on futures – interest rate options. Concept of exotic option. Hedging & Trading strategies involving options, valuation of option: basic model, one step binomial model, Black and Scholes Model, option Greeks. Arbitrage profits in options. (Practical Problem)

Unit VI

Value at Risk (VaR)&Margins Measure, Historical simulation, Model building approach, linear approach, Quadratic model, Monte Carlo simulation, stress testing and back testing. (Only Theory). Margins: Types of Margins, Valuation of Margins using cash segment, future contracts, option contracts and VaR (Practical Problems).

Unit VII

Commodity derivatives Commodity futures market-exchanges for commodity futures in India, Forward Market Commissions and regulation-commodities traded – trading and settlements – physical delivery of commodities. (Only Theory)

Suggested Readings:

- Options Futures & Other Derivatives John C. Hull, 6/e, Pearson Education.
- An introduction to derivatives and risk management, Chance, Cengage, 9thedition.
- Derivatives, Principles and Practice, Sundaram & Das, Mc Graw Hill, 2016
- Risk Management, Vaijanath Babshetti& Prakash B. Yaragol, 1st edition, Kalyani Publishers, 2014.
- Introduction to Derivatives and Risk Management Don M. Chance, Cenage Learning, 2008.
- Financial Derivatives- Bishnupriya Mishra and Sathya Swaroop Debashish, Excel BOOKS, 2007.
- Options & Futures Edwards & Ma, 1/e, McGrawHill. 6. Derivatives- Valuation & Risk Management Dubofsky & Miller, Oxford University Press, 2005



FIN – TECH (MINOR)

MBT 305 FT 4 TRADING STRATEGIES

Unit I

Market Microstructure: An Overview Sources of value and reasons for trade, Mechanisms in economic settings, Multiple characterizations of prices, "Liquidity", The long-term dynamics of security prices - Macroeconomic models of asset prices, Martingales in microstructure analyses, Sequential trade models of asymmetric information – Overview, A simple sequential trade model, Extensions - Fixed transaction costs, Price-sensitive liquidity traders and market failures, Event uncertainty, Orders of different sizes, Orders of different types, Empirical implications

Unit II

Various Trade Models and Execution Strategic trade models of asymmetric information - Strategic trade models of asymmetric information - The informed trader's problem, The market maker's problem, Properties of the solution, The multiperiod model – Setup, Solution, Analysis of solution, Numerical example, Autocorrelation in trades, Increasing the number of auctions (when total noise trading remains unchanged), Problems based on the single-period model, Limit orders and dealer quotes – Overview, Limit order placement when faced with incoming orders of varying size, Empirical evidence, Introduction of a dealer/specialist, Bidding and offering with uncertain execution - Expected utility, Setting the bid for a single risky security, Setting the bid with correlated risky assets, Limit order submission strategies

Unit III

Automated Trading and Risk Management Fishing for Ideas - How to Identify a Strategy That Suits You, A Taste for Plausible Strategies and Their Pitfalls, Back-testing - Common Back-testing Platforms, Finding and Using Historical Databases, Performance Measurement, Common Back-testing Pitfalls to Avoid, Transaction Costs, Strategy Refinement, Execution Systems - What an Automated Trading System Can Do for You, Minimizing Transaction Costs, Testing Your System by Paper Trading, Why Does Actual Performance Diverge from Expectations? Money and Risk Management - Optimal Capital Allocation and Leverage, Risk Management, Psychological Preparedness

Unit IV

Various Trading Strategies Special Topics in Trading Strategies - Mean-Reverting versus Momentum Strategies, Regime Switching, Stationarity and Co-integration, Factor Models, What Is Your Exit Strategy? High-Frequency Trading Strategies, Is It Better to Have a High-Leverage versus a High-Beta Portfolio? Short sale strategy-zero investment portfolio, Margin trading strategy, Mispricing.

Unit V

Behavioural Models and Trade Rational Bubbles and Learning - Rational Bubbles, Tests of Rational Bubbles, Intrinsic Bubbles, Learning, Behavioural Finance and Anomalies - Key Ideas, Beliefs and Preferences, Survival of Noise Traders, Anomalies, Behavioural Models - Simple Model, Optimizing Model of Noise Trader Behaviour, Shleifer—Vishny Model: Short-Termism, Contagion, Beliefs and Expectations, Momentum and News watchers, Style Investing, Prospect Theory:

Unit VI

Price Action Strategies – Live markets Real examples of price action from various asset classes such as Equities, Commodities and FX, high probability trades by being able to identify tops and bottoms in the making, kind of Option Trading strategies to employ in various market regimes, timing your strategies using legging concepts an dynamically managing positions.

Unit VII

Algorithmic Trading – Live markets Practical introduction to Algorithmic Trading platform through - Conceptualization of trading strategy, Trading Performance Indicators, Back testing Trading strategy, Strategy Optimization, Creating Portfolio strategy basket, Simulating markets and strategies.

Suggested Readings:

• Joel Hasbrouck – Empirical Market Microstructure, 1st Edition, Oxford University Press



- Ernest P. Chan Quantitative Trading, 1st Edition, John Wiley & Sons
- Keith Cuthbertson and Dirk Nitzsche Quantitative Financial Economics1st Edition, John Wiley & Sons
- Market Microstructure in Practice Charles-Albert Lehalle and Sophie Laruelle, 1st Edition, World Scientific, Singapore Press

Market Microstructure – Maureen O'Hara, 1st Edition, Blackwell Publisher



IV - Semester

| | | | | | | Contact Hours per | | | Total Credit | |
|-------------------------------|-----------------|------------|--|-------------------|-------------------|----------------------|----------|---|--------------|----|
| S. No. | Subject Code | | | | Total Marks | Week | | | | |
| | | | | External Marks | Internal Marks | | L | T | P | |
| 1. | MBT 401 | | Business Ethics and Corporate Governance | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 2. | MBT 402 | | Project Management | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 3. | MBT 403 | | Entrepreneurship Development | 70 | 30 | 100 | 3 | 0 | 0 | 3 |
| 4. | MBT 404 | | Major 1 | 70 | 30 | 100 | 2 | 0 | 0 | 2 |
| 5. | | | Major 2 | 70 | 30 | 100 | 2 | 0 | 0 | 2 |
| 6. | | | Minor 1 | 70 | 30 | 100 | 2 | 0 | 0 | 2 |
| 7. | MBT 405 | | Dissertation & Viva-Voce | 50 | 150 | 200 | 0 | 0 | 12 | 6 |
| Tota | 1 | | | 470 | 330 | 800 | 18 | 0 | 12 | 21 |
| NSS/NCC | | Non Credit | 1 | 1 | | -1 | <u> </u> | 1 | | |
| TOTAL CREDIT ALL SEMESTERS 94 | | | | | | | | | | |



veer madho singh bhandari uttarakhand technical university, dehradun <u>List of Electives</u>

| FINANCE | | | | | | | |
|--------------|------------------------------------|---|---|---|---|--|--|
| Subject Code | Elective | L | Т | P | С | | |
| MBT404 F1 | International Financial Management | 2 | 0 | 0 | 2 | | |
| MBT404 F2 | Mergers and Acquisitions | 2 | 0 | 0 | 2 | | |
| MBT404 F3 | Financial Derivatives | 2 | 0 | 0 | 2 | | |
| MBT404 F4 | Financial Services (MINOR) | 2 | 0 | 0 | 2 | | |

| MARKETING | MARKETING | | | | | | | | |
|--------------|----------------------------|---|---|---|---|--|--|--|--|
| Subject Code | Elective | L | Т | P | С | | | | |
| MBT404 M1 | Product & Brand Management | 2 | 0 | 0 | 2 | | | | |
| MBT404 M2 | Retail Management | 2 | 0 | 0 | 2 | | | | |
| MBT404 M3 | Rural Marketing | 2 | 0 | 0 | 2 | | | | |
| MBT404 M4 | Sales Management (MINOR) | 2 | 0 | 0 | 2 | | | | |

| HUMAN RESOURCE MANAGEMENT | | | | | | | |
|---------------------------|---|---|---|---|---|--|--|
| Subject Code | Elective | L | Т | P | С | | |
| MBT404 HR1 | International Human Resource Management | 2 | 0 | 0 | 2 | | |
| MBT404 HR2 | Performance Management | 2 | 0 | 0 | 2 | | |
| MBT404 HR3 | Compensation Management | 2 | 0 | 0 | 2 | | |
| MBT404 HR4 | Corporate leadership (MINOR) | 2 | 0 | 0 | 2 | | |



| INTERNATIONALBUSINESS | | | | | | |
|-----------------------|--|---|---|---|---|--|
| Subject Code | Elective | L | Т | P | C | |
| MBT404 IB1 | International Marketing Management | 2 | 0 | 0 | 2 | |
| MBT404 IB2 | Global Financial Markets and Instruments | 2 | 0 | 0 | 2 | |
| MBT404 IB3 | Foreign Exchange Management and Currency Derivatives | 2 | 0 | 0 | 2 | |
| MBT404 IB4 | EXIM Financing and Documentation (MINOR) | 2 | 0 | 0 | 2 | |

| AGRIBUSINESS MANAGEMENT | | | | | | | | |
|-------------------------|--|---|---|---|---|--|--|--|
| Subject Code | Elective | L | Т | P | C | | | |
| MBT404 AB1 | Agri-Supply Chain Management | 2 | 0 | 0 | 2 | | | |
| MBT404 AB2 | Food Technology and Processing Management | 2 | 0 | 0 | 2 | | | |
| MBT404 AB3 | International Agribusiness Trade | 2 | 0 | 0 | 2 | | | |
| MBT404 AB4 | Agricultural Marketing Management (MINOR) | 2 | 0 | 0 | 2 | | | |

| BUSINESS ANALYTICS | | | | | | | |
|--------------------|---|---|---|---|---|--|--|
| Subject Code | Elective | L | Т | P | C | | |
| MBT404 BA1 | Business Optimization and Big Data Analysis | 2 | 0 | 0 | 2 | | |
| MBT404 BA2 | Financial Analytics | 2 | 0 | 0 | 2 | | |
| MBT404 BA3 | Advanced Research Methods and Predictive Analysis | 2 | 0 | 0 | 2 | | |
| MBT404 BA4 | Marketing Analytics (MINOR) | 2 | 0 | 0 | 2 | | |

| RURAL DEVELOPMENT | | | | | | | |
|-------------------|-------------------------|---|---|---|---|--|--|
| Subject Code | Elective | L | T | P | C | | |
| MBT404 RD1 | Non-Credit Cooperatives | 2 | 0 | 0 | 2 | | |
| MBT404 RD2 | Allied Laws | 2 | 0 | 0 | 2 | | |



| MBT404 RD3 | Accounts and Audit | 2 | 0 | 0 | 2 |
|------------|--|---|---|---|---|
| MBT404 RD4 | Project Management in cooperatives (Minor) | 2 | 0 | 0 | 2 |

| SUPPLY CHAI | N MANAGEMENT | | | | |
|--------------|---|---|---|---|---|
| Subject Code | Elective | L | Т | P | C |
| MBT404 SC1 | Global Supply Chain & Outsource Manufacturing | 2 | 0 | 0 | 2 |
| MBT404 SC2 | Green Logistics | 2 | 0 | 0 | 2 |
| MBT404 SC3 | Enterprise Resource Planning for Managers | 2 | 0 | 0 | 2 |
| MBT404 SC4 | Lean Supply Chain & Supplier Relationship | 2 | 0 | 0 | 2 |
| | Management (MINOR) | | | | |

| HEALTH CARE AND HOSPITAL MANAGEMENT | | | | | | | | |
|-------------------------------------|--|---|---|---|---|--|--|--|
| Subject Code | Elective | L | Т | P | C | | | |
| MBT 405 HCHM 1 | Hospital Facilities Management | 3 | 0 | 0 | 3 | | | |
| MBT 405 HCHM 2 | Hospital Information Systems | 3 | 0 | 0 | 3 | | | |
| MBT 405 HCHM 3 | Innovation in Health Care | 3 | 0 | 0 | 3 | | | |
| MBT 405 HCHM 4 | Analytics for Health Care Management (MINOR) | 3 | 0 | 0 | 3 | | | |

| DATA SCIENCE | | | | | | | |
|--------------|---|---|---|---|---|--|--|
| Subject Code | Elective | L | Т | P | С | | |
| MBT 405 DS 1 | Machine Learning | 3 | 0 | 0 | 3 | | |
| MBT 405 DS 2 | Data Visualization | 3 | 0 | 0 | 3 | | |
| MBT 405 DS 3 | Big Data Technology | 3 | 0 | 0 | 3 | | |
| MBT 405 DS 4 | Big Data Acquisition and Analysis (MINOR) | 3 | 0 | 0 | 3 | | |

| Fin-Tech | | | | | | |
|--------------|--------------------------------|---|---|---|---|--|
| Subject Code | Elective | L | Т | P | С | |
| MBT 405 FT 1 | Insurance and Risk Management | 3 | 0 | 0 | 3 | |
| MBT 405 FT 2 | Fin-Tech Ethics and Risks | 3 | 0 | 0 | 3 | |
| MBT 405 FT 3 | Crypto currencies and Payments | 3 | 0 | 0 | 3 | |
| MBT 405 FT 4 | Block Chain (MINOR) | 3 | 0 | 0 | 3 | |

MBT 401 BUSINESS ETHICS AND CORPORATE GOVERNANCE

Unit 1

Introduction to Business Ethics

An understanding of Ethics, Meaning of Ethics, Def. Of Business Ethics, Ethical Performance, Types of Ethics, Sources of Ethics, Ethics and Business, Importance and Scope of Ethics, Factors influencing Business Ethics, Objective of Business Ethics, Morality and Ethics.

Unit2

Values, Norms, Beliefs and Standards

Ethical Codes, Managing Ethics, Ethical Activities, Ethical Dilemmas, Whistle Blowing

Unit3

Ethical Decision

Making the role of Moral Philosophies in Decision Making, Ethical Organisation, Ethical Issues that arise for Mangers, Kohlenberg's Model, Carrol Gilligan's Model.

Unit4

Ethical Practices in Business Management

Application in Marketing, Advertising, Finance-Tax Evasion, Lack of Transparency, Preparing False Financial Statement, Speculation and InsiderTrading. Application in HR Mare alike Compensation, and Work Place Harassment of Employee.

Unit5

Corporate Governance

Introduction, Concept and Need for Corporate Governance, Definitions, Parties to Corporate Governance, Agency Theory, Stewardship Theory, Popular Model for Governance ,Anglo-American Model ,Japanese Model and Indian Perspective of Corporate Governance.

Unit6

Corporate Governance framework

India's Corporate Governance Framework, SEBI, Company Law and Accounting, CII Code on Corporate Governance, National Code on Corporate Governance (1999), Chandra Committee on Auditing and Governance.



Suggested Readings

- 1. Muraleedharan, Fernando's Business Ethics and Corporate Governance, 3e, 2021, Pearson Education
- 2. CSVMurthy, Business Ethics (Text and Cases), Pub. By HPH
- 3. Marianne M. Jennings, Cases in Business Ethics, Pubby Cenage Learning
- 3. Prof.(Col) P.S. Bajaj, Dr. Raj Agarwal, *Business Ethics—An Indian perspective*, Pubby Biztantra
- 4. Fernando, Business Ethics: An Indian Perspective, 3e, 2019, Pearson Education
- 5. John R. Beatright , Ethics and the conduct of business, Pub. By Pearson Education
- 6.GeetaRani and R K Mishra, Corporate Governance Theory & Practice, Pub. By Excel Books
- 7. VSithapathyandRamadeviIyer, *CorporateGovernancePractice&Procedure*, Pub. By Taxman

| S.no | Course Outcomes (CO's) |
|------|--|
| 1 | To Interpret and apply business ethics and morality in performing business activities. |
| 2 | To Demonstrate and apply value, norms, ethical codes and various ethical activities in a business. |
| 3 | To develop and apply moral philosophies in as manager in an organisation decision making. |
| 4 | To assess and apply ethical practices in business management in marketing, finance and HRM |
| 5 | To Develop and apply various models of corporate governance and its framework in an organisation. |
| 6 | To Assess and illustrate corporate governance and accounting code and standards in a business. |



MBT 402

PROJECT MANAGEMENT

Unit1 Introduction

Definitions, Classification, Project risk, Scope, Concepts and Characteristics of Project, Importance of Project Management, Project management-definitions, overview, Project plan, management principles applied to project management, Tools and techniques of project management, Project management life cycles and uncertainty.

Project Planning

Project and Strategic Planning, Scope, Problem Statement, Project Goals, Success criteria, Risk Management, Approval Process, Social Cost Benefit Analysis, Feasibility Study.

Unit2

Project Organization

Project Organization: Various Forms of Project Organizations, Project Organization Charting, Organization Human Resources, The Project Manager, The Project Team, Project Team Pitfalls, Project Contract Management, Types of Contracts, Fixing the Zero Data.

Unit3

Project Financing

Project Cost Estimation, Sources of Finance, Multiple Project and Constraints.

Unit4

Project Implementation and Monitoring

Project Resource Requirements, Type of Resources, Men, Materials, Finance, Multi-project Resources scheduling, Splitting and Multitasking, Resources Allocation method, Project Monitoring and control, Project network Technique-(PERT and CPM), Planning for Monitoring and evaluation, Project Management Information System, Project Scheduling-Time Constrained and Resource Constrained Scheduling, Project Communication, Project Audits, Post Project Reviews.

Unit5

Project Direction and Control

Project Direction, Types of Project Termination, Project in Trouble, Termination Strategies, Evaluation of Termination Possibilities, Termination Procedures, Features of Future Indian Projects.

Learning Resources

1. *Project management*-for2₁ st century-Beenet P Lientz, Kathyn- Pearson Academic Press,1995



- 2. Project Management Jeffrey K Pinto, 5e, 2020, Pearson Education
- 3. Project Management-Denislok
- 4. Project management-DavidI Cleland-McGraw Hill International Ed, 1999.
- 5. Project management-Gopala krishnan-Mc Millian India Ltd.
- 6. Project Management-Harry. Maylor, 5e 2020, Pearson Education
- 7. Project Management-Gray & Larson-Tata McGraw Hill
- 8. Project Management-Prasanna Chandra- Tata McGraw Hill

| S. No. | Course Outcomes (CO's) |
|--------|---|
| 1 | To interpret the tools and techniques of project management & to create a feasibility study of analysing the risk and uncertainty involved in same. |
| 2 | To demonstrate the various types of project organization and its hierarchy including the pitfalls in the project team & types of contracts. |
| 3 | To examine the project cost estimations and various sources from where the project can be financed. |
| 4 | To identify project resources requirement and various methods of allocation and also the techniques required to monitor the project. |
| 5 | To predict the evaluation of termination possibilities associated with the project and how it can be controlled. It also focuses on future prospects of Projects. |



MBT 403 ENTREPRENEURSHIP DEVELOPMENT

Unit 1

Foundation of Entrepreneurship Development

Concept and need of entrepreneurship; Characteristics and Types of Entrepreneurship; Entrepreneurship as a career; Entrepreneurship as a style of Management; The changing role of the entrepreneur; Entrepreneurial traits, factors affecting entrepreneur.

Units2

Theories of Entrepreneurship

Influences on entrepreneurship development; External influences on entrepreneurship development; Socio-cultural, Political, economical, personal entrepreneurial success and failure: reasons and remedies; Women entrepreneurs: Challenges and achievements of women entrepreneurs.

Unit3

Business Planning Process

The business plan as an entrepreneurial tool; Elements of business planning; Objectives; Market analysis; development of Product/idea; Marketing, Finance, Organisation and management; Ownership; Critical risk contingencies of The proposal; Scheduling and milestones

Unit4

Project Planning for Entrepreneurs

Technical, Financial, Marketing, Personnel, and management feasibility reports; Financial schemes offered by various financial institution, Like Commercial Banks, IDBI, ICICI, SIDBI, SFCs, Foreign currency Financing; Estimation of Financial requirements.

Unit5

Entrepreneurship Development and Government

Role of Central Government and State Government in promoting entrepreneurship with various incentives, subsidies, grants, programmed, schemes and challenges. Government initiatives and inclusive entrepreneurial Growth.

Suggested Reading

- 1. Charantimath, Entrepreneurship Development and Small Business Enterprises, 3/e 2018, Pearson **Education India**
- 2. Khanna, S. S., *Entrepreneurial Development*, S. Chand, New Delhi.
- 3. Hisrich D. Robert Michael P. Peters, Dean A. Sheperd, Entrepreneurship, McGraw-Hill, 6



- 4. Zimmerer W. Thomas, Norman M. Scarborough, *Essentials of Entrepreneurship and Small Business Management*, 8e, 2016, Pearson Education
- 5. Holt H. David, Entrepreneurship: New Venture Creation 1e, 2016, Pearson Education
- 6. Kuratko, F. Donald, Richard M. Hodgetts, *Entrepreneurship: Theory, Process, Practice*, Thomson, 7ed.
- 7. Desai, Vasant, *Dynamics of Entrepreneurship: New Venture Creation*, Prentice-Hall of India, New Delhi, Latest edition.
- 8. Patel, V. G., *The Seven Business Crises and How to Beat Them*, Tata McGraw-Hill, New Delhi, 1995.
- 9. Roberts, Edward B.(ed.), *Innovation: Driving Product, Process, and Market Change*, San Francisco: Jossey Bass, 2002.
- 10. Barringer, Entrepreneurship: Successfully Launching New Ventures, 6e, 2020 Pearson Education
- 11. SIDBI Report on Small Scale Industries Sector, Latest edition.

| S.no | Course Outcomes(CO's) |
|------|--|
| 1 | Identify the changing roles, traits of entrepreneurs for the growth of entrepreneurship. |
| 2 | Assess internal and external factors affecting entrepreneurship and apply theories to overcome them. |
| 3 | Analysis of market and develop business plan process. |
| 4 | To develop reports and analyse various funding offered by different financial institutes. |
| 5 | To Develop the role and schemes of government to support entrepreneurship |



SYALLABUS OF ELECTIVE PAPERS SEMESTER 4

FINANCE (MAJOR) SUBJECTS

MBT404 F1 INTERNATIONAL FINANCIAL MANAGEMENT

Unit1

Financial Management in Global Perspective: Development in the International Monetary System, Gold Standard, Brett on Woods System of Exchange Rate, Exchange Rate Regime, IMF and International Liquidity, System of Exchanging Currencies.

Exchange Rate Determination : Determination of Exchange Rate in Spot and Forward Market, PPP Theory, IRP Theory, Monetary Theories of Exchange Rate determination, Overshooting Models.

Unit2

Foreign Exchange Market

Structure; Spot and Forward, Participants in Foreign Exchange Market-Arbitraging, Hedging and Speculation, Covered Interest Rate Arbitrage, Borrowing and Investing Markets. **Fisher's Effect.**

Unit3

Risk Exposures and Their Management

Translation, Transaction and Operating Exposures: Their Measurement and Management, Political Risk.

Unit4

Financial Foreign Operations

Internationalisation Financial Markets, Euromarkets, Special Financing Vehicles, Designing a Global Financial Strategy.

Unit5

International Financial Markets: International Equity Issues and Long Term Borrowings. GDRs, ADRs and Euro Bonds. International Development Banks, Foreign Currency Financing by Indian Financial Institutions. **Multinational Working Capital Management:** Management of Cash, Inventory and Accounts Receivable in Global Context, Inter–Company Fund Flow Mechanism, Short Term Financing. Financing of International Trade.

Suggested Readings

1. Shapiro AC: *Multinational Financial Management*: PHI 2. Levi, Maurice: *International Finance*, Routledge, 2009



- 3. Eiteman, David K: Arthur Stone hill, Multinational Business Finance, 14e, 2017, Pearson Education
- 4. Michael H. Moffett, Fundamental Multinational Finance, 5e Pearson Education 2020
- Madhu: International Financial Management, Excel Publications, 2006
- 5. Apte: International Financial Management : PHI
- 6.Seth, A.K.: International Financial Management
- 7. Siddaiah, International Financial Management, 3e, 2021, Pearson Education

| S.no | Course Outcomes (CO's) |
|------|---|
| 1 | to analyze the understanding of developments in international financial market. |
| 2 | to demonstrate nature and functioning of foreign exchange market |
| 3 | to illustrate the foreign exchange risks and to identify risk management strategies |
| 4 | To analyse, apply and evaluate information within the global financial environment of international financial market. |
| 5 | To explore the international sources of long term finance and management of multinational working capital. |



MBT 404 F2 MERGERS AND ACQUISITIONS

Unit1 Introduction

Overview of Mergers; Types And Characteristics; Motives Behind Mergers; Theories of Mergers- operating, Financial and Managerial Synergy of Mergers; Role of Industry Life Cycle-Development Stages; Value Creation through Mergers; Agents Contributing to Mergers and Acquisition Activities, Difference between Merger, Amalgamation, Absorbtion Reconstruction and Takeover.

Unit2

Corporate Restructuring

Method of Restructuring- Joint Ventures, Sell-Off And Spin Off- Equity Carve-Outs, Leveraged Buy Outs (LBO)-Management Buy Outs-Master Limited Partnerships- Employees Stock Option Plans(ESOP).

Unit3

Mergers and Acquisition Process

Process of Merger Integration-Process of Merger Integration-Organisational and Human aspects; Managerial challenges of Mergers and Acquisition. Strategic fit and the M&A decision.

Unit4 Valuation

Benchmarks of Value; Valuation approaches- Discounted Cash Flow Valuation-Valuing relative Contribution—Valuing Comparables- Valuation of the Target's Equity-Precedent Acquisition; Valuing Operating and Financial Synergy—Valuing Corporate Control-Valuing of Leveraged Buy Outs (LBO)-Methods of Financing Mergers-Cash Offer, Share Exchange Ratio-Merger as Capital Budgeting Decision.

Unit5

Defensive Strategies in Restructuring

Accounting for Amalgamation- Polling Interest Method-Purchase Method; Procedure Laid down under Indian Companies Act of 1956, Accounting Standard and SEBI Guidelines, Takeover Defenses- Types and Techniques of Raid; Advance Preventive Measures; Strategies of Take over bid White Knights- White Square- Crown Jewel-Pacman's Strategy-Golden Parachute- Poison Pills Strategy-Coercive Offers and Defense- Financial Defensive Measures-Anti takeover Amendments.

Suggested Readings

1. Weston.F,Chung. K, and Hoag, S. (2008). *Mergers, Restructuring and Corporate Control*, Prentice-Hall of Indian Pvt. Ltd.,New Delhi.



- 2. Patrick A. Gaughan (2007). *Mergers, Acquisitions and Corporate Restructurings*,4/eWiley India,NewDelhi.
- 3. Narayanan, P.and Vikram, Nanda (2003), *Finance For Strategic Decision Making*-What non-Financial managers Need to Know, Jossey-Bass, Wiley India.
- 4. Reuvid Jonathan, (2005). Mergers and Acquisitions, Kogan Page.
- 5. Robert Brown(2007), Applied Mergers and Acquisitions, John Willey and Sons.
- 6. Kevin K. Boeh and Paul W. Beamish (2007). *Mergers and Acquisitions*: Text and Cases. Sage Publications, New Delhi.

| SN | Course Outcomes |
|----|--|
| 1 | Explain the rationale behind the use of mergers and acquisitions by a firm's managers, the key |
| | pitfalls and recommendations for maximizing the chances for long-term success. |
| 2 | Develop integrative, adaptive planning frameworks for use before, during and after a negotiation by applying a thorough understanding of negotiation concepts, theories and principles |
| 3 | Critically compare the concepts and principles of financial valuation and negotiation in relation to managerial decision-making |
| 4 | Apply industry-accepted valuation methods (DCF, relative valuation, and precedent transactions) to analyse international merger, acquisition and related transactions, including those with a cross-border and international context |



MBT 404 F3 FINANCIAL DERIVATIVES

Unit 1

Financial Derivatives

Concept, Features, Uses, Types, Critiques of Derivatives, Traders in Derivative Markets, Factors contributing to the growth of Derivatives, Financial Derivatives Market in India, Derivative centrals and Market Liquidity.

Unit2Future--

Introduction, Financial Futures Contracts, Types of Financial Futures, Contracts, Evolution of Futures Market in India, Operators/ Traders in Future Market, Functions Market Growth in Future Market, Future Margin, Market to Market, Cleaning House, Theories of Future Prices. Hedging Concepts— Long, Short, Cross, Forward Contract, Feature of Forward Contract, Classification of Forward Contracts, Forward Prices vs Future Prices, Index Futures.

Unit3

Financial SWAPS

Introduction, Concept, types, Nature, Evolution, Features, and Types of Swaps.

Unit4

Financial Options

Introduction, Concept, Types, Distinction between option and futures contracts, Option valuation, Determinants of option pricing, option premium, Greeks of option Contracts.

Option Models

Black- Scholes option pricing model, Binomial Option pricing model, Trading and Hedging with options.

Unit5

Carry Trades and speculative Derivatives-Economic Derivatives, Market Expectations, Carrytrade as a speculative Investment Strategy; Uncovered Interest Parity, Measurement of Risk and Returns in carry Trades, Rupee Interest Derivatives, Convertible Securities and Warrants, Hedging – objective sand Process.

Suggested Readings

- 1. Hull, Option, futures and other derivatives, 11e, 2022, Pearson Education
- 2. David A. Dubofsky and Thomas W. Miller, J. R. Derivatives: *Valuation and Risk Management*, Oxford.



- 3. Vohra, N.D. and Bagri, B. R., Future and Options, TMH 3. Kumar, Financial Derivatives, PHI.
- 4. Marshall & Bansal: *Financial Engineering*, a complete guide to Financial Innovation, PHI.
- 5. Mishra, Bishnupriya, Debasis, S, Derivatives and Risk management, Excel Books.
- 6. Bhalla V. K, Investment Management Security Analysis and Portfolio Management-S. Chand

| S.no | Course Outcomes (CO's) |
|------|---|
| 1 | To evaluate financial environment concepts and its evolution |
| 2 | Compare and contrast among finance segmentation and consumer |
| | behaviour concepts |
| 3 | To critically analyze the role and concepts of financial derivatives. |
| 4 | To develop the ability of stock pricing decisions, channel of distribution and physical distribution. |
| | |

FINANCE (MINOR) SUBJECT

MBT 404 F4 FINANCIAL SERVICES

Unit1

Financial Services

Meaning and Concepts, Need for Financial Services, Various Types of Financial Services, Fund Based and Non Fund based. Characteristics and Role of Financial Intermediaries.

Unit2

Depositories and Financial Services

Commercial Banks and their Changing Role, Functioning of Banks, Financial Services and Banking System. Non Depository Institutions: Finance Companies and Mutual Funds and Pension Funds-Financial Services and Their Role.

Unit3

Merchant Banking and Venture Capital

The Concept of Merchant banking Services of Merchant bankers, Merchant Banking in India-Rules Regulation Management of Capital Issues, Fixed Deposits and Debenture Issues, Venture Capital-The Concept and Characteristics, Growth of Venture Capital Services in India.

Unit4 Leasing:

Concept, Types, Legal and Tax Aspects, Factoring in India, Hire-Purchase, Lease Structuring. **Factoring:** Concept and Characteristics, Types of Factoring in India, factoring and Bill Rediscounting. **For-faiting:** Meaning and Mechanism of For-faiting.



Unit5

Credit Rating Services

Concept, Types and significance, Function of Credit Rating Agencies, Credit Rating Agencies in India, Process of Credit-Rating.

Suggested Readings

- 1. Bhole L.M.: Financial Institutions and Markets, 4thed., McGrawHillCo.NewDelhi, 2008.
- 2. Bharati V. Pathak, Indian Financial System, 5e, 2017, Pearson Education
- 3. Anthony Saunders, *Financial Markets and Institutions*, 4 ed., McGraw Hill Publishing Company, New Delhi.
- 4. Khan M.Y: Financial Services and System (2008), McGraw Hill Publishing Company, New Delhi.
- 5. Clifford Gomez, Financial Markets, Institutions Management-A Risk management Approach, 6 ed., McGraw Hill Publishing Company New Delhi.
- 6.M.Y.Khan *Indian Financial System*,6 ed.,McGrawHillPublishingCompany,NewDelhi,2008. 7.Sharma, *Management of Financial Institutions*: With Emphasis on Bank and Risk management, Prentice Hall of India, New Delhi.

| S.no | Course Outcomes (CO's) |
|------|--|
| 1 | To develop the understanding of the concept of various types of financial services in India. |
| 2 | To demonstrate the role and functions of commercial banks in Indian Financial system and knowledge of depositories surrounding the financial services. |
| 3 | To analyze the role played by merchant bankers and how venture capital services grow in India. |
| 4 | To analyze the problems related to leasing, hire purchase, factoring, forfeiting and bill discounting. |
| 5 | To develop the understanding of credit rating and process adopted by various institutions. |



MARKETING (MAJOR) SUBJECTS

MBT 404 M1 PRODUCT & BRAND MANAGEMENT

Unit 1

Introduction to Product & Product Related Concepts: Product Management & Scope Marketing Organization & Types, Marketing Planning: Components of Marketing Plan Defining the Competitive Set: Levels of Market Competition, Methods for Determining Competitors Category Attractiveness Analysis: Aggregate Market Factors, Category Factors, Environmental Analysis

Unit 2

Competitor Analysis: Sources of Information, Assessing Competitors' Current Objectives & Strategies, Differential Advantage Analysis Customer Analysis: Purpose, Segmentation Criteria, Market Potential & Sales Forecasting, Methods of Estimating Market & Sales Potential

Unit 3

Developing Product Strategies, PLC, Product Strategies Over the Life Cycle Managing New Product Development, Product Modification, Line Extension & Brand Extension

Unit 4

Brands & Brand Management, Branding Challenges & opportunities, Concept of Brand Equity, Strategic Brand Management Process: Introduction & Phases, Identifying & Establishing Brand Positioning: Building A Strong Brand, Positioning Guidelines

Unit 5

Planning & Implementing Brand Marketing Programs: Criteria for Choosing Brand Elements, Options & tactics for Brand Elements, Use of IMC for Brand Building, Leveraging Secondary Brand Associations to Brand building, Measuring & Interpreting Brand Performance: Developing A Brand Equity Measurement & Management System, Measuring Sources of Brand Equity & Outcome of Brand Equity, Growing & Sustaining Brand Equity: Designing & Implementing Branding Strategies Managing Brands Over Time

Reference Text:

- 1 Product and Brand Management, Tapan K. Panda, Oxford University Press
- 2 Keller, Strategic Brand Management, 5e, 2020, Pearson Education India
- 3 Baker, Product Strategy and Management, 2e, 2008, Pearson Education India
- 4 Donald R. Lehmann and Russell S. Winer, (2004). Product Management, McGraw Hill Higher Education, 4th edition
- 3. Kapferer J.N., 2008. The New Strategic Brand Management, 4th edition, United Kingdom, Kogan page Publishers
- 4 Kotler. P., Pfoertsch W., Michi I., 2006. B2B Brand Management. Springer Berlin. Springer

Course Outcome:

1. The focus of this course is on decisions about how a company can build and manage its products



so that they are profitable to the company

2. To understand at the same time adequately meet target customers' needs and wants. To synchronize product and brand management processes



MBT 404 M2 RETAIL MANAGEMENT

Unit 1

Retailing Environment

An Overview: Introduction, Evolution and Challenges of Retailing; Types of Retailers and Ethical Security Issues in Retail, The Global Retail Market, Opportunity in Retailing, Multi Channel Retailing.

Unit 2

Strategic Retail Planning

Strategic Retail Planning Process, Understanding the Retail Customer, Delivery Value through Retail Formats, Role of Customer Services and Relationship Marketing in Retail, Retail Location and Site Decision, Retail Buying, Retail Market Segmentation, Evaluation Areas for Retail Locations, Concept of Product Life Cycle.

Unit 3

Retail In India

Evolution of Retail in India, Drivers of Retail Change in India, The Size of Retail in India, Retail Formats in India, FDI in Retail, Challenges to Retail Development in India.

Unit 4 Retail Mix

Product Merchandizing, Pricing Decisions in retail, Promotion and Communication Mix in Retail, Multi Channel Retailing, Managing Retail Services, Category Management, Merchandise management Process Overview, Considerations in setting up a Retail Prices, Store Design Objectives and Visual Merchandizing.

Unit 5

Retail Operations

Supply Chain Management and Vendor Relation role in Retail, Management of Human Resources, Financial Management issues in retail, The strategic Profit Model, The Profit path, Store Operations - size and place allocation, Store Maintenance, Inventory Management, retail Management Information Systems.

Suggested Readings

- 1. SwapnaPradhan, Retailing Management, text and Cases, Second Edition, Tata McGraw Hill Publications.
- 2. Barry Berman, Joel R. Evans, *Retail Management*, A Strategic Approach, 13th Edition, 2017, Pearson Education India
- 3. C Bajaj, Retail Management, Oxford Publication, SecondEdition
- 4. Dairs& Ward: Managing Retail Consumption, John Wiley&Sons

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards



5. Levy & Wertz: Retailing Management, Irwin

Course Outcome:

- 1. To understand the concept of Retail management
- 2. To identify the importance of Retail Environment
- 3. To appreciate the importance of Strategic Retail Planning
- 4. To understand the nuances of Retail Operations



MBT 404 M3 RURAL MARKETING

Unit 1

Introduction to Rural Markets

Definition, Concept, Nature, Size and Scope of Indian Rural markets, Rural Demand, Buying Characteristics, Rural Market Structure: Demographic, Physical, Economic Environment.

Unit 2

Understanding the Rural Consumer

Rural Community in India, Profile of Rural markets: Segmenting the Rural Market, Target and Positioning, Rural Consumer Behavior, Rural Buyer Characteristics, Consumer Buying Decision Process, Factors Affecting Consumer Behavior – Cultural, Social, Technological, Economic and Political.

Unit 3

Marketing Mix in Rural Markets

Product: Significance, Concept and Product Mix Decisions, Pricing Strategy: Objectives, Policies and Strategies, Promotion: Advertising, Sales Promotions Communication in Rural marketing, language and Culture Distribution Strategies, Channels of Distribution, Role of Co-operative, Government, Financial Institutions, Public Sector Undertakings, Regulated Markets and Public DistributionSystems.

Unit 4

Innovation in Rural Markets

Significance of innovation in rural markets, Intervention of IT in Rural Markets: Importance and Initiatives, Emergence of Organised retailing in Rural India, Key Drivers of Organised Retail, Cases in organised retail: Operative Models adopted by Indian Companies.

Unit 5

Future of Rural Marketing

Changing Role of Rural Sector in India; Rural Income and Demand, Problems in Marketing of agricultural inputs in Rural India – Chemical fertilizers, Certified seeds and Agricultural Equipments – Tractors, Engines, Pump Sets, Marketing of Agricultural products, improvement Measures taken by the Government – Initiatives by Co-operative and Private Sector, Present Scenario- Rural Female Empowerment, Micro Financing, Mobility in Emerging Markets, Growing RuralTourism.

Suggested Readings



- 1. Pradeep Kashyap, Rural Marketing, 3e 2016, Pearson Education India
- 2. Rama Bijapurkar (2007), We are like That Only, the logic of Consumer India, PenguinBooks
- 3. Prahalad C.K (2008), Fortune at the Bottom of the Pyramid, PearsonPublication
- 4. R V Badi, N V Badi, Rural Marketing, 2008, Himalaya PublishingHouse.
- 5. U C Mathur, Rural marketing, Text and Cases, 2008, excelbooks
- 6. CSG Krishnamacharyulu, LalithaRamakrishnan, Cases in Rural marketing, An Integrated Approach. 2006, Pearson Education

Course Outcome:

- 1. To understand the concept of Rural Market & rural customer
- 2. To identify the process of Rural Marketing
- 3. To understand the marketing mix in rural markets
- 4. To understand the innovations being done for rural markets

MARKETING (MINOR) SUBJECT

MBT 404 M4 **SALES MANAGEMENT**

Unit 1 Introduction

The Nature and Importance of Personal Selling, Nature of Sales Management Situation where Personal Selling is more effective than Advertising, Types of Selling situations, Types of Sales Persons, Application of AIDA Model in Personal Selling.

Unit 2

Process of Personal Selling

Process of Effective Selling; Prospecting, Pre-approach, Approach, Presentation and Demonstration, Handling the objections, Closing the Sales, Post-Sale Activities, Qualities of a Successful Sales person with reference to B-2-C, B-2-BMarketing.

Unit 3

Controlling the Sales Effort

Sales Forecasting; Sales Budget, Sales Quotas, Sales Territories, Sales Controlling and Sales Cost Analysis.



Unit 4

Managing the Sales Force

Recruitment and Selection, Training and Development, Compensation and Innovation, Direction and Suspension, Performance Appraisal of Sales Personnel.

Unit 5

Emerging Issues in Selling Aspects

Ethical and Legal aspects of Selling, Measures for Making Selling as attractive Career, Recent Trends in Selling.

Suggested Readings

- Richard R. Still, Edward W. Cundiff, Norman A.P Govani 6th ed., Sales Management: Decision, Strategies and Cases, Pearson Education, New Delhi, 2017.
- 3. Rosann L. Spiro, William J. Stanton, Gregory A. Rich 11th ed., *Management of a Sales Force*, Tata McGraw Hill, New Delhi 2008
- 4. Mark W. Johnston, Greg W. Marshall, *Sales Force Management*, 8th ed. TMH, N.Delhi, 2007
- 5. Charles Fatrell, SalesManagement.

Course Outcome:

- 1. To understand the process of sales management
- 2. To identify the role and responsibilities of sales manager
- 3. To appreciate the concept of sales force and its responsibilities
- 4. To understand the nuances of Personal selling



HUMAN RESOURCE MANAGEMENT (MAJOR) SUBJECTS

MBT 404 HR1 INTERNATIONAL HUMAN RESOURCE MANAGEMENT

Unit-I

Global Business Environment and Human Component

Global Business Environment, Introduction, Human and Cultural variables, Cross cultural differences and Managerial Implication. Cross Cultural Research Methodology and Hofstede Study.

Unit-II

Cross Cultural Management

Cross Cultural Leadership and Decision making, Cross Cultural Communication and Negotiation. Developing International Staff and Multinational Teams.

Unit-III

International Human Resource Management

Approaches; International Recruitment and Selection, Performance Management, Training and Development and Strategic HRM. Managing Global, Diverse Workforce. Human Resources in a Comparative Perspective

Unit-IV

International HRM

International HRM roles in multinational organizations, Expatriate problem, International Compensation, Repatriation.

Unit-V

Key issues in International Labour Relations

Approaches to International Compensation, International Labour Standards, Labour Unions and International Labour Relations, HRM practices in other countries. International Labour Standards, HR/IR issues in MNCs Corporate Social Responsibility.

Text Books:

1. Doweing, P.J. – *International Dimensions of Human Resource Management End Edition*, Words Worth.



- 2. G.Hofstede– Cultures Consequence; International Differences in Work related Values–Sage.
- 3. Deresky-InternationalManagement, PHI/Addision Wesley.
- 4. Aswathappa, Human Resource and Personnel Management, TMH.
- 5. Meraic, Dand Puffer, S. Management International cross Exercises and Reading St. Paul . West Publish.
- 6. Mangaraj, S., Globalization and Human Resource Management, Excel Books.
- 7. S.C.Gupta- *Textbook of International HRM*-Macmillan.
- 8. Tayeb- *International HRM* Oxford.
- 9. Dowling, Welch & Schuler, International HRM, Excel Books

| S.no | Course Outcomes (CO's) |
|------|---|
| 1 | Identify and create different strategies for |
| | managing the cultural differences |
| 2 | To analyse and manage people of different cultures. |
| 3 | Create the strategies to execute the functions of HR in accordance with the organisational goals and link it to workplace diversity |
| 4 | Apply the knowledge and playing a significant role in MNC's. |
| 5 | To analyse and addressthe major employee issuesand grievances and solving them according to the standard procedures |

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards



MBT 404 HR2 PERFORMANCE MANAGEMENT

Unit 1

Introduction

Meaning, Objectives and scope of PM systems; Role of PM Systems, Characteristics of an ideal PM system., Performance Management in different types of organizations (manufacturing, sales and service), Issues and Problems in Performance Management, Performance Management and its Organisational implications Legal and Ethical Perspectives in Performance Management.

Unit 2

Measuring Performance

Determinants of performance, performance dimensions, approaches to measuring performance, diagnosing causes of poor performance, differentiating task from contextual performance, Performance Measurement Approaches. Process of Performance Management.

Unit 3

Behavioural Issues and Employee Development

Relationship between performance measurement systems and behavior; Influence of individual and group behavior on performance. Accountability issues arising out of performance measurement systems. Assessment of potential beneficial and adverse consequences of linking reward schemes to performance measurement. Performance management and employee development: Personal Development plans, 360 degree feed back as a developmental tool; Performance linked remuneration system, performance linked career planning and promotion policy.

Unit4

Performance Consulting Performance Consulting: Concept, the need for performance consulting, Role of performance consulting, designing and using performance relationship maps, contracting for performance consulting services, implementing organization-wide performance improvement. Performance evaluation and corporate failure: Alternative views of performance measurement; Non-financial performance indicators and predicting and preventing corporate failure.

Unit 5

Current Developments and Emerging Issues in Performance Management Computation and evaluation of performance measures relevant in a divisionalised organization structure including ROI, RI and Economic value added (EVA). Devising separate measures in respect of managerial and divisional performance. Application of value-based management approaches to performance management. Modern performance measurement frameworks: Six Sigma; Performance Prism, Forced ranking Balanced Score Card. Contemporary issues in performance management. Studying the impact of change in organization's structure, culture and strategy on the adoption of new performance measurement methods and techniques. Methods of PMS-

Appraisal, Communication and Interview, Performance feedback and counseling. Talent Management



Suggested Readings

- 1. Herman Aguinis (2007). Performance Management. Pearson Education.
- 2. Bhattacharyya, Performance Management Systems & Strategies, 1e, 2011, Pearson Education
- 3. Lance A. Berger and Dorothy (2007). *The Talent Management Hand Book*. Tata Mc-GrawHill 3.Rao T.V. (2007). *Appraising and Developing Managerial Performance*. ExcelBooks.

Course Outcome:



MBT 404 HR4 COMPENSATION MANAGEMENT

Unit-I Introduction

Conceptual aspects of compensation and reward management; Monetary and non-monetary components of compensation and rewards; Perspectives and trends in compensation and reward management. Compensation Philosophies, Compensation Approaches, Decision about Compensation. Economic and behavioural theories related to wages: subsistence theory, wages fund theory, residual claimant theory, surplus value theory, marginal productivity theory, bargaining theory; supply and demand theory; competitive theory; Employee's acceptance of wage level; wage and motivators; tournament theory. Concept of total rewards.

Unit -II

Job Evaluation: Processes and Schemes

Salient features of Job Evaluation – Analytical and non-analytical techniques – Point factor rating; factor comparison; job classification; ranking ;Urwick Orr Profile Method; Hay Plan method; Decision Band method; job or role matching; market pricing; Computer assisted job evaluation.

Unit-III

Wages and Salary Administration

Concepts of minimum wage, living wage and fair wage; Wage Boards; Pay Commissions; Collective bargaining. Pay surveys; Determinants for formulating wage structures; Pricing Jobs: pay levels; designing pay ranges and bands; Salary structures: graded salary structures; salary progression curves; Pay structure in practice: Basic salary, DA, Allowances, Bonus; Fringe benefits and Incentive schemes. Spot awards. Team incentives; *Design of a pay rollsystem (using Accounting software)*. Legal Constraints on Pay System.

Unit-IV

Compensation Strategies

Job based pay, Skill based pay, competency based pay, market based pay, Pay for position; Pay for person; Pay for performance: variable pay; Rewarding excellence; Creating the strategic reward system. Best practices in 'pay for performance'. Compensation as a retention strategy.

Unit-V

Rewarding Performance and Executive Compensation

Individual-based compensation; team-based compensation; Incentives: types of incentive plans: Taylor's differential piece rate system, Halsey Premium Plan, Rowan Premium Plan, Emerson Efficiency Premium Plan, Gantt Bonus Plan, Bedaux Premium Plan, Merrick Piece Rate System, Commission system; Gain sharing plans: Scanlon Plan, Rucker Plan, Improshare, Value added; Profit sharing plans and Cafeteria plan. Employee benefits and pensions. Policies and practice of benefits; Strategic Perspectives on Benefits, goals for Benefits, Benefits Need Analysis, principal types of benefits; Stock option and purchase plans using ESOP compensation. Pension-understanding kinds of pension. Agency Theory and Executive Compensation; Principles of Executive Compensation; Factors affecting Executive compensation; Models of Executive Compensation: Optimal Contracting Model; Managerial Power Model; Trends of Executive compensation in India and abroad.

International Compensation. *Practical Orientiation (Lab. Sessions)*



Text Books:

- 1. Richard.I. Henderson (2005). Compensation Management in Knowledge-based World. Prentice-Hall.
- Thomas.P.Plannery, David.A.Hofrichter&Paul.E.Platten (2002). People, Performance Pay: Dynamic Compensation for Changing Organizations. Free Press.
- 3. Michael Armstrong & Helen Murlis (2005). Reward Management: A Handbook of RemunerationStrategy and Practice. 5/e, Kogan Page, London.
- 4. Edwarde.E. Lawler III (2000). Rewarding Excellence: Pay Strategies for the New Economy. Jossey Bass, California.
- 5. Singh B.D. (2007). Compensation and Reward Management, Excel Books, New Delhi.
- 6. Tapomoy Deb (2009). Compensation Management: Text and Cases, Excel Books, New Delhi.
- 7. Martocchio, Strategic Compensation, 10e, 2020, Pearson Education

Course Outcome:



HUMAN RESOURCE MANAGEMENT (MINOR) SUBJECT

MBT 404 HR4 CORPORATE LEADERSHIP

Unit-I OrganisationalLeadership

Introduction, importance and scope of corporate leadership. Leadership traits, Functions and Theories, Leadership Styles in Indian Organisations, Leadership Effectiveness.

Unit-II Communication

Business communication-Types, Medias, Objectives, Models, Process, Importance Understanding Barriers to communication and ways to handle and improve barriers. Presentation skills-Its Purpose in business world. Reading and writing Skills- Importance of Reading And Writing, Improving Writing Skills through Understanding and Practicing Notice, E-mail, Tenders, Advertisement, Formal Letter. Listening skills-its importance as individual and as a leader or as a worker, its types, Barriers to Listening & Remedies to improve Listening Barriers. Non Verbal Communication.

Unit- III

Power and Politics

Meaning of Power and Politics, Distinction between Power and Authority, Bases or Sources of Power, Acquisition and Symbols of Organisational Politics. Reasons of Organisational Politics, Managing Organisational Politics. Influencing: Power, Politics, Networking and Negotiation

Unit-IV

Team Leadership

Leader / Follower Relations, Team Leadership and Self-Managed Teams, Leadership of Culture and Diversity and Learning Organisation. Enhancing Morale and Motivation. Time Management, Job Frustration, Stress Management,

Unit-V

Ethics in Leadership, Strategic Leadership and Managing Crises and Change, Emerging Trends in Corporate Leadership.

Text Books:

- 1. Peter Northouse. Sage press
- 2. Leadership in Organisations. (9th edition). (2019), Gary Yukl. Pearson Education India
- 3. Leadership: *Enhancing the Lessons of Experience*. (7th edition). (2010). Richard L. Hughes, Ginnett, & Curphy. McGraw-Hill/Irwin.
- 4. Effective Leadership. (3rdEdition). (2007). Author Lussier/Achua. Thomson.



| S.no | Course Outcomes (CO's) |
|------|--|
| 1 | Analyze the effectiveness of corporate leadership & corporate leadership style in Indian |
| | organizations. |
| 2 | Explain various methods of business communication & importance of listening skills. |
| 3 | Examine the role and effects of power and politics |
| 4 | Analyze the importance of team leadership and time management |
| 5 | Apply ethics in corporate leadership and articulate the emerging trends in corporate |
| | leadership. |

INTERNATIONAL BUSINESS (MAJOR) SUBJECTS

MBT 404 IB 1

INTERNATIONAL HUMAN RESOURCE MANAGEMENT

Unit 1:

International Human Resource Management-Overview, Developments leading to International HRM Perspectives, International Human Resource Management: Role and Distinguishing Activities, Organisational Structure and HRM, International Human Resource Planning. Case Studies

Unit 2

Staffing Practices in International Human Resource Management, Recruitment and Selection for Overseas Assignments, Global Staffing Practices, International Transfers and Repatriation Strategies, Training and Development in International Context, International Performance Management, Global Compensation Practices. Case Studies

Unit 3

Industrial Relations and International Practices in Industrial Relations, Shifts in IHRM and IR, International Strategic Human Resource Management, International Labour Standards, Global Unions, Regional Integration and Framework Agreements. Case Studies

Unit 4

Equal Opportunity and Diversity Management in Global Context. Sensitivity to Cultural Diversity, Global Organisation Structures, Emerging Trends in Employee Relations and Employee Involvement, Convergence or divergence in personnel management in developed and developing economies, Case Studies

Unit 5

Emerging Trends in International HRM, HR/IR issues in MNCs and Corporate Social Responsibility, Case Studies

Suggested Readings:



- 1.Peter J Dowling, Marion Fosting, Allen D Engle Sr- International Human Resource Management (Cengage learning)
- 2. Anne WilHarzing, Ashly H Pinnington- International Human Resource Management (Sage Publication)
- 3. PL Rao International Human Resource Management (Excel Books)
- 4.P SubbaRao International Human Resource Management (Himalaya Publishing)
- 5.K Ashwathappa&Sadhna Dash International Human Resource Management (McGraw Hill Education)

Course Outcome:

- 1. To familiarize the students with HR management in Global perspective.
 - 2. To make the students understand the complexity of workforce diversity in international context. 3. To make the students aware of the international labor relations.
 - 4. To help develop an understanding of expatriate's recruitment & training programs.



MBT 404 IB 2 GLOBAL FINANCIAL MARKETS AND INSTRUMENTS

Unit 1

Global Financial Markets

International Financial Market, European Financial Market Functions, Structure, Participants, Depository Receipts Market, Commercial papers-Market.

Unit 2

Euro Currency Market

Creation of Euro Dollar, Global Currency Markets (with Size and Structure); Asian Markets-Transactions, Regulatory Systems and Measure Instruments.

Unit 3

International Money Markets

GDR's, ADR's, Euro Bonds, Euro Loans, Euro Issues, Commercial papers, Repos, Derivatives, Floating rate instruments, Euro deposits, Loan Syndication, Money Market Institution(IMF, IBRB, Development Banks).

Unit 4

Global Capital markets

Equity, Euro Equity Markets, debt Market, Emerging Market Assets, world capital market and Financial Sector Reforms in India.

Unit 5

Foreign Portfolio Investment

As an alternative Sures, Foreign currency Flows and Asset prices; Techniques of Portfolio Investment, Landing Capital Flows Recipients, and Portfolio of capital Flows Financial Innovations Stock market Bubbles, Financial Crashes and Scams in international capital Markets.

Suggested Readings

- 1. Shaprio, A.C: Multinational Financial Management, Prentice Hall of India, New Delhi
- 2. Buckley, Adrian: Multinational Finance, Prentice Hall of India, New Delhi.
- 3. Maurice, Levi: International Finance, McGraw Hill, Int., Ed., New York.
- 4. Bhalla V.K: Investment- Security Analysis- S.Chand (New Delhi) Management and PortfolioManagement.
- 5. Henning C.N., Piggot, W. and Scott, W.H: International Financial Management, McGraw Hill, Int. Ed., New York.
- 6. P.G: Global Financial System, TMH, Delhi.
- 7. Apte P.G: Global Financial System; TMH, Delhi

Course Outcomes

1. To list and distinguish the different financial instruments available to an investor

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards



- 2. To compare global financial markets
- 3. To explain the features of equity, debt, and derivative instruments Define traditional and alternative asset classes
- 4. To discuss different trading venues and mechanics of securities trading
- 5. To discuss the current trends affecting today's financial markets



MBT 404 IB 3 FOREIGN EXCHANGE MANAGEMENT AND CURRENCY **DERIVATIVES**

Unit 1

The Foreign Exchange Market

Organisation- Spot Vs Forward Markets- Bid and Ask Rates- Interbank Quotations- International MarketQuotations- Cross Rates- Merchant Rates- FEDAI Regulations – Roles of RBI.

Unit 2 Exchange Rates

Exchange Rate System- Gold Standard- Bretton Woods- Fixed Vs Floating Exchange Rate systems-Determinants of Exchange Rates- Exchange Controls.

Unit 3

Foreign Exchange Transactions

Purchase and sales transactions – Spot vs Forward transactions- Forward Margines- Interbank Deals – Cover deals – trading- swap deals- Arbitrage operations – Factors Determining Forward margins.

Unit 4 Exchange Rates

Principal types of Ready Merchant Rates- ready rates based on cross rates, Forward exchange contracts

- Execution of Forward contracts - Cancellation and Extensions - Dealing position- Exchange Positon

– Cash position.

Unit 5

Currency Derivatives as Hedging Mechanism

Currency Forwards- Currency Futures - Currency Option - Exchange traded transactions - Financial Swaps - Forward Rate agreements - Interest Rate Options.

Suggested Readings

- 1. Alan C Shapiro: Multinational Financial Management, Prentice Hall, New Delhi.
- 2. Francis Cherunilam: International Economics, Tata McGraw Hill Pub Ltd, New Delhi.
- 3. Ian H Giddy: Global Financial Markets, AITBS Publishers and Distributers, New Delhi.
- 4. C Jeevanandam, Foreign Exchange: Practice, Concepts, Sultan Chand & Sons, New Delhi.
- 5. Vijayabhaskar P and Mahapatra B., Derivatives Simplified, Response Books, Sage Publications, New Delhi
- 6. Apte P.G Global Financial System, TMH.

Course Outcomes

- 1. To understand how the foreign Exchange Market operates
- 2. To understand the principles of Currency valuation
- 3. To explain techniques that can be used to hedge foreign exchange risk

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards



- 4. To understand the role of conventions in exchange rates quotation and trading in foreign exchange markets
- 5. To understand the principles and procedures relating to Forex markets and different types of currency derivatives and its operations.



INTERNATIONAL BUSINESS (MINOR) SUBJECT

MBT 404 IB 4 EXIM FINANCING AND DOCUMENTATION

Unit1Introduction

Export and Import documentation; Foreign exchange regulations ;including FEMA,IS/ISO9000 and new ISO 14000 accepted quality certificates; Quality Control and pre-shipment inspection; Export trade control; Marine insurance; Commercial inspection and practices.

Unit2

Export Procedures

General excise clearances: Role of Clearing and following agents; shipment of export cargo. Export credit, Export credit guarantee and policies; Forward exchange cover; Finance for export on deferred payment terms; Duty drawbacks.

Unit3

Import Procedures

Import Licensing policy; Actual user Licensing; Replenishment Licensing; Import-export passbook; Capital goods Licensing; Export houses and trading houses, Import of unrestricted and restricted items, Customer guarantee, Green channel for import cargo clearance.

Unit4

Export Incentives

Overview of export Incentives- ECGC, Duty drawbacks, duty exemption schemes, tax incentives; Procedures and documentation for expert incentives.

Trading Houses, Export and trading houses schemes: Criteria, Procedures and Documentation; Policy and Procedures for EOU/FTZ/EPZ/SEZ units, Exim Bank.

Unit5

Export and Import Financing

Nature, General Guidelines, Classification Pre-shipment Finance with classification, Packing credit limits with documents ECGC Formalities, Scrutiny of Packing credit application amount and disbursement. Repayments and sharing of Packing credits, Substitution of export contracts, Preshipment in Foreign currency, Factoring Services, Post-shipment Finance.

Suggested Readings

- 1. Cherian and Parab: Export Marketing, Himalaya Publishing House, New Delhi.
- 2. Government of India: Handbook of Procedures, Import and Export Promotion, New Delhi.
- 3. Rathod, Rathor and Jani: International Marketing, Himalaya Publishing House, New
- 4. Export-ImportManual, Nabhi Publication, New Delhi.
- 5. Government of India: Export Policy, Procedures, etc (VolumesI,II and III) New

Syllabus of MBA in VMSB Uttarakhand Technical University, Dehradun for admissions in (2023-24) and onwards



Delhi.

6. Khurana P.K-Export Management, Galgotia Publication.

Course Outcomes

- 1 Develop various documents for import and export and apply various regulations and standards for smooth functioning of trade.
- 2 Develop& apply clearances process by using various policies and methods that are used for export from various countries
- 3 Develop the import licensing policy and evaluate various steps like export houses and trading houses, import of restricted and unrestricted items.
- 4 Analyse various export incentives, policy procedures for smooth functioning of various units like EOU/FTZ/SEZ
- 5 Apply & evaluate various guidelines and formalities required for export and import financing and how to fulfill various formalities like factoring science and substitution of like export set by government

AGRI BUSINESS MANAGEMENT (MAJOR) SUBJECTS

MBT 404 AB1 AGRI-SUPPLY CHAIN MANAGEMENT

Unit 1

Supply Chain: Changing Business Environment; SCM: Present Need; Conceptual Model of Supply Chain Management; Evolution of SCM; SCM Approach; Traditional Agri. Supply ChainManagement Approach; Modern Supply Chain Management Approach; Elements in SCM.

Unit2

Demand Management in Supply Chain: Types of Demand, Demand Planning and Forecasting; Operations Management in Supply Chain, Basic Principles of Manufacturing Management. Procurement Management in Agri. Supply chain: Purchasing Cycle, Types of Purchases, Contract/ Corporate Farming, Classification of Purchases Goods or Services, Traditional Inventory Management, Material Requirement Planning, Just in Time(JIT), Vendor Managed Inventory(VMI).

Unit3

Logistics Management: History and Evolution of Logistics; Elements of Logistics; Management; Distribution Management, Distribution Strategies; Pool Distribution; Transportation Management; Fleet Management; Service Innovation; Warehousing; Packaging for Logistics, Third-Party Logistics (TPL/3PL); GPS Technology.

Unit4

Concept of Information Technology: IT Application in SCM; Advanced Planning and Scheduling; SCM in Electronic Business; Role of Knowledge in SCM; Performance Measurement and Controls in Agri. Supply Chain Management-Benchmarking: introduction, concept and forms of Benchmarking.

Unit 5

Issues in marketing and customer service with special reference to agri business: changing environment the importance of CRM, Gap analysis for customer service management, efficient customer response planning for uncertainty, product costing for uncertainty.

Suggested Readings:

- 1. Acharya, S.S., and Agarwal, N.L., 2011, Agricultural marketing in India. Oxford and IBH.
- 2. Altekar, R. V., 2006, Supply Chain Management: Concepts and Cases.PHI.
- 3. Chopra, S., Meindl, P. and Kalra, D.V., 2016, Supply chain management: Strategy, Planning, and Operation, Pearson Education India.
- 4. Monczka, R., Trent, R. And Handfield, R., 2002, Purchasing and Supply Chain Management. Thomson Asia.
- 5. Van Weele, A.J., 2000, Purchasing and Supply Chain Management Analysis, Planning and Practice, Vikas Publ. House.



| S.No | Course Outcomes (CO's) |
|------|---|
| 1 | To illustrate characteristics of Agricultural Supply Chain |
| 2 | To analyse the Demand Management in Supply Chain |
| 3 | To summarize the concept of Agri Logistics Management |
| 4 | To predict the Concept of Information Technology |
| 5 | To forecast the issues in marketing and customer service (CRM) with reference to agri |



MBT 404 AB 2 FOODTECHNOLOGYANDPROCESSINGMANAGEMENT

Unit 1

Present status of food industry in India; organizational structure of agro-industry; major dimensions of agro based industries; unit operations of food industry; deteriorative factors and their control, Laws and regulation related to food industry

Unit 2

Principles of food preservation and 'processing ;preservation through temperature reduction, water removal, radiation, heat processing, fermentation and use of preservatives, technology of extrusion, solvent extraction, refining and hydrogenation, food additive and toxicology.

Unit 3

Management of functional areas of food processing units-capacity planning, sourcing of raw material, Analysis of costs in food organization, Storage, Packaging, Transportation and Distribution of food products. Risk management, quality management in food industry- quality standards and ISO

Unit 4

HACCP- - Prerequisites; GMP/GHP, Cleaning and Sanitation, Pest Control, Recall Procedures. Principles and steps of HACCP Plan, Hazard Identification, Risk assessment Risk communication with communication agencies and Hazard analysis, CCP Decision Tree, HACCP Plan.

Unit 5

Case studies on project formulation in various types of food industries —milk and dairy products, cereal milling, oil-seed and pulse milling, sugarcane milling, honey production, baking, confectionery, oil and fat processing, fruits and vegetable storage and handling, processing of fruits and vegetables, egg, poultry, fishand meath and ling and processing, etc.

Suggested Readings:

- 1. Acharya,S.S.andAgarwal,N.L.,2011,Agricultural Marketing in India,Oxford and IBH.
- 2. Clute, M., 2017, Food industry Quality Control Systems, Crc. Press, London.
- 3. Singh,D. And Singh,D.,2015, Food Processing and Preservation. Shree Publishers and Distributors, New Delhi.



| S.No | Course Outcomes (CO's) |
|------|--|
| 1 | To understand different food processing techniques and their management. |
| 2 | To analyse the Principles of food preservation and processing |
| 3 | To summarize the concept of functional areas of food processing units |
| 4 | To understand new concept ie., HACCP which is implemented by food industry to maintain the quality of product. |
| 5 | To predict the Concept of project formulation in various types of food industries |



MBT 404 AB 3 INTERNATIONAL AGRIBUSINESS TRADE

Unit1

International trade—basic concepts, Importance of foreign trade for developing economy; absolute and comparative advantage, foreign trade of India. WTO and its implications for Indian economy in general and agriculture sector in particular.

Unit2

TRIPS,TRIMS quotas, anti-dumping duties, quantitative and qualitative restrictions, tariff and non-tariff measures, trade liberalization, subsidies, green and redboxes, issues for negotiations in future in WTO; Countervailing Duty Measures and carbon trade, SPS Agreement. Regional economic groupings

Unit3

Composition of India's foreign trade policy; India's balance of payments; interregional Vs international trade; tariffs and trade control; exchange rate; the foreign trade multiplier. Export promotion institutions with special emphasis on EPCs and commodity boards, MPEDA, APEDA and service institutes. Role of ECGC in insurance

Unit4

Foreign demand, supply side analysis, opportunity cost, trade and factor prices, implications for developing countries, export procedures & documentations. International marketing-market entry methods, international product planning, pricing, promotion, distribution, problems of exporters, legal dimensions of international marketing.

Unit5

Institutional infrastructure for export promotion in India, export assistance, State trading in imports and exports, working of the State trading organisations in India

Suggested Readings:

- 1. Anant, K., Sundaram and Stewart, B.J., 2010, The International Business: Text and cases, PHI.
- 2.BhallaV.K.,1993,International Economy-Liberalisation Process.Anmol, New Delhi
- 3. Cherunilam, F., 2010, International Business-Text and Cases. PHI.
- 4. Economic Survey of India(various issues), Ministry of Finance, GOI.
- 5. Eiteman, D. K. and Stopnehill, A.L., 1986, Multinational Business

Finance. Addition Wesley, New York.

- 6. Paul, J., 2013, International Business. PHI.
- 7. SubbaRao, P., 2008, International Business Text and Cases. HPH.



| S.No | Course Outcomes (CO's) |
|------|--|
| 1 | To understand International agricultural trade market structure |
| 2 | To analyse the quantitative and qualitative restrictions |
| 3 | To summarize the concept of India's foreign trade policy |
| 4 | To predict the Concept of Foreign demand, supply side analysis |
| 5 | To summarise about export promotion, export assistance role of state trading |

AGRI BUSINESS MANAGEMENT (MINOR) SUBJECT

MBT 404 AB 4 AGRICULTURAL MARKETING MANAGEMENT

Unit 1

Meaning and scope, agricultural marketing and economic development; Agricultural market structure—meaning, components and dynamics of market structure; marketing strategy—meaning & significance, formulation of marketing strategy; agribusiness marketing environment, design of marketing mix, market segmentation and targeting, determinants of consumer's behaviour.

Unit 2

Product management- product management process and decisions, new product development – significance and classification of new product, stages and estimation of demand of new product; product life cycle.

Unit 3

Pricing policies and practice for agribusiness- determinants of price, objectives of pricing policies and pricing methods. Promotional management- advertising planning and execution; sales promotion; grading and standardization.

Unit 4

Distribution management- storage and warehousing and transportation management for agricultural products; marketing agencies/intermediaries—roles and functions; distribution channels involved in agribusiness, APMC Act,.

Unit 5

Retail marketing in the modern age; Importance of e-commerce, business environment for retailing, the digital age and the new global culture for retailing with special reference to food retailing in local, national and global context.

Suggested Readings

- Acharya, S.S. and Agarwal, N.L., 2011, Agricultural Marketing in India. 4th Ed. Oxford and IBH.
- ➤ Kohls,R.L. and Uhj,J.N.,2005,Marketing of Agricultural Products.9thEd. Prentice Hall.
- ➤ Kotler, P., 2002, Marketing Management-Analysis, Planning, Implementation and Control. Pearson Edu.
- ➤ Krishnamacharyulu, C. and Ramakrishan, L., 2002, Rural Marketing. Pearson Edu.
- Ramaswamy, V.S. and Nanakumari, S., 2002, Marketing Management. 2nd Ed. Mac Millan India.

Course Outcome:



BUSINESS ANALYTICS (MAJOR) SUBJECTS

MBT 404 BA 1 BUSINESS OPTIMIZATION AND BIG DATA ANALYSIS

Course Objective:

- To provide foundational knowledge associated with the domain of business optimization and analytics
- To familiarise the students with all concepts of optimisation techniques
- To understand the simulation for analytics
- To describe the big data analytics

Unit 1

Modeling Overview: processes, Big Data, Models. Productivity and efficiency. Classification of models. Sensitivity analysis. The seven- step modelling process. Spreadsheet modeling. Excel's pivot function.

Unit 2

Linear Programming Linear Programming, Introduction to Linear Programming (LP). Graphical representation. Basic assumptions. The simplex algorithm. Infeasibility and Unboundedness. Production problem example. Production scheduling. Bond portfolio optimization. Extracting additional meaning from LP models: shadow prices, sensitivity analysis

Unit 3

Visualization, Organization/sources of data, Importance of data quality. Dealing with missing or incomplete data, Data Classification.

Unit 4

Decision modeling, Optimization Use of Excel to solve business problems: e.g. marketing mix, capital budgeting, portfolio optimization, Goal programming; pareto optimality and trade-off curves; the Analytic Hierarchy Process (AHP)

Unit 5

Process Mining, Concept and content of workflow logs; discovering the underlying process; discovering exceptions. Process Mining (Course Notes). ProM - process mining toolkit

Text Books:

- Winston, Wayne L. and S. Christian Albright, "Practical Management Science." Pacific Grove, CA: Duxbury, 2001 (3rd edition). (W&A)
- VasantDhar and Roger Stein (1997), Seven methods for transforming corporate data into business intelligence. Upper Saddle River: Prentice Hall.



- Kelton, W. David, et al. (2006). Simulation with Arena, McGraw-Hill Professional (5th edition).
- Weske, Mathias (2007), Business Process management: Concepts Languages and Architectures. Berlin: Springer-Verlag.

| S.no | Course Outcomes (CO's) |
|------|--|
| 1 | To recognize the fundamental concepts of Optimization and Business |
| | applications of Optimization. |
| 2 | To understand the operations research techniques for analytics. |
| 3 | To understand the role of visualization and data classification. |
| 4 | To identify the different dimensions data for big data analytics. |
| 5 | To explain the application software of analytics. |



MBT 404 BA 2 FINANCIAL ANALYTICS

UNIT 1:

Introduction to Financial planning

Financial planning – meaning, Scope, Objectives and Characteristics – Factors influencing financial planning – Essentials, Significance and limitations of financial planning – Estimation of capital requirement – Over capitalization and under capitalization – Time value of money.

UNIT 2:

Financial planning system and model

Steps in financial planning - Principles of financial plan - Risk return trade off - Financial planning system in a firm - Strategic decision making and planning - Strategic financial planning - Constructing a financial model.

UNIT 3:

Data mining

Data mining – Evolution – Steps in data mining – Data warehouse – Techniques in data mining – Applications targeted in data mining – Major issues –Data pre-processing – Data warehousing – Difference between traditional database and data warehouse –Multi dimensional data model –Market based analysis – Classification and prediction of data

UNIT 4:

Decision tree and Cluster analysis

Decision tree - Cluster analysis - Time series data mining - Graph mining - Social network analysis - Multi relational data mining - Spatial data mining - Multimedia data mining - Audio and video and text data mining - Web usage mining - Applications of data mining - Trends in data mining.

UNIT 5:

Data Modelling – meaning and concept – Data modelling objects – data modelling development cycle – Steps to create a data model – Data modeller role – model versioning – modelling standards – Data modelling reports – data modelling relationships – types.

REFERENCES:

- 1. General Principles of Financial Planning Textbook, John Keir
- 2. W.H.Inmon, Building the Data Warehouse, fourth edition Wiley India pvt.Ltd. 2005.
- 3. Ralph Kimball and Richard Merz, The data warehouse toolkit, John Wiley, 2005.
- 4. Michel Berry and Gordon Linoff, Mastering Data mining, John Wiley and Sons Inc 2nd Edition, 2011
- 5. Michel Berry and Gordon Linoff, Data mining techniques for Marketing, Sales and Customer support, John Wiley, 2011
- 6. G. K. Gupta, Introduction to Data mining with Case Studies, Prentice hall of India, 2011

Course Outcomes:

CO1 - Provide solutions assessments and validation to a broad range of financial securities concepts including t-bills, bonds, debentures, common and preferred shares, equities and financial derivatives. CO2 - Document, manage, understand and communicate all aspects of the personal financial process



and its components and steps.

- CO3 Use a financial calculator in determining the time value of money.
- CO4 Understand fundamental and technical analysis and discuss investment theory and financial economics and strategic decision making through planning.
- CO5 Understand data mining principles and techniques: Introduce DM as a cutting edge business
- CO6 Intelligence method and acquaint the students with the DM techniques for building competitive advantage through proactive analysis, predictive modelling, and identifying new trends and behaviours.
- C07 Learning how to gather and analyze large sets of data to gain useful business understanding.
- CO8 Learning how to produce a quantitative analysis report/memo with the necessary information to make decisions.
- CO9 Describing and demonstrating basic data mining algorithms, methods, and tools CO10 Identifying business applications of data mining



MBT 404 BA 3

ADVANCED RESEARCH METHODS AND PREDICTIVE ANALYSIS

Unit 1

Conceptual foundations of research

Meaning of research and scope of research methodology, Identification of problem area, Formulation of research questions, Typology of Research Designs. Overview of quantitative research, Logic of Inquiry, Construction of theories, Conceptual framework in quantitative research. Introduction to Academic Writing, Structure of Academic Writing, Reading for Research, Academic Styles, Plagiarism, Publication, Online Resources. Specific Research Methodology

Unit 2

Sampling Design and Tools

Sampling: Process and Types sampling; probability and non probability sampling, Validity: Internal and external validity, Threats to Validity: Threats to internal validity and external validity, balancing internal and external validity. Reliability: Factors influencing reliability.

Unit 3

Multivariate Designs and Analysis

Introduction to Multivariate methods and analysis, Discriminant Analysis Multiple, logistic and hierarchical regression Factor analysis, structural equation modeling (SEM), Meta analysis, Mediational Analysis, Canonical Analysis. Advantages of multivariate strategies

UNIT 4

Predictive analysis Simple linear regression

Coefficient of determination, Significance tests, Residual analysis, Confidence and Prediction intervals Multiple linear regression: Coefficient of multiple coefficient of determination, Interpretation of regression coefficients, Categorical variables, heteroscedasticity, Multi-collinearity, outliers, Autoregression and Transformation of variables

UNIT 5

Logistic and Multinomial Regression

Logistic function, Estimation of probability using logistic regression, Deviance, Wald Test, Hosmer Lemshow Test Forecasting: Moving average, Exponential smoothing, Trend, Cyclical and seasonality components, ARIMA (autoregressive integrated moving average). Application of predictive analytics in retail, direct marketing, health care, financial services, insurance, supply chain, etc.



Text Books:

- 1. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research methods, 11th Edition, Tata McGraw Hill, New Delhi, 2012.
- 2. Alan Bryman and Emma Bell, Business Research methods, 3rd Edition, Oxford University Press, New Delhi, 2011.

References:

- 1. Uma Sekaran and Roger Bougie, Research methods for Business, 5th Edition, Wiley India, New Delhi, 2012.
- 2. William G Zikmund, Barry J Babin, Jon C.Carr, Atanu Adhikari, Mitch Griffin, Business Research methods, A South Asian Perspective, 8th Edition, Cengage Learning, New Delhi, 2012.

| S.no | Course Outcomes (CO's) |
|------|---|
| 1 | Understand appropriate and relevant fundamental and applied evidence based knowledge and undertake lifelong learning to improve personal and professional practice. |
| 2 | Demonstrate a capacity to employ a variety of approaches and procedures to research to permit judgements and decisions to be supported by appropriate evidence that places practice within a global and local context |
| 3 | Maintains tolerance and respect for individuals and groups from diverse backgrounds, holding diverse values, adhering to professional expectations and demonstrating ethical behaviour |
| 4 | Describes the important methodological and design issues underlying applied human research |
| 5 | Analyze, and interpret the data using specific statistical tools |



BUSINESS ANALYTICS (MINOR) SUBJECT

MBT 404 BA 4 MARKETING ANALYTICS

Unit1

Introduction To Marketing Analytics

Evolution and Scope of Analytics. Data for Marketing Analytics. Decision Models—Descriptive, Predictive and Prescriptive Models. Problem Solving and Decision making process.

Unit 2

Data Management

Exploring Data; Frequencies; Descriptive Statistics Cross tabulations; Independent Samples t-Test; One-Way ANOVA Simple Regression and Correlation, Multiple Regression to Forecast sales, Modelling Trend and Seasonality, Ratio to Moving Average Method

Unit 3

Customer Segmentation And Valuation

Analytics for Segmentation–Introduction to Cluster analysis multivariate method. Estimation, Model performance and validation of assumptions for Cluster analysis. Customer Value Analysis, Customer Lifetime Value-Conjoint Analysis

Unit 4

Metrics And Measurements Analytics

Product and Price analytics- Conjoint Analysis-Pricing – Estimating Demand Curves and Optimize Price Retailing Analytics- Allocating Retail Space and Sales Resources-Market Basket Analysis. Advertising and Promotion Analytics-Promotion Analytics-Measuring the effectiveness of Advertising

Unit 5

Web Analytics

Search Engine Optimisation-Tracking the success of SEO. Webmetrics-Google Adwords, Advertising & Analytics.

- 1. Evans, J.R. (2012). Business analytics methods, models and decisions. New Jersey: Pearson Education
- 2. Sorger, Stephan.—Marketing Analytics:Strategic Models and Metrics. Admiral Press/CreateSpace, 2013
- 3. Cases and data sets for hands on learning. Pearson Education.
- 4. Grigsby, M. (2015). Marketing Analytics: A Practical Guide to Real Marketing



Science.Kogan Page Publishers.

5. Sathi, A. (2014). Engaging customers using bigdata: how Marketing analytics are transforming Business. Palgrave Macmillan.

6. Rao, P. H. (2011). Predictive modelling for strategic marketing. New Delhi. Prentice Hall India

COURSE OUTCOMES:

1. This course will provide with an introduction to marketing analytics.



- 2. To show the benefits of using a systematic and analytical approach to marketing decision-making.
- 3. To help students develop analytic competencies pertaining solving of marketing problems
- 4. To study various tools for generating marketing insights from empirical data in such areas as segmentation, targeting and positioning, satisfaction management,
- Customer lifetime analysis, customer choice, and product and price decisions using conjoint analysis
- 5. To understand the recent practices scientific and empirical approach by case studies



RURAL DEVELOPMENT (MAJOR) SUBJECTS

MBT404 RD1

NON-CREDIT COOPERATIVES

Unit - 1 Introduction of Non Credit Cooperatives

Classification of Cooperative Societies - Agricultural Marketing Cooperative Societies - Non-Agricultural Cooperative Societies - Agricultural Credit - Agricultural Non-Credit.

Unit - 2 Agricultural Non-Credit Societies

- a) Cooperative Marketing Role of Cooperative Marketing Institutions in Agricultural Production Essential Prerequisites for organisation of successful Marketing Institutions Structure of Cooperative Marketing Societies.
- b) Primary Marketing Societies, Product Marketing Societies like Jute, Mango, Coconut, Grape etc., Regional Level Marketing societies- Apex level marketing Societies Membership, Constitution, Organization, Function and Working of Cooperative Marketing Societies.

Unit - 3 Cooperative Processing/ Cooperative Farming

Types of Processing Cooperatives and their Importance in Agricultural Production - Sugar Factories - Spinning Mills. Need for Cooperative Farming- Features- Types of Cooperative Farming- problems and prospects.

Unit - 4 Non-agricultural Non-credit Societies

- a) Constitution and Management Essential Conditions of Success Importance and Advantages
- b) Structure of Consumer Cooperatives Primary District State and National Federations Constitution and Working-Procurement Policy with Marketing Societies-Margin Fixation-Flexibility in Pricing-Disposal of old goods.
- c) Self Service Cooperative Supermarket
- d) Public Distribution System-Cost consciousness

Unit - 5 Industrial Cooperatives

Industrial Cooperative Societies -Tea Factories – Handloom / Silk Weavers - Cottage and Small Scale Industries - Constitution, Function and Working. Pattern of Financial Assistance – Industrial Cooperative Banks Status.

MBT404 RD2

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ALLIED LAWS

Unit - 1 Constitution of India

Provisions relating to Various Writs –its application to cooperative Societies-Federal Constitution-Salient Features of Indian Constitution-Writ jurisdiction of Supreme Court and High Courts.

Unit -2 Indian Contract Act, 1872-

Essential elements of a Valid Contract-void and voidable contract- enforcement and breach of contract-appropriation of payments- contract of agency- bailment and pledge – contract of guarantee and indemnity

Unit - 3 Income Tax Act 1961

Salient features of income tax act, 1961 & sales tax act 1990, value added tax 2005, limitations of VAT – exemption to cooperatives – filing of returns. Deductions from total income for cooperatives.

Unit - 4 Consumer protection Act, 1986 -

Definition of complainant-service of summons-Consumer Protection Councils-Consumer Disputes Redressal Agencies and procedure for redressal of consumer grievances at District, State and national Consumer Commission and enforcement of orders /awards.

Unit - 5 Agricultural produce market Act

Salient features of Agricultural produce market Act-Regulation of Markets-Reforms in Agricultural Markets. Food and Adulteration Act, National Food Security Bill, Gender Related Laws, RTI Act and Cyber Laws.



MBT404 RD3 ACCOUNTS & AUDIT

Unit - 1 ACCOUNTING PRINCIPLES AND CONCEPTS

Meaning and Scope of Accounting – Definition of Accounting – Steps of Accounting – Functions of Accounting – Objectives of Accounting – Book Keeping – Limitations of Accounting; Branches of Accounting; Accounting Principles – Accounting Concepts – Entity Concept – Dual Aspect Concept – Accounting Period Concept – Going Concern Concept – Cost Concept – Money Measurement Concept – Matching Concept – Realization Concept – Accrual Concept – Rupee Value Concept; Accounting Conventions – Disclosure – Conservatism – Consistency – of Materiality.

Unit -2 DOUBLE ENTRY SYSTEM OF ACCOUNTING

Meaning – System of Accounting – Cash System – Mercantile System – Mixed System – Single Entry System – Cooperative System – Double Entry System – Advantages – Factors Common to Every Business; Types of Accounts – Personal Accounts – Real Accounts – Nominal Accounts; Accounting Rules – Debit Aspect – Credit Aspect – Common Accounting System in Cooperative Societies.

Unit - 3 ACCOUNTING BOOKS AND RECORDS

Introduction – Meaning of Books and Records – Journal – Meaning – Specimen ruling of Journal – Preparation of Journal – Types of Journal – General Journal – Special Journals – Sales Book – Purchase Book – Sales Returns Book – Purchase Returns Book – Preparation Subsidiary Journals – Bills Receivable Book – Bills Payable Book – Cash Book – Types of Cash Book – Preparation of Cash Book – Petty Cash Book – Preparation of Petty Cash Book – Purpose of Subsidiary Books – Ledger – Meaning – Posting of Journal to Ledger – Balancing of Ledger – Difference between Journal and Ledger – Preparation of Ledger – Trial Balance – Meaning – Objectives – Errors not disclosed by Trail Balance – Classification of Errors – Errors Disclosed by Omission – Errors of Commission – Errors of Principles Compensating Errors – Errors Disclosed by Trail Balance – Locating Errors – Suspense Account – Method of Preparation of Trial Balance – Preparation of Receipts and Disbursement Statement.

Unit - 4 Accounting for Cooperatives

Special Features of Maintenance of Accounts of different Category of Cooperatives – Credit – Non-Credit at primaries, Central and Apex Level and Special Type of Cooperatives – Books and Registers required to be maintained – Inspection by various Agencies/Financial Institutions – RBI, NABARD, etc.



Unit - 5 Audit Management in Cooperatives

1. Audit- Auditing - concept - definition - objectives of audit- different types of audit-difference between cooperative audit and other audits. Internal Control & Check: Nature and objectives of internal control- internal check systems and internal audit- internal control vis-à-vis statutory audit. Audit Programme- important components- preparation and implementation - Voucher and Vouching of accounts. Routine checking: Subsidiary book- ledgers - trial balance- receipt and disbursement statement- income and expenditure account- detection of frauds and preventive measures. Valuation: closing stock- stock on consignment- assets and liabilities. Verification: contingent liabilities - estimation of bad and doubtful debts - creation of reserves and provisions - divisible profits. Examination of financial statement- manufacturing, trading and profit and loss account and balance sheet - Final adjustment items- need for adjustment - outstanding assets and liabilities: Analysis of Financial Statements



RURAL DEVELOPMENT (MINOR) SUBJECTS

MBT404 RD4

Project Management in Cooperatives

Unit - 1 Project Management

Concept- characteristics-objectives-types-need of Project Management-Limitations-Project areas in Cooperatives.

Unit - 2 Project Feasibility-

Project Life Cycle-Project Appraisal(Technical-Managerial-Market-Financial (PBP, ARR, NPU etc)-Economic-Social Cost Benefit Analysis) Project Implementation-Monitoring-Control and Evaluation Techniques (PERT, CPM)

Unit - 3 Project Financing Institutions-

Schemes-Policies, NABARD, NCDC, KVIC, DIC (District Industries Commission) etc.

Unit - 4 Project Analysis

Data Description-Selection-Classification- Tabulation and Presentation Measures of Variation: Range-Mean-Median-Mode-Standard Deviation, Tie Series, Forecasting Methods, Index Numbers

Unit - 5 Project Report Writing

Preparation-Presentation-Model Project for small Scale Units (SMEs)

Course Objectives: Students will engage in a range of learning activities, with an emphasis on problem based learning focusing on the application of data analysis techniques for addressing the research questions at the heart of their own research projects.



SUPPLY CHAIN MANAGEMENT (MAJOR) SUBJECT

MBT 404 SC 1 GLOBAL SUPPLY CHAIN & OUT SOURCE MANUFACTURING

UNIT1.

INTRODUCTION

International Logistics and Supply chain management: meaning and objectives, importance in global economy, Characteristics of global supply chains,: Supply chain relationship to business performance, Key tasks of logistics and supply chain managers, Role of Government in controlling international trade and its impact on Logistics and supply chain

SUPPLY CHAIN STRATEGY: Supply chain as a competitive advantage, Global Supply chain strategy, Structuring supply chain capabilities, Business matching supply chain design with business strategy

UNIT 2. TRANSPORTATION:

Strategic importance of transport in global logistics, Logistical objectives of transport, International Ocean, Air Transportation, and Land Transportation: types, characteristics and salient features, Intermodal transportation in international operations, Factors influencing mode and carrier selection decision.

INVENTORY FLOW AND MODELING: Approaches to Inventory Management in Global Supply Chain Management; Distribution Resource Planning; Symptoms 0f poor inventory management, Modeling in Supply chain: inventory models, safety stock determination for service level, and lead time; forecasting models, routing problem

UNIT 3

OUTSOURCING AND LOGISTICS SERVICE PROVIDERS

Intermediaries and Alliances in Global Logistics, Meaning of 3 PL and 4 PL service providers, Role in Global logistics, types of services, Considerations for hiring 3PL and 4 PL service providers Concept and need of outsourcing, Determinants for outsourcing decisions, Role of outsourcing in global supply chain management **CUSTOMER SERVICE:** The marketing and logistics interface, Customer service and customer retention, Service driven logistics systems, customer service priorities and standards, Customer service strategy

Unit 4

PLANNING GLOBAL SUPPLY CHAIN

Planning the global supply chain, Network design for global supply chain management, Risk management in the global context, Measuring logistics cost and performance. Benchmarking the supply chain, Performance measurement and evaluation in global supply chains

GLOBAL TRADE ENVIRONMENT: Global trade environment: various trade blocks/FTZ and their impact on supply chain management, Customs and Regulations, Trade Documentation, International Contracts, Terms of Trade and Term of Payment, International Currency, INCO terms, Logistical packaging, Containerization.

Unit 5

PERFORMANCE MEASUREMENT AND TRENDS

Dimensions of Performance Metrics, Approaches/tools for Performance Measurement, Measuring logistics cost and performance. Benchmarking the supply chain, Performance measurement and evaluation in global supply chains, Impediments to improve Performance, Trends, in International supply chain management

Books Recommended:-

- 1. Douglas Long International Logistics: Global Supply Chain Management Springer- Verlag New York, LLC;2004
- 2. Philippe-Pierre Dornier, Panos Kouvelis, Michel Fender Global Operations and Logistics: Text and Cases Wiley, John &Sons, Incorporated 1998



- 3. Alan Branch Global Supply Chain Management in International Logistics Routledge2007
- 4. Kent N. Gourdin Global Logistics Management: A Competitive Advantage for the New Millennium Blackwell Publishing 2006
- 5. Sridhar R. Tayur (Editor), Michael J. Magazine (Editor), RAM Ganeshan (Editor) Quantitative Models for Supply Chain Management Kluwer Academic Publishers

Course Outcomes

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

- State the factors influencing global market forces.
- 2 Apply understanding of the global implications of supply chain management and List the issues in international supply chain management.
- Clarify the regional and cultural differences in logistics.
- 4 Understand meaning of 3 PL and 4 PL service providers and its role in Global logistics
- 6. Understand the importance of outsourcing in global supply chain management



MBT 404 SC2 GREEN LOGISTICS

Unit 1

Green Logistics and Transportation

Green Logistics and Transportation, Definitions of Green Logistics, Critical drivers of Green Logistics. Green transportation and logistics practices – Environmental impacts of transportation and logistics – Closing the Loop: Reverse Logistics,

Assessing the environmental impacts of freight transport: Introduction, Environmental impacts, Environmental standards, measuring the environmental impact of freight transport.

Unit 2

Green Purchasing and Warehousing

Green Procurement and Purchasing – Definitions of green purchasing – Drivers of green purchasing – Green purchasing strategies – Green purchasing performance measurement –Green Supplier Development and Collaboration.

Introduction to warehousing- its meaning and concept, Scale of the environmental impact, Increasing resource intensity, Framework for assessing the environmental impact of warehouses, Ways of reducing the environmental impact.

Unit 3

Reverse Logistics For The Management of Waste242

Meaning and concept of reverse logistics, Waste management in the context of reverse logistics, The impact of waste treatment legislation, Reuse, refurbishment markets and take-back schemes, Managing waste as part of a sustainable reverse process

Unit 4

E-Business, E-Logistics And The Environment

Meaning and Concept; Business-to-business (B2B), Business-to consumer (B2C), Restructuring of the supply chain, the environmental impact of e-commerce.

Unit 5

Public Policy Perspective

The role of government in promoting green logistics- Introduction, Objectives of public policy on sustainable logistics, Policy measures, Reducing freight transport intensity, Shifting freight to greener transport modes, Improving vehicle utilization, Increasing energy efficiency, cutting emissions relative to energy use, Government sponsored advisory and accreditation programmes.

Recommended Textbook:

4. McKinnon, A. Browne, M. Whiteing, A. (2015). Green Logistics: improving the environmental sustainability of logistics. (3rd edn). London: Kogan Page. (eBook available).



Other Reading:

- 1. Beamon B. (1999). Designing the green supply chain. Logistics Information Management. Vol. 12, No. 4, pp. 332-342
- 2. Dale S. Rogers and Ronald Tibben-Lembk. (2001). An examination of reverse logistics practices. Journal of Business Logistics. Vol.22, No. 2, pp.129-148
- 3. Nouira I., Y. Frein, A. B. Hadj-Alouane. (2013). Optimization of manufacturing systems under environmental considerations for a greenness-dependent demand. International Journal of Production Economics. DOI: 10.1016/j.ijpe.2013.12.024.

Course Outcomes

- 2. Students will be able to explain environmental issues about logistics and supply chain management.
- 3. Students will be able to discuss the reasons and challenges for green logistics activities.
- 4. Students will be evaluate how operations are interlinked with green logistics activities.
- 5. The students will be able to analyze supply chain's effects on the environment.
- **6.** Student will be able to combine their theoretical knowledge with practical knowledge.



MBT 404 SC3

ENTERPRISE RESOURCE PLANNING FOR MANAGERS

Course Outcome:

- To understand the business process of an enterprise
- To grasp the activities of ERP project management cycle
- To understand the emerging trends in ERP developments
- Knowledge of ERP implementation cycle
- Awareness of core and extended modules of ERP

UNIT I

INTRODUCTION

Overview of enterprise systems – Evolution - Risks and benefits - Fundamental technology - Issues to be consider in planning design and implementation of cross functional integrated ERP systems.

UNIT II

ERP SOLUTIONS AND FUNCTIONAL MODULES

Overview of ERP software solutions- Small, medium and large enterprise vendor solutions, BPR, and best business practices - Business process Management, Functional modules.

UNIT III

ERP IMPLEMENTATION

Planning Evaluation and selection of ERP systems - Implementation life cycle - ERP implementation, Methodology and Frame work- Training - Data Migration. People Organization in implementation Consultants, Vendors and Employees.

UNIT IV

POST IMPLEMENTATION

Maintenance of ERP- Organizational and Industrial impact; Success and Failure factors of ERP Implementation.

UNIT V

EMERGING TRENDS ON ERP

Extended ERP systems and ERP add-ons -CRM, SCM, Business analytics- Future trends in ERP systems-web enabled, Wireless technologies, cloud computing.

REFERENCE TEXT:

- 1. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2008.
- 2. Sinha P. Magal and Jeffery Word, Essentials of Business Process and Information System, Wiley India, 2012
- 3. Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill, 2008
- 4. Alexis Leon, Enterprise Resource Planning, third edition, Tata McGraw-Hill, 2014.
- 5. Mahadeo Jaiswal and Ganesh Vanapalli, ERP, Macmillan India, 2013
- 6. Vinod Kumar Grag and N.K. Venkitakrishnan, ERP- Concepts and Practice, second edition Prentice Hall of India, 2009.

Summer, ERP, Pearson Education, 2016



SUPPLY CHAIN MANAGEMENT (MINOR) SUBJECT **MBT 404 SC 4**

LEAN SUPPLY CHAIN MANAGEMENT AND SUPPLIER RELATIONSHIP MANAGEMENT

Unit- 1

Introduction To The Lean Supply Chain

Analyzing the Lean supply chain maturity model, Evolution of the Lean supply chain, Essential problemsolving skills for the Lean supply chain professional, Value-stream mapping for the Lean supply chain

Unit- 2

Understanding And Responding To The Market

Indispensable Lean "Voice of the Customer" tools, Expert tips for Lean demand management planning and target costing, Top Lean tools and techniques for product and process design

Physical And Virtual Lean Supply Chain Design

Vital risk management factors, Lean sourcing: applying Lean thinking and leveraging supplier capabilities, Lean logistics planning: integrating the logistics; 3PL, cross-docking, milk runs and proximity

Unit-3

Lean Suppliers, Channels And Customers

Impact of globalization on the Lean supply chain, Must-know enterprise resource planning (ERP) vocabulary, structure and principles, Leveraging ERP in supply chain planning, Successful sales and operations planning, Proven Lean supply chain tools for the perfect order

ITAnd Communications For The Lean Supply Chain

Crucial Lean IT elements for the Key business-process management (BPM) tools to support Lean supply chain control and execution

Unit –4 Lean Demand Management And Execution

Transforming your organization in to a Lean SCM culture, Fundamentals of TAKT time, flow and changeover, Lean data management, Leveraging "theory of constraints" thinking in the Lean supply chain

Unit -5lean Supply Chain Execution

Assuring the quality of products, services and information in the Lean supply chain, Lean inventory optimization, Lean supply chain accounting and metrics

Continuous Improvement In The Lean Supply Chain

Powerful Kaizen programs for Lean SCM, Dot Company Lean simulation, Human development in Lean SCM: getting the "people" part right



Recommended Books:

- 1. Douglas Long International Logistics: Global Supply Chain Management Springer- Verlag New York, LLC;2004
- 2. Philippe-Pierre Dornier, PanosKouvelis, Michel Fender Global Operations and Logistics: Text and Cases Wiley, John & Sons, Incorporated 1998
- 3. Alan Branch Global Supply Chain Management in International Logistics Routledge 2007
- 4. Kent N. Gourdin Global Logistics Management: A Competitive Advantage for the New Millennium Blackwell Publishing 2006
- 5. Sridhar R. Tayur (Editor), Michael J. Magazine (Editor), RAM Ganeshan (Editor) Quantitative Models for Supply Chain Management Kluwer Academic Publishers

Course Outcomes

- 1. To understand issues & challenges in implementing & developing lean manufacturing techniques from TPS & its contribution for improving organizational performance.
- 2. Apply lean techniques to bring competitive business culture for improving organization performance
- 3. Analyze how lean techniques can be applied to manufacturing & service industry
- 4. Developing lean management strategy for Supply chain management
- 5. Analyzing how lean technique can create value generation for organization.



HEALTHCARE AND HOSPITAL MANAGEMENT (MAJOR)

MBT 405 HCHM 1

HOSPITAL FACILITIES MANAGEMENT

Objectives:

To get familiarised with support service systems & to get acquainted with hazards and its management in hospital environment

UNIT I

Nutrition and Dietary services – Pharmacy services – Medical Records services.

UNIT II

Facilities Engineering – Maintenance of Civil Assets – Electrical supply and Water supply – Medical gas pipeline – Plumbing and Sanitation – Air conditioning system – Hot water and Steam supply – Communication Systems –Biomedical engineering departments in modern hospitals.

UNIT III

Laundry services – House keeping services – CSSD-Energy conservation methods – AMC.

UNIT IV

Ambulance services – Mortuary services – Hospital security services.

UNIT V

Disaster management – Fire hazards – Engineering Hazards – Radiological hazards.-Outsourcing of Support services –Waste disposal and management - few case studies.

- 1. G.D. Kunders, HOSPITAL AND FACILITIES PLANNING AND DESIGN
- 2. Jacob Kline, HAND BOOK OF BIO-MEDICAL ENGINEERING
- 3. Webster J.G and Albert M. Coo, CLINICAL ENGINEERING PRINCIPLES AND PRACTICES
- 4. Antony Kelly, MAINTENANCE PLANNING AND CONTROL



MBT 405 HCHM 2

HOSPITAL INFORMATION SYSTEMS

Objectives:

To understand the role of IT in hospital management to familiarise with the latest developments in technology with relevance to hospitals

Unit I

The Information Explosion: Information is important – Impact on society – Impact on teaching and learning – Impact on Government – Impact on Healthcare – The future of healthcare technology – The future healthcare record – Preparing for the future – Summary. The world of Informatics.

Unit II

The Electronic health record: Functions of the health record — Changing functions of the patients record — Advantages of the paper record — Disadvantages of the paper record — Optically scanned records — The electronic health record — Automating the paper record — Advantages of the EHR — Disadvantages of the EHR — Bedside or point-or-care systems — Human factors and the EHR — Roadblocks and challenges to EHR implementation — The future

Unit III

Securing the Information: Privacy and confidentiality and Law – Who owns the data? – Security – Computer crime – Role of healthcare professionals – Summary. Information Systems cycle: The information systems cycle – Analysis – Design phase – Development – Implementation –

Unit IV

Electronic Communications: A bit of history – Hardware and software for connecting – Methods of accessing information – World Wide Web (WEB) – Communication Technologies

Unit V

Tele health—Historical perspective on tele health—Types of Technology—Clinical initiatives—Administrative initiatives—Advantages and Barriers of telehealth—Future trends—Summary-The future of Informatics: Globalization of Information Technology—Electronic communication—Knowledge management—Genomics—Advances in public health—Speech recognition—Wireless computing—Security—Telehealth—Informatics Education—Barriers to Information Technology implementation

Suggested Readings:

Kathleen M., INFORMATICS FOR HEALTHCARE PROFESSIONAL

James O'Brien, Tate McGraw Hill, MANAGEMENT INFORMATION SYSTEM

Peter Norton, INTRODUCTION TO COMPUTER, Tata McGraw Hill

MBT 405 HCHM 3

INNOVATIONS IN HEALTH CARE

Course Objectives:

The objectives of this are to introduce the participants to a wide range of advances and innovations that are happening in healthcare services. The innovations relate to use of technology, information technology, business and service delivery models.

Course Content

Unit I:

Advances in medical technology – sensors, digital medical treatment and diagnostic devices

Unit II:

Advances in healthcare informatics related areas like big data, genomics, mobile health and cloud-based technologies

Unit III:

Newer service delivery models – remote monitoring and telehealth

Unit IV:

Newer internet-based healthcare business models

Unit V:

Project work – preparation and presentation of new business models/plans in healthcare

- 1. https://www.babylonhealth.com/
- 2. 10 common applications of artificial intelligence in healthcare: accessed at https://novatiosolutions.com/10-common-applications-artificial-intelligencehealthcare/
- 3. Telemedicine: A New Horizon in Public Health in India Indian J Community Med. 2008 Jan; 33(1): 3–8
- 4. How mHealth can revolutionize the Indian healthcare industry: PWC 2010



HEALTHCARE AND HOSPITAL MANAGEMENT (MINOR)

MBT 405 HCHM 4

ANALYTICS FOR HEALTH CARE MANAGEMENT

Course Objectives:

In an environment where complexity is growing, decision makers in healthcare systems need to use data to make pertinent and accurate decisions. Their practices and policies should be supported and strengthened by data. Tools of analytics provide the capability to identify patterns in data and to implement this knowledge in developing strategies and improving performance. The objectives of this course are to enable the participants to develop an understanding of basic principles of data analysis and familiarize them with key tools and techniques that would enable them to take datadriven decisions in a hospital/healthcare delivery setting.

Course Content

Unit I:

Health Care Data: Data as an asset for health care organization; Data, information, knowledge and wisdom hierarchy; Types and sources of healthcare data;

Unit II:

Data governance, methods for effective use of data analytics; Ethics, data ownership and privacy

Unit III:

Working with Data: Common data analytics terms, Steps of data analytics; Enterprise data architecture as seen in health care organizations; Common data types; Selection, aggregation, querying and transformation of data; Descriptive and visual analytics; Common patterns or distributions in data.

Unit IV:

Healthcare analytics tools: Predictive analytics tools, classification, regression; Introduction to text mining, contextual analysis, social media analytics; Text mining, social media analytics; Basics of image Analysis; analysis of multimedia Data, big data Analysis

Unit V:

Decision analysis: Decision tree; Simulation in Decision Analysis; Select prescriptive analytics applications in health care operations management (scheduling, resource allocation, project management, waiting line management etc.)

- 1. Anderson, D., Sweeney, D., Williams, T., Martin, R.K. (2012). An introduction to management science: quantitative approaches to decision making (13th edition). Cengage Learning, India.
- 2. Davenport, T. H., Harris, J. G., & Morison, R. (2010). Analytics at work: Smarter decisions, better results. Harvard Business Press.



- 3. Madsen, L. B. (2015). Data-driven healthcare: how analytics and BI are transforming the industry. Wiley India Private Limited.
- 4. Meier, Kenneth J., Jeffrey L. Brudney, and John Bohte. (2015) Applied Statistics for Public and Nonprofit Administration, 9th Edition, Cengage.
- 5. McLaughlin, Daniel B. and Hays Julie M. (2008) Healthcare Operations Management. Health Administration Press.
- 6. McNeill, D., & Davenport, T. H. (2013). Analytics in Healthcare and the Life Sciences: Strategies, Implementation Methods, and Best Practices. Pearson Education.
- 7. Reddy, C. K., & Aggarwal, C. C. (Editors.). (2015). Healthcare data analytics (Vol. 36). CRC Press.
- 8. Strome, T. L., & Liefer, A. (2013). Healthcare analytics for quality and performance improvement. Hoboken, NJ, USA: Wiley.



DATA SCIENCE (MAJOR)

MBT 405 DS 1 MACHINE LEARNING

Unit I -

Machine Learning: Introduction, Types of machine learning, supervised learning-Basics, Over fitting the training data.

Unit II –

Nearest Neighbor Methods, Validation: Nearest neighbor prediction, K-nearest neighbor methods, Weighted neighbor methods, the curse of dimensionality, Computational considerations, Connection to density estimation. Bayesian Classifiers, Naive Bayes classifier, Classifiers and Error Rates

Unit III –

Linear regression: Optimization, Increasing the number of features, Over fitting and method Selection, linear classification: Characterizing a linear classifier, Training a linear classifier, Logistic regression

Unit IV -

Support vector machines (SVMs), Linear SVM, Lagrangian optimization and duality, The soft margin SVM, The kernel Trick, VC dimension

Unit V -

Decision Trees: Predictor form, Training Decision trees, Decision tree classifiers, Learning Decision trees, Decision stumps. Ensemble Methods: Stacking, Bagging and Boosting

- 1. Hastie, Tibshirani, and Friedman, The Elements of Statistical Learning
- 2. Barber, Bayesian Reasoning and Machine Learning
- 3. Mitchell, Machine Learning



MBT 405 DS 2 DATA VISUALIZATION

Unit I –

INTRODUCTION TO VISUALIZATION - Visualizing Data-Mapping Data onto Aesthetics, Aesthetics and Types of Data, Scales Map Data Values onto Aesthetics, Coordinate Systems and Axes- Cartesian Coordinates, Nonlinear Axes, Coordinate Systems with Curved Axes, Color Scales-Color as a Tool to Distinguish, Color to Represent Data Values, Color as a Tool to Highlight, Directory of Visualizations- Amounts, Distributions, Proportions, x—y relationships, Geospatial Data

Unit II –

VISUALIZING DISTRIBUTIONS - Visualizing Amounts-Bar Plots, Grouped and Stacked Bars, Dot Plots and Heatmaps, Visualizing Distributions: Histograms and Density Plots- Visualizing a Single Distribution, Visualizing Multiple Distributions at the Same Time, Visualizing Distributions: Empirical Cumulative Distribution Functions and Q-Q Plots-Empirical Cumulative Distribution Functions, Highly Skewed Distributions, QuantileQuantile Plots, Visualizing Many Distributions at Once-Visualizing Distributions Along the Vertical Axis, Visualizing Distributions Along the Horizontal Axis

Unit III –

VISUALIZING ASSOCIATIONS & TIME SERIES - Visualizing Proportions-A Case for Pie Charts, A Case for Side-by-Side Bars, A Case for Stacked Bars and Stacked Densities, Visualizing Proportions Separately as Parts of the Total ,Visualizing Nested Proportions- Nested Proportions Gone Wrong, Mosaic Plots and Treemaps, Nested Pies ,Parallel Sets. Visualizing Associations Among Two or More Quantitative Variables-Scatterplots, Correlograms, Dimension Reduction, Paired Data. Visualizing Time Series and Other Functions of an Independent Variable-Individual Time Series , Multiple Time Series and Dose–Response Curves, Time Series of Two or More Response Variables

Unit IV –

VISUALIZING UNCERTIANITY - Visualizing Trends-Smoothing, Showing Trends with a Defined Functional Form, Detrending and Time-Series Decomposition, Visualizing Geospatial Data-Projections, Layers, Choropleth Mapping, Cartograms, Visualizing Uncertainty-Framing Probabilities as Frequencies, Visualizing the Uncertainty of Point Estimates, Visualizing the Uncertainty of Curve Fits, Hypothetical Outcome Plots

Unit V -

PRINCIPLE OF PROPORTIONAL INK - The Principle of Proportional Ink-Visualizations Along Linear Axes, Visualizations Along Logarithmic Axes, Direct Area Visualizations, Handling Overlapping Points-Partial Transparency and Jittering, 2D Histograms, Contour Lines, Common Pitfalls of Color Use-Encoding Too Much or Irrelevant Information, Using Nonmonotonic Color Scales to Encode Data Values, Not Designing for Color-Vision Deficiency

Suggested Readings:

Claus Wilke, "Fundamentals of Data Visualization: A Primer on Making Informative and Compelling Figures", 1st edition, O'Reilly Media Inc, 2019.

Tony Fischetti, Brett Lantz, R: Data Analysis and Visualization, O'Reilly, 2016 Ossama Embarak, Data Analysis and Visualization Using Python: Analyze Data to Create Visualizations for BI Systems, Apress, 2018



MBT 405 DS 3 BIG DATA TECHNOLOGY

Unit-I:

Introduction to Big Data Introduction –Distributed File System – Big Data and its importance, Characteristics of Big Data, Limitation of Conventional Data Processing Approaches, Need of big data frameworks, Big data analytics, Limitations of Big Data and Challenges, Big data applications

Unit-II

Hadoop: Basic Concepts of Hadoop and its features -The Hadoop Distributed File System (HDFS)-Anatomy of a Hadoop Cluster - Hadoop cluster modes - Hadoop Architecture, Hadoop Storage - Hadoop daemons (Name node-Secondary name node-Job tracker-Task tracker-Data node,etc) - Anatomy of Read & Write operations – Interacting HDFS using command-line (HDFS Shell and FS shell commands) -Interacting HDFS using Java APIs – Dataflow – Blocks –Replica - YARN.

Unit-III

Hadoop Ecosystem Components – Schedulers- Fair and Capacity, Hadoop 2.0 Vs Hadoop 3.0 and its new features. Hadoop Cluster Setup – SSH & Hadoop Configuration –HDFS Administering – Monitoring & Maintenance.

Unit-IV

Hadoop MapReduce - Introduction - Phases in MapReduce Framework - Anatomy of MapReduce Job run - Failures, Job Scheduling, Shuffle and Sort, Task Execution, Map Reduce Types and Formats, Map Reduce Features. Understanding Basic MapReduce Pogram (WordCount program): The Driver Code - The Mapper class - The Reducer class.

Unit-V:

Writing first MapReduce Program - Hadoop's Streaming API - Using Eclipse for Rapid Development - YARN Vs MapReduce Advanced MapReduce Concepts: Partitioner - Combiner - Joins - Map-side Join - Reduce-side Join - Case Study: Weblog Analysis done using Mapper, Reducer, Combiner, Partitioner, etc.

- 1. Boris lublinsky, Kevin t. Smith Alexey Yakubovich, "Professional Hadoop Solutions". Wiley, ISBN: 9788126551071, 2015.
- 2. Chris Eaton, Dirk Deroos et al., "Understanding Big Data", McGraw Hill, 2010.
- 3. Tom White, "HADOOP": The definitive Guide", O Reilly 2012. 4. Srinath Perera, Thilina Gunarathne, "Hadoop MapReduce Cookbook", PACKT publishing, 2013.



DATA SCIENCE (MINOR)

MBT 405 DS 4 BIG DATA ACQUISITION AND ANALYSIS

Unit- I

Introduction To Big Data Acquisition: Big data framework – fundamental concepts of Big Data Management and analytics – Current challenges and trends in Big Data Acquisition. Map Reduce Algorithm- Hadoop Storage [HDFS], Common Hadoop Shell commands - Anatomy of File Write and Read, NameNode, Secondary NameNode, and DataNode - Hadoop Configuration – Pig Configuration – Hive Configuration - HBase Configuration.

Unit-II

Data Collection And Transmission: Big data collection – Strategies – Types of Data Sources – Structured Vs Unstructured data – ELT vs ETL – storage infrastructure requirements – Collection methods – Log files – sensors – Methods for acquiring network data (Libcap-based and zero-copy packet capture technology) – Specialized network monitoring softwares (Wireshark, Smartsniff and Winnetcap) – Mobile equipments, Transmission methods, Issues.

Unit-III

Apache Pig - Introduction - Pig features - Pig Architecture - Pig Execution modes, Pig Grunt shell and Shell commands. Pig Latin Basics: Data model, Data Types, Operators - Pig Latin Commands - Load & Store, Diagnostic Operators, Grouping, Cogroup, Joining, Filtering, Sorting, Splitting - Built-In Functions, User define functions. Pig Execution Modes: Batch Mode – Embedded Mode – Pig Execution in Batch Mode – Use cases - Map Reduce programs with Pig – Pig Vs SQL

Unit-IV

Hive: Introduction - Hive Features - Hive architecture - Hive Meta store - Hive data types - Hive Tables - Table types - Creating database, Altering database, Create table, alter table, Drop table, Built-In Functions - Built-In Operators, User defined functions(UDFs), View, Pig Vs Hive. HiveQL—Introduction, HiveQL Select, HiveQL — MapReduce using HiveQL OrderBy, Group By Joins, LIMIT, Distribute By, Cluster By - Sorting And Aggregation — Partitioning: Static & Dynamic partitioning — Index Creation - Bucketing — Analysis of MapReduce execution — Hive Optimization — Setting Hiivng Parameters. Comparison between MapReduce, Hive QL and SQL. UseCase: Implementation of MapReduce programs with HiveQL.

Unit-V

Hbase: HBasics, Features of HBase, Concepts, Clients, Example, Hbase Versus RDBMS, Limitations of HBase Big Data Privacy And Applications: Data Masking – Privately identified Information (PII) – Privacy preservation in Big Data – Popular Big Data Techniques and tools – Applications Social Media Analytics – Fraud Detection.

- 1. Bart Baesens, "Analytics in a Big Data World: The Essential Guide to Data Science and its Applications', John Wiley & Sons, 2014.
- 2. Tom White "Hadoop: The Definitive Guide" Third Edit on, O'reily Media, 2012.
- 3. Seema Acharya, Subhasini Chellappan, "Big Data Analytics" Wiley 2015.
- 4. Min Chen. Shiwen Mao, Yin Zhang. Victor CM Leung, Big Data: Related Technologies, Challenges and Future Prospects, Springer, 2014.
- 5. Michael Minelli, Michele Chambers Ambiga Dhiraj, "Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends", John Wiley & Sons, 2013.
- 6. Raj. Pethuru "Handbook of Research on Cloud Infrastructures for Big Data Analytics", IGI Global.



Fin-Tech (MAJOR)

MBT 405 FT 1 INSURANCE AND RISK MANAGEMENT

Unit I

Introduction to Insurance Meaning and Importance of Insurance & Brief History of Insurance, Definition of risk and uncertainty; classification of risk; Sources of risk - external and Internal. Principles of life insurance. Contracts of Life Insurance: proposals and policy, assignment and nomination, title and claims, Life insurance products, pensions & Annuities.

Unit II

Overview of Risk Globalization of Insurance Sector, Reinsurance, Coinsurance, Assignment. Endowment. Risk – Introduction, Definition (market, credit, liquidity, operational), more specifically on the identification of different forms of risk (currency, interest rate, equity, commodity), Financial risk - An Overview, Evolution, and the Environment.

Unit III

Insurance Contract Nature of Insurance Contract, Principle of Utmost Good Faith, Insurable Interest, proximate cause, contribution and subrogation, Indemnity, Legal Aspects of Insurance Contract, Types of Insurance, Fire and Motor Insurance, Health Insurance, Marine Insurance, Automobile Insurance.

Unit IV

Role of Actuaries & IRDA Control of Malpractices, Negligence Loss Assessment and Loss Control, Exclusion of Perils, Actuaries, Computation of Insurance Premium. Regulatory Framework of Insurance: Role, Power and Functions of IRDA, Composition of IRDA, IRDA Act'1999.

Unit V

Quantitative Risk Measurement Measures of Risk, Introduction to Value-at-Risk, Expected Shortfall, Other popular measures Volatility Calculation and Forecasting, Expected/Unexpected Loss Estimation

Unit VI

Risk Modeling in Global Markets VaR concept, Trading limits, risk aggregation, Statistical measures of risk, Value at Risk (VaR) and its limitations, VaR models, Delta-normal (variance-covariance) VaR, Historical VaR, Monte Carlo VaR Exponential weighted average models

Unit VII

Regulatory norms for Capital and Market Risk Calculations Market Risk Capital Charge and RWA (Basel 2.5), Standardized Charges, Stressed VaR (SVaR), Incremental Risk Charge (IRC), Comprehensive Risk Measure (CRM), Basel 3, Capital ratios: Buffers and Procyclicality, Leverage Ratios, Liquidity Ratios: LCR and NSFR

- Insurance Principles and Practice, Mathew M.J, RBSA Publishers, Jaipur
- Insurance Principles and Practice, Mishra M.N, S.Chand& Company Ltd
- Insurance Fundamentals, Environment and Procedures, Dr.P.K.Gupta & K.P.Singh, Deep & Deep Publications, New Delhi
- Value-at-Risk, 3rd edition: The new benchmark for managing financial risk by Philip Jorion



- IRDAI website-www.irdai.gov.in
- New Insurance Law, Nandan Singh, University Book Publishers
- Principles of Insurance Law, M.N. Srinivasan & K.Kannan, Wadhwa Book Company



MBT 405 FT 2 FINTECH ETHICS AND RISKS

Unit I

Introduction to Business Ethics, Key Ethical principle- Trust, Proximity, Accountability, Cultural Lag, Privacy. Technologies and Ethics, Ethical concerns in Finance, Assessing ethical concerns of digital finance, Importance of Ethics in FinTech.

Unit II

Block Chain Ethical Design Framework The approach, Root issues-governance, identity, verification and authentication, access, data ownership, security, Ethical impacts of block chain-Micro level, Meso level and Macro-Level

Unit III

Micro-financial, Macro-financial Risks Micro-Financial Risks -- Maturity Mismatch, Liquidity Mismatch, Leverage Mismatch, Macro Financial Risk-Contagion, Procyclicality, excess volatility, Systemic Risks

Unit IV

Operational Risks Operational Risks-Governance/process control, Cyber risks (Data privacy Breach, fraud, DDOS attacks), Third party and fourth party concentration risks, legal/regulatory risk, Business Risk,

Unit V

Potential Risk Cases Retail Payments, Digital Wallets and Shadow Banking, FinTech Credit, Robo Advisor, DLT based Wholesale payment system, Digital currency, Crowdfunding, AI and Machine learning in financial services

- Bishop, D. L., Lee, D., Ferrel, O. C., Fraedrich, J., & Ferrell, L. (2019). Business Ethics: Ethical Decision Making and Cases, An Asia Edition, 1st Edition. Cengage Learning Asia.
- Chishti, S., & Barberis, J. (2016). The FinTech book: the financial technology handbook for investors, entrepreneurs and visionaries. John Wiley & Sons.
- Marshall, K. P. (1999). Has Technology Introduced New Ethical Problems? Journal of Business Ethics, 19(1), 81-90.
- Scott, B. (2017). Hard Coding Ethics into Fintech. Finance & The Common Good.
- Cara Lapointe & Lara Fishbane (n.d.) The Blockchain Ethical framework, Beek Centre of Social impact and innovation at George Town University
- Bostrom, N. (2014). Superintelligence: Paths, dangers, and strategies. Oxford: Oxford University Press.
- Müller, J., & Kerényi, Á. (2019). The Need for Trust and Ethics in the Digital Age—Sunshine and Shadows in the FinTech World. Financial and Economic Review, 18(4), 5-34.
- Dierksmeier, C., Seele, P. Cryptocurrencies and Business Ethics. J Bus Ethics 152, 1–14 (2018).



- Buckley, R. (2016). The Changing Nature of Banking and Why It Matters. In R. Buckley,
 E. Avgouleas, & D. Arner (Eds.), Reconceptualising Global Finance and its Regulation (pp. 9-27). Cambridge: Cambridge University Press. doi:10.1017/CBO9781316181553.002
- Financial Stability Board (2017) Financial Stability Implications from FinTech, June.
- Bogusz, C. I. (2018). Digital traces, ethics, and insight: Data-driven services in FinTech. In The Rise and Development of FinTech (Open Access) (pp. 207-222). Routledge.
- Shevlin R. (Oct, 2019) Are Fintech Startups More Ethical Than Banks?
- Vijayaprasad Gopichandran et al. Ethical challenges of digital health data in India. Bulletin of the World Health Organization; Type: Lessons from the field Article ID: BLT.19.237123
- Jain M. (May, 2019). The Aadhaar Card: Cybersecurity Issues with India's Biometric Experiment.
- Tang, Y., Xiong, J., Becerril-Arreola, R. and Iyer, L. (2019), "Ethics of blockchain: A framework of technology, applications, impacts, and research directions", Information Technology & People, Vol. 33 No. 2, pp. 602-632.



MBT 405 FT 3 CRYPTO CURRENCIES AND PAYMENTS

Unit I

Introduction to Cryptocurrency Define Bitcoin and understand its popularity as a currency, Discuss the methodology behind transacting with Bitcoin, and Gain a deep understanding of the definition of currency and the critical importance of a shared common belief behind a unit of currency, Clearly defined understanding of why cryptocurrency and bitcoin is used as a cash-alternative method, and How Bitcoin derives its potential value in the current market.

Unit II

Rules and Structure of Bitcoin Analyze the problems that a decentralized currency must solve in order to be successful, and how, Bitcoin meets these challenges using cryptology and blockchain technology, How Bitcoin utilizes digital signatures in their transactions to ensure privacy for individuals, Examine how blockchain technology employs Hash Functions to detect tampering attempts, Explore the creation and concept of Distributed Consensus Protocol and how Proof of Work incentivizes honest trading and stable currency creation. Identify the importance of digital signatures, Blockchain, and Proof of Work in the stability of Bitcoin as a currency.

Unit III

Cryptocurrency as an Asset Class Examine Cryptocurrency as an asset class, and delve deeper into whether Cryptocurrency has a place in individual investment portfolios. Understand the risks and returns on Bitcoin and its place in a more stable and predictable portfolio. Learn about the Capital Asset Pricing Model, and key concepts of Modern Portfolio Theory such as Tangency Portfolio and the Sharpe Ratio. Estimate and analyze the values of Beta and Alpha in Cryptocurrency, and effectively optimize utility in incorporating Cryptocurrency as an asset for your portfolio.

Unit IV

The Blockchain Ecosystem Explore the Blockchain Ecosystem and the numerous use cases for Blockchain in different industries. , Discover how Blockchain is built. Learn about the difference between Proof of Work and Proof of Stake, and the two interoperability of Blockchain. Through analyzing the different types of crypto finance, explore the different use cases of Blockchain in business, gaming, and investing. Build a deeper understanding of the fundamentals of Blockchain, be able to utilize Blockchain in many different contexts, and assess how Blockchain will affect both business and society in the future.

Unit V

Payments Understand Digital wallets, Understand Individual Payments, Learn about Developing Countries and DFS: Regulation of Mobile Money, Develop understanding of RTGS Systems, Understand the ABCDs of Alternative Finance and Digital Finance, Learn the benefits from New Payment Stacks

- Bitcoin and Cryptocurrency Technologies A Comprehensive Introduction Hardcover by Arvind Narayanan (Author), Joseph Bonneau (Author), Edward Felten (Author), Andrew Miller (Author), Steven Goldfeder (Author). Publisher: Princeton University Press
- Mastering Bitcoin: Unlocking Digital Cryptocurrencies by Andreas M. Antonopoulos.
 Publisher: O'Reilly



FIN-TECH (MINOR)

MBT 405 FT 4 BLOCK CHAIN

Unit I

Introduction, Blockchain-Definition, Network view of blockchain, Generic structure of blockchain, Generic elements of blockchain, features of blockchain, how blockchain accumulates blocks, Tier of blockchain, Types of blockchain,

Unit II

BlockChain CAP theorem in Blockchain, Decentralisation, Platforms for decentralization, Consensus in Blockchain, Benefits of blockchain, Challenges and limitations of blockchain-Scalability, Security, Privacy and confidentiality

Unit III

How Blockchain Works Hash functions, Puzzle friendly Hash, Collison resistant hash, digital signatures, public key crypto, verifiable random functions, Zero-knowledge systems

Unit IV

Blockchain 1.0: Bitcoin Issues with Digital Cash- Double spend and Byzantine Generals computing problem, Bitcoin blockchain, how a cryptocurrency works, The challenges-crypto security, merchant acceptance of crypto-currency, regulatory status

Unit V

Blockchain 2.0: Contracts Financial Services, Crowdfunding, Bitcoin Prediction markets, Smart Contracts, Smart Property, Blockchain 2.0 protocol projects, Wallet development projects, Blockchain Development Platforms, Blockchain Ecosystem, Ethereum, Dapps-Decentralized applications, DAOs/DACs-Decentralized autonomous organisations, DAS-Decentralized autonomous societies, Automatic markets

Unit VI

Blockchain 3.0 Hyperledger Project, Applications of blockchain in Science, Digital identity, Law, Governance, Healthcare, Online learning, Academic Publishing,

Unit VII

Block Chain Use cases in Finance Trusted Data Transfer, Trade Markets, Capital Markets, Supply chain Financing, Insurance, Trade Finance

- Bashir I. (2017) Mastering Blockchain. Packt Publishing.
- Swan M. (2015) Blockchain. Publisher O' Rielly.
- Crosby et al. (2015) Blockchain Technology, Sutardja Center for Entrepreneurship & Technology Technical Report. Available at: https://scet.berkeley.edu/wpcontent/uploads/BlockchainPaper.pdf
- Yaga et al. (2018). Blockchain Technology overview. Available at: https://nvlpubs.nist.gov/nistpubs/ir/2018/NIST.IR.8202.pdf 3. PwC(n.d.) Blockchain a new catalyst for insurance. Available at: https://www.pwc.com/gx/en/insurance/assets/blockchain-a-catalyst.pdf



- Nakamoto, S. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System. Available at: https://bitcoin.org/bitcoin.pdf
- Popper, N. (2018). Confused About Blockchains? Here's What You Need to Know. The New York Times. Retrieved from: https://www.nytimes.com/2018/06/27/business/dealbook/blockchainsguideinformation.html
- Davies, S., & Likens, S. (2018). Blockchain is Here. What's Your Next Move? PwC. Retrieved from https://www.pwc.com/blockchainsurvey
- Blockchain the India strategy. https://niti.gov.in/sites/default/files/2020-01/Blockchain_The_India_Strategy_Part_I.pdf