



# Institute of Management Sciences

University of Lucknow

National Education Policy-2020

Course Structure & Syllabus

**BBA (MANAGEMENT SCIENCE)**

(To be effective from the session 2023-2024)

# **PROGRAM OBJECTIVE**

The course aims to provide the knowledge and skill-sets for making the students ready for employment in Technology Driven field. The essential tools and techniques required by the industries will also be inculcated through the curriculum. The course provides in-depth understanding of strong conceptual framework Information Technology. The students shall also be able to understand applicability of the theoretical concepts into real business issues. The course also focuses on how to operate management tools in a scientific arrangement which can use quantitative methods and IT tools in combination. The students shall also be able to understand applicability of the Technology into real business issues, research and innovation purposes.

## **PROGRAMME OUTCOMES**

At the end of this course, students should be able to:

- Demonstrate their understanding of descriptive statistics by practical application of quantitative reasoning and data visualization.
- Demonstrate their knowledge of the basics of inferential statistics by making valid generalizations from sample data in terms of skills.
- Use Analytical software to conduct statistical analysis for resolving business problems.
- Recognize pitfalls in using statistical methodology and enable himself for usage of upgraded and innovative methods to deal in practical situations.
- Students will develop Critical attitudes, which are necessary for “life-long learning” in this course and Greater appreciation for the importance of statistical literacy in today’s data rich world.

### Proposed Structure BBA (Management Science)

Year	Sem		Major 1	Credits		Major 2	Credits		Minor 1	Credits	CC/VC	Credits	Total Credits	Award
1	Sem-1	P1	Principles of Management	4	P1'	Financial & Management Accounting - I	4	P1"	Computer & IT Applications - I	4	CC1	4	24	Certificate
		P2	Business Organisations	4	P2'	Business Communication	4							
	Sem-2	P3	Organizational Behaviour	4	P3'	Financial & Management Accounting - II	4	P2"	Quantitative Techniques - I	4	VC1	4	24	
		P4	Managerial Economics	4	P4'	Business Environment	4							
2	Sem-3	P5	Financial Management	4	P5'	Marketing Management	4	P3"	Computer & IT Applications - II	4	CC2	4	24	Diploma
		P6	Operations Management	4	P6'	Human Resource Management	4							
		NC1	Foreign Language French/German	0										
	Sem-4	P7	Introduction to Analytical Software	4	P7'	Customer Relationship Management	4	P4"	Quantitative Techniques - II	4	VC2	4	24	
P8		Logistic & Supply Chain Management	4	P8'	Database Management System	4								
3	Sem-5	P9	Entrepreneurship and Family Business - I	4	P9'	Business Ethics	4				INTERNSHIP	4	24	BBA (MS) Degree
		P10	Business Policy & Strategic Management - I	4	P10'	Business Laws	4							
		P11	P11 X: Operating System & Application Software	4										
			P11 Y: Consumer Behaviour	4										

	<b>Sem-6</b>	P12	Entrepreneurship and Family Business - II	4	P11'	Corporate Governance and Corporate Social Responsibility	4				<b>MINOR PROJECT</b>	4	24	
		P13	Business Policy & Strategic Management - II	4	P12'	Management Information System	4							
		P14	P14 X: E - Commerce	4										
P14 Y: Mathematical Modelling	4													
4	<b>Sem-7</b>	P15	Decision Sciences	4						<b>Research Methodology</b>	4	24	<b>BBA (MS) Research</b>	
		P16	Project Management	4										
		P17	Business Analytics	4										
		P18	P18 X: Advanced Data Base Management System	4										
			P18 Y: Internet of Things	4										
		P19	P19 X: Enterprise Resource Planning	4										
	P19 Y: Information Security & Cyber Law		4											
<b>Semester-8</b>	<b>Major Project</b>										24	24		
<b>Total Credits</b>				76			48			16		52	192	

# **Certificate**

**BBA**

**(Management Science)**

**Year 1 (Semester 1+2)**

# SEMESTER I

## P1: PRINCIPLES OF MANAGEMENT

Total Session: 40

**Course Outcome:** The objective for this course to provide an understanding of the task and functions of management and to acquaint the participants with the developments in concept. Theories and practices in the overall field of management.

### UNIT I

Nature and significance of Management, Approaches of management, Contributions of Taylor, Fayol and Barnard, Functions of a Manager, Social responsibility of Managers, Values in management.

### UNIT II

The Nature and significance of Planning, Objectives, Steps of Planning, Decision making as key step in planning. The Process and Techniques of Decision Making. Organisation: Nature and significance, Approaches, Departmentation, Line and staff relationships, Delegation and Decentralisation, Committee system, Department of effective organizing

### UNIT III

Staffing, nature and Significance, Selection, Appraisal and Development of Managers. Directing: Issues in managing human factors, Motivation, nature and Significance's, Theories and Techniques.

### UNIT IV

Communication Definition and Significance, Process, Barriers of Communication, Building effective communication system. Controlling: Definition and Elements Control Techniques, Coordination, Determinants of an Effective Control system, Managerial Effectiveness.

### References:

1. Koontz H., Weihrich H. (2009) ; Principles of Management; Tata Mc Graw Hill; 8<sup>th</sup> Edition.
2. Williams C (2009) Principles of Management; South-Western/Cengage Learning; 5<sup>th</sup> Edition.
3. Prasad L.M, principles and Practice of Management, Sultan Chand & Sons, 20<sup>th</sup> Edition.
4. Vaishath Neeru, Principle of Management, Taxmann, 5<sup>th</sup> Edition.
5. Weihrich Heinz and Koontz Harold (2013); Management: A Global, Innovative, and Entrepreneurial Perspective; Mc Graw Hill; 14<sup>th</sup> Edition.
6. Andrew Leigh (2012); The Essentials of Management: Everything you need to succeed as a new manager; Pearson UK; 2<sup>nd</sup> Edition.

## **P2: BUSINESS ORGANIZATIONS**

**Total Session: 40**

**Course outcomes:** The objective of this course is to develop an understanding on several important aspects of an organization, not just from an economic point of view but also considering organizations as part of society. It also includes analysis of the source of wealth creation, with a brief description of the environment and the key internal factors of an organization. The course introduces the students with the most important concepts of the dynamic framework of an organization.

### **UNIT I**

Meaning and definition of business essentials & scope of business, Classification of Business Activities, Meaning, Definition, Characteristics and objectives of Business Organization, Evolution of Business Organization. Modern Business, Business & Profession

### **UNIT II**

Business Unit, Establishing a new business unit. Meaning of Promotion. Features for business, Plant location, Plant Layout & size of business unit

### **UNIT III**

Organization process – Importance, principles, Various aspects of organization, organization structure, Departmentation, Line and Staff Relationships, Span of control, Delegation of authority, Decentralization

### **UNIT IV**

Business Combination Meaning Causes, Objectives, Types and Forms Mergers, Takeovers and Acquisitions.

Business Finance: Financial need of Business methods & sources of finance. Security Market, Money Market, Study of Stock Exchange & SEBI.

### **References:**

1. Stoner, Freeman and Gilbert Jr (2003); Management, Prentice Hall of India, New Delhi,
2. Gupta, C.B. (2003); Management Concepts and Practices, Sultan Chand and Sons, New Delhi,
3. Robbins, S. (2017). Management, Pearson Education, New Delhi; (13th ed.).
4. Wren, D. A., & Bedeian, A. G. 2009. The evolution of management thought. (6th ed.), New York: Wiley

**Course outcomes:**

The aim of the course is to build knowledge and understanding of Financial and Management accounting among the student. The basic objective of this course is to enable the students to learn, explain and integrate the fundamental concepts, principles and techniques of accounting. Along with successfully applying the techniques and methods practically in order to analyze business performance, planning, decisions making and controlling the outcomes

**UNIT 1**

Introduction to Accounting -Basic Concepts, Purpose, Importance, Scope and Limitations of Accounting Users of Accounting, Information, Generally Accepted Accounting Principles (GAAP) and Accounting Standards (AS), Introduction to International Financial Reporting Standards (IFRS) –need and significance. Ethical Issues in Accounting

**UNIT II**

Recording and Classification of transactions, Preparation of trial balance, capital and revenue expenditure Preparing final accounts for business Adjustment Entries : Inventory, Depreciation, Provision for Bad Debts, Accrued, prepaid, outstanding and unearned income and expenditure

**UNIT III**

Introduction to Cost accounting: Meaning, Objectives and differences with financial accounting, Classification of cost, Preparation of cost sheet, Difference between Marginal and absorption costing, Cost volume profit analysis

**UNIT IV**

Methods of costing: Job costing, Process Costing, Activity based costing. Reconciliation of Costing and Financial records

**References**

1. Khan, M. Y., & Jain, P. K. (2006). Management Accounting, McGraw-Hill Education, 4<sup>th</sup> Edition.
2. Ananthanayanan, P.S. (2014). Management Accounting, Oxford Publication.
3. Larson, Kermit D., & Miller, Paul B. W. (1994) Financial Accounting, McGraw-Hill Education
4. Narayanaswamy, R. (2014). Financial Accounting: A Managerial Perspective, Prentice Hall India, 6<sup>th</sup> Edition.
5. Maheshwari, S.N., Maheshwari, S.K. & Maheshwari, S.K. (2018), Financial Accounting, Vikas Publishing, 6<sup>th</sup> Edition
6. Arora M.N. (2012) A textbook of Cost and Management Accounting, Vikas Publication, 10<sup>th</sup> edition



**Course Outcome:** This course aims to develop communication skills in equip students with a broad based knowledge business communication.

**UNIT I**

Introduction to business communication, characteristics of effective organizational communication, basic forms of communication, process of communication, Barriers to Communication, Principles of effective business communication.

**UNIT II**

Oral communication: Purpose, Advantages & Disadvantage, Principles of Oral Communication, Effective Listening, Non-verbal Communication. Written communication: Purpose, Advantages & Disadvantage, Principles of Written Communication, Effective writing techniques. Employment Communication: Application letter and Resume writing,

**UNIT III**

Conduct of meeting – agenda, notice, notes, minutes, office memorandum, office orders, press release, Business Letter Writing– Need, Functions and kinds, layout and types. Report Writing – problems, organization and techniques. (Practical's/Projects)

**UNIT IV**

Corporate Communication: Scope, Components, Corporate communication and Public relations, Role of Social Media in Communication. Role of Technology in Communication (ICT's), Business Etiquettes.

**References:**

1. Rajendra Pal, Business Communication, Sultan chand& Sons Publication 6<sup>th</sup> .
2. VikramBisen & Priya, Business Communication, New Age International Publication, 2<sup>nd</sup> Edition
3. M.K. Sehgal & V. Khetrapal - Business Communication (Excel Books).
4. P.D. Chaturvedi – Busines Communication, Pearson Education, 1st Edition 2006.
5. Lesikar RV & Pettit Jr. JD – Basic Business Communication: Theory & Application, Tata Mc Grow Hill, 10thEdition.
6. Tayler Shinley – Communication for Business, Pearson Education, 4th Edition.
7. Sharma R.C., Mohan Krishna – Business: Correspondence and Report Writing, Tata McGraw Hill, 3<sup>rd</sup> Edition

## **P1'' : Computer & IT Applications - I**

**Total Sessions: 40**

**Course outcomes:** The course aims to familiarize the students with computers & its applications in the field of business.

### **UNIT I:**

Basics of computers and their evolution- Characteristics of Computer, Application of Computer in business, Various fields of Computer, Classification of Computer, Generation of Computer, Types of Software, Compiler & Interpreter, Generation of Language, Data representation - Different Number Systems, Inter Conversion between Number Systems, Binary Arithmetic.

### **UNIT II:**

Standard and non-standard Input devices : Keyboard, Point & draw devices, Data Scanning Devices, Digitizer, etc., and output devices: Output Devices: Monitors, Printers, Plotters, Voice Response System, etc., Main Memory / Primary Memory: RAM, ROM, PROM, EPROM: Cache Memory, Secondary Memory/Storage , Concept of Magnetic Tape, Magnetic Disk, Optical Disk, MO Disk, etc. Business Data Processing: File Management System, Database Management System

### **UNIT III:**

Operating System Concept: Introduction to Operating System, Functions of Operating System, Types of Operating System. Introduction to GUI-Windows Operating System. Concept of Data Communication & Networking: Network Concepts, Types of Network, Different Topologies Communication Media, Introduction to Internet

### **UNIT IV:**

Text Processing :Introduction to Text Processing software, Creating, Saving, Printing and modification in document, Spreadsheet Software: Introduction to spreadsheet, creation and their application, formulas, function, Addressing , Graphics on spreadsheet, modes of data processing, & Report generation, Presentation Software: Creating a presentation. Introduction to MS-Access

### **References:**

1. Sinha P. K., Sinha P., Computer Fundamentals, BPB Publication
2. Rajaraman V., Computer Fundamentals, PHI
3. Norton P., Introduction to computers, 9<sup>th</sup> reprint Edi., Tata Mcgraw Hill, 2008

**Course outcomes:** The objective of this course is to familiarize the students with the conceptual background, theories and techniques of Personality and teaches the basic techniques of how an organization manages and develops its people .

**UNIT I**

Introduction to Personality: Meaning, Significance, Functions and Objectives. Theories of Personality. Types of Personality. Personality Disorders- types, causes, symptoms and their treatment .

**UNIT2**

Communication Skills and Personality Development. Team Building. Leadership Skills. Body Language and interpersonal communication. Strategies to enhance communication.

**UNIT 3**

Personality Development- Building self esteem, self confidence. Time Management and Efficient Planning. Stress Management – Meaning, types, coping measures. Self Acceptance, Self Growth. Conflict Management. Steps in grooming student personality.

**UNIT 4**

Business Etiquettes and table manners. Public Speaking. Interviews and Group Discussions. Telephone Conversations. Business Meetings. Morality and Ethics.

**References:**

1. Personality Development by Rajiv K. Mishra, Rupa&Co.
2. Dynamics of Behaviour by Pooja Sharma&J. Agarwal by Books River Publication.
3. Sharma, P. (2019). *Soft Skills: Personality Development for Life Success*. BPB publications.
4. Vaughn, G. R., & Roth, C. B. (1947). *Effective personality building*. McGraw-Hill Book Company.

# SEMESTER II

## P3: ORGANIZATIONAL BEHAVIOR

Total Session: 40

**Course Outcome:** To provide knowledge about Organizational Behavior, individual and group behavior and give an overview about change in organization and QWL.

### UNIT I

Introduction: Nature and scope of OB, Challenges and opportunities for OB, Organization Goals, Models of OB, Impact of Global and Cultural diversity on OB.

### UNIT II

Individual Behavior: concept, Personality, Perception and its role in individual decision making, Learning, Motivation: Hierarchy of needs theory, Theory X and Y, Motivation-Hygiene theory, Vroom's expectancy theory.

### UNIT III

Behavior Dynamics: Interpersonal behavior, Communication, Transaction Analysis, Leadership: Its Theories and prevailing leadership styles in Indian Organizations. Group Behavior: Definition and classification of Groups, Types of Group Structures, Group decision making, Teams Vs Groups, Contemporary issues in managing teams, Inter-group problems in organizational group dynamics, Management of conflict.

### UNIT IV

Management of Change: Change and Organizational development, Resistance to change, Approaches to managing organizational change, Organizational effectiveness, Organizational culture, Power and Politics, Stress Management: Definition, potential, sources of stress, consequences of stress, managing stress.

### References:

1. Robbins, Judge, and Vohra (2013); Organizational Behavior; Prentice Hall Inc.; 15th Edition.
2. Fred, Luthans (2005); Organisational Behavior; UK: McGraw Hill; 10th Edition.
3. G, Moorhead & Griffith. (2007). Organizational Behavior. Houghton Muffin Co.
4. Newstrom J (2007); OB: Human Behaviour at Work. McGraw Hill Inc.; 12th Edition.
5. Pareek Udai (2016); Understanding Organizational Behaviour; Oxford University Press; 4th Edition.
6. Rao, V.S.P. (2009); Organization Behaviour; Excel Book.

## **P4: MANAGERIAL ECONOMICS**

**Total Session: 40**

**Course Objective:** To impart basic knowledge of the concepts and tools of Economic Analysis as relevant for Business Decision-Making.

### **UNIT – I**

Nature and Scope of Managerial Economics: Basic Tools- Opportunity Cost principle, Incremental principle, Equi-Marginal Principle. Principle of Time perspective, Discounting Principle. Uses of Managerial Economics.

Demand Analysis: Demand Theory, The concepts of Demand, Determinants of Demand. Demand Function and Elasticity of Demand and its uses in Business decisions.

### **UNIT – II**

Production Analysis: Concept of Production, Factors, Laws of Production, Economies of Scale, Economies of Scope, Production functions.

Cost Analysis: Cost Concept, Types of Costs, Cost function and cost curves, Costs in short and long run, LAC and Learning Curve.

### **UNIT – III**

Market Analysis: Price-output determination in different markets, Perfect competition, Monopoly, Price discrimination under monopoly, Monopolistic competition, Duopoly and Oligopoly markets , Different pricing policies.

### **UNIT – IV**

Introduction to Macro Economics. National Income Aggregates. Concept of Inflation- Inter-Sectoral Linkages: Macro Aggregates and Policy Interrelationships – Tools of Fiscal and Monetary Policies. Profit Analysis: Nature and Management of Profit, Profit Theories, Function of Profits, Profit policies.

### **Recommended book(s)**

1. Thomas & Maurice, Managerial Economics, Tata McGraw Hill
2. Koutsoyiannis.A, Modern Micro Economics. Mc Millan
3. Peterson, H.C and Lewis , Managerial economics, Tata McGraw Hill
4. Vaishampayan,J.V, Managerial Economics. NRBC

**Course Objective** The aim of the course is to extend and enhance the knowledge and understanding of Financial and Management accounting among the student. The basic objective of this course is to enable the students to learn and explain advanced concepts, principles and techniques of accounting. The practical application of the knowledge will help them in developing the skill of using these advanced methods in effective decision making.

**UNIT I**

Accounting for Assets: Valuation of inventories, Depreciation - meaning and Methods of Depreciation :SLM & WDV , bank reconciliation statement, Introduction to corporate accounting - Preparation of financial Statements of a company

**UNIT II**

Analysis of Financial Statements- meaning types and techniques Trend analysis ratio Analysis Statement of Cash Flow – Indirect method

**UNIT III**

Introduction to Management Accounting: Meaning, objectives, difference between cost and management accounting,

Relevant costing: and decision making, special order and addition, deletion of product and services, optimal uses of limited resources, pricing decisions, make or buy decisions,

**UNIT IV**

Budgets and Budgetary Control: Preparing flexible budgets , Standard Costing and Variance Analysis for material and labour , Introduction to Responsibility accounting : meaning and types of responsibility centres

**References**

1. Khan, M. Y., & Jain, P. K. (2006). Management Accounting, McGraw-Hill Education, 4<sup>th</sup> Edition.
2. Ananthanayanan, P.S. (2014). Management Accounting, Oxford Publication.
3. Larson, Kermit D., & Miller, Paul B. W. (1994) Financial Accounting, McGraw-Hill Education
4. Narayanaswamy, R. (2014). Financial Accounting: A Managerial Perspective, Prentice Hall India, 6<sup>th</sup> Edition.
5. Maheshwari, S.N., Maheshwari, S.K. & Maheshwari, S.K. (2018), Financial Accounting, Vikas Publishing, 6<sup>th</sup> Edition
6. Arora M.N. (2012) A textbook of Cost and Management Accounting, Vikas Publication, 10<sup>th</sup> edition

**Course outcomes:** The objective of this paper is to give the basic knowledge about the business environment in industry.

**UNIT I**

Meaning, Definition and Significance of Business Environment; Environmental Matrix; Factor affecting Business Environment: Micro and Macro environment; Environment scanning techniques: SWOT, ETOP with practical examples, Porter's Five Force Model.

**UNIT II**

Economic Systems: Capitalism, Socialism, Mixed Economy- Public Sector and Private Sector. Features of Indian Economy: Primary, Secondary and Tertiary Sectors. Relationship between Government and Business; Public, Private and Co-operative sectors: meaning, role and importance.

**UNIT III**

National Income and its aggregates, Industrial Policy-Overview and Role; New industrial policy of India, Socio-economic implications of Liberalization, Privatization and Globalization. Trade Cycle. Inflation Analysis

**UNIT IV**

Role of Government in Regulation and Development of Business; Monetary and Fiscal Policy; Overview of International Business Environment, Trends in World Trade, EXIM Policy; WTO- Objectives and role in international trade.

**References:**

1. Cherunilam, Francis (2019), Business Environment Text & Cases, Himalaya Publishing House, 27<sup>th</sup> Revised Edition
2. Agarwal, A. N. and Agarwal M. K. (2019), Indian Economy Developmental Problems & Policies, New Age International (P) Ltd, 43<sup>rd</sup> Edition
3. Saleem, Shaikh (2020), Business Environment, Pearson Education, 4<sup>th</sup> Edition
4. Jaiswal B. & R. Banerjee, (2019), Introduction to International Business, Himalaya Publishing House, 1<sup>st</sup> Edition
5. Aswathapa, K. (2014), Essentials of Business Environment: Text, Cases and Exercise, Himalaya Publishing House Pvt. Ltd, 12<sup>th</sup> Revised Edition

**Course outcome:** The Course aims at providing students insight about the mathematical terms and their appropriate usage in business problems.

**UNIT I**

**Series and Permutation Combination:** Arithmetical Progression- Sum of a series in A. P. Arithmetic Mean, Geometric Progression, Sum of a series in G.P, Geometrical Mean, Sum of an infinite geometric series. Permutation and combination, Fundamental rules of counting, Permutation of n different things, Permutation of thing not all different., Circular permutation, Combination of n different things r at a time, Simple problems.

**UNIT II**

**Matrix Algebra:** Definition, Matrix Operations- Addition, Subtraction, and Multiplication of matrices, Types of matrices- Square, Diagonal, null, Transpose of a matrix, Determinant of a Square matrix. Singular and non-singular matrix, Co- factor matrix, ad-joint of a matrix, Inverse of a matrix. Solution of simultaneous equation by using matrices.

**UNIT III**

**Statistics:** Types of Data, Classification & Tabulation of Data, Frequency Distribution, Census and Sample Investigation, Diagrammatical and Graphical Presentation of Data. Measures of central Tendency (Mean, Median & Mode), Measures of Dispersion (Range, Mean Deviation & Standard Deviation).

**UNIT IV**

**Correlation:** Significance of Correlation, Types of Correlation, Scatter Diagram Method, Karl Pearson Coefficient of correlation, Spearman's coefficient of Rank correlation. Regression: Introduction, Regression Lines and Regression Equations & Regression Coefficients.

**References:**

1. Sancheti & Kapoor, (2008) Business Mathematics, Sultan Chand & Sons, Reprint Edi.
2. Raghavachari M. (1980) Mathematics for Management: A Introduction, Tata McGraw-Hill Education.
3. Levin &Rubins, (2017) Statistics for Business, Prentice Hall of India, 8<sup>th</sup> Edition, N.Delhi.
4. Bhardwaj, R.S. (2009) Business Statistics, Excel Books,2<sup>nd</sup> edition.
5. Gupta,S.C. &Kapoor VK, (2002) Fundamentals of Mathematical Statistics, Sultan Chand & Sons Reprint Edition.



**Course outcomes:** The course is designed to empower students to carry out day to day communication at work place by adequate understanding of various types of communication and use of technology to facilitate efficient interpersonal communication. The course will also equip with effective writing skills necessary for resume building and other forms of written corporate communication.

### **UNIT I**

Role of communication – defining and classifying communication – purpose of communication –process of communication – characteristics of successful communication – importance of communication in management – communication structure in organization – communication in crisis- 7 C's of Communication-Barriers to effective communication- Forms of Communication: one-to-one-informal and formal

### **UNIT II**

Non Verbal Communication: Relevance and effective usage, Para language, Chronemics, Haptics Proxemics, Body language, Object language

Listening Skills: The process, importance and types of listening

Effective Listening: Principles and Barriers

Enhancing Listening Skills: Paraphrasing, Summarizing Guidelines to increase listening, Activities to enhance listening

### **UNIT III**

Resume Writing, Cover Letters, Interview Follow Up Letters

Introduction to business letters – writing routine and persuasive letters – positive and negative messages- writing memos – what is a report purpose, kinds and objectives of reports- writing reports

Group discussions – interview skills, Impact of Technological Advancement on Business Communication networks – Intranet – Internet – e mails – SMS – teleconferencing – videoconferencing

### **UNIT IV**

Presentation skills: What is a presentation – elements of presentation – designing a presentation. Advanced visual support for business presentation- types of visual aid

Negotiations skills: What is negotiations – nature and need for negotiation – factors affecting negotiation –stages of negotiation process – negotiation strategies

## **References:**

1. Fred Luthans, Organizational Behaviour, Boston, McGraw-Hill, 8th edition, 1998
2. Essentials of Business Communication by Rajindra Pal and J. S. Korlahalli. Sultan Chand and Sons., New Delhi.16
3. Effective Business Communication by Herta A. Murphy and Charles E. Peck. Tata McGraw Hill Publishing Company Limited., New Delhi.
4. Essentials of Business Communication by Pettett and Lesikar. Tata McGraw Hill Publishing Company Limited., New Delhi.

# **Diploma**

**BBA**

**(Management Science)**

**Year 2 (Semester 3+4)**

# SEMESTER III

## **P5: Financial Management**

**Total Session: 40**

**Course outcomes:** The aim of the course is to build knowledge and understanding of Financial Management among the student. The course seeks to give detailed knowledge about the subject matter by instilling them basic ideas about Financial Management. The outcome of the course will be as follows – To provide knowledge about business finance and investment decisions. To provide knowledge about financing and dividend decision. To give an overview about working capital.

### **UNIT I**

Introduction to Financial Management: Concept of Financial Management, Finance functions, objectives of financial management- Profitability vs. Shareholder wealth maximization. Time Value of Money - Compounding Discounting.

Investment Decisions: Capital Budgeting-Payback, NPV, IRR and ARR methods and their practical applications.

### **UNIT II**

Financing Decision: Capitalization Concept, Basis of Capitalization, consequences and remedies of over and under capitalization, Cost of Capital, WACC, Determinants of Capital structure, Capital structure theories.

### **UNIT III**

Dividend Decision: Concept and relevance of dividend decision, Dividend Models-Walter's, Gordon's and MM Hypothesis, Dividend policy-determinants of dividend policy.

### **UNIT IV**

Management of Working Capital: Concepts of working capital, Approaches to the financing of current Assets, Management of different components of working capital: Cash, receivables and inventory.

### **References:**

1. Pandey I. M. (2017). Financial Management, Vikas Publishing, 11th Edition
2. Rustagi, R.P. (2019). Fundamentals of Financial Management, Taxman , 14th Edition
3. Kishore, Ravi M (2016). Financial Management, Taxman's, 8th Edition.
4. Khan, M.Y., & Jain, P.K. (2018). Financial Management: Text, Problems and Cases, Mc Graw Hill Publication, 8th Edition
5. Maheshwari S.N. (2019). Financial Management: Principles and Practice, Sultan Chand and Sons, 5th Edition

**Course outcome:** The purpose of this course is to develop an understanding of issues and challenges involved in the area of Operation Management among under graduate students. The course aims to equip the students with basic management decisions regarding production & operation, designing decisions and designing of a production system.

**UNIT I:**

Nature and scope of production & Operation management, the transformation process, production analysis and planning, production functions, objective and functions of production management. responsibilities of the production manager, types of manufacturing processes and plant layout, plant location, routing, scheduling, plant location and plant layout, assembly line balancing. Production Planning and Control (PPC).

**UNIT II:**

Facility Location Planning, layout planning, Materials management - its scope and importance. Purchasing function and procedure, store-keeping, material planning function, Inventory control, relevant costs, economic lot size, reordering point, ABC analysis, Economic Order Quantity (EOQ) Model, Buffer stock.

**UNIT III:**

Productivity definition and concept, factors affecting productivity, productivity measurement, productivity improvements, New Product development and design, stages of product development, Conjoint Analysis, techniques of product development (standardization. simplification and specialization. Automation.

**UNIT IV:**

Development of efficient work methods, material flow process chart, manflow process chart, principles of motion economy, comparison of alternate work methods, maintenance of production facilities, quality control and inspection , Cost of quality, TQM, Quality Standards – ISO 9000, sampling inspection, control charts for attributes and variables charts.

**References:**

1. Bedi, Kanishka, 2nd Ed, Production and Operation management, OUP.
2. Stevenson, William, Production and Operation management, 11 ed., Mc Graw Hill
3. Heizer and Render, (2010) Operations Management, 10th edition, Prentice Hall,.
4. Ashwathappa K &Bhat K. Shridhara (2019) - Production & operation Management, 2<sup>nd</sup> Edition, Himalaya Publication.
5. S N Chary (2019) Production and Operations Management, 6<sup>th</sup> Edition, Tata McGraw Hill,.

## **P5': Marketing Management**

**Total Session: 40**

**Course outcome:** The purpose of this course is to develop an understanding of the underlying concepts, strategies and the issues involved in the exchange of products and services.

### **UNIT I**

Introductory Concept of marketing, difference between marketing and selling, modern marketing concept, marketing mix, market segmentation, marketing planning, strategy and approaches.

### **UNIT II**

Consumer Behaviour: Concept of consumer behaviour, buying motives, study of consumer behaviour and motivational research – its types, nature, scope and role. Method of conducting marketing research, sales promotion and advertising, factors influencing consumer behavior.

### **UNIT III**

Product Management: Nature and scope of product policy decisions, product-mix, product-line and product-life cycle, product planning and development, product diversification, product improvement. Branding and Trade Marks, packaging. Product Pricing-Concept, nature and scope of product pricing decisions; price policy considerations, objectives and strategies of pricing.

### **UNIT IV**

Distribution Management & Marketing communication, Decisions relating to channels of distribution management of physical distribution, sales promotion, sales planning and forecasting, management of sales force, analysis of sales performance and marketing of services, functions of distribution channel, factors influencing distribution channel, integrated marketing communication.

### **References:**

1. Kotler, Keller, Koshi & Jha. Marketing Management- South Asian Perspective. Pearson Publication. 14 th Edition.
2. Ramaswamy & Namakumari. Marketing Management- Concepts and Cases. Macmillan
3. Arun Kumar & Meenakshi N.(2006) Marketing Management. Vikas Publication
4. Saxena R. Marketing Management. Mc.Graw Hill. 6<sup>th</sup> Edition

## **P6': Human Resource Management**

**Total Session: 40**

**Course outcomes:** The objective of this course is to familiarize the students with the conceptual background, theories and techniques of Human Resource Management and teaches the basic techniques of how an organization acquires, rewards, motivates, and manages its people effectively.

### **UNIT I**

Introduction to Human Resource Management: Personnel vs. Human Resource Management, Significance, Functions and Objectives of HRM. Evolution and Development of HRM. Human Resource

Planning: Process, Significance and Integration with Strategic Planning. Job Analysis: Concept and Components.

### **UNIT2**

Recruitment: Concept, Sources and Assessment of Recruitment Techniques. Selection: Concept and Procedure. Placement and Induction, Training and Development: Concept, Need, Objectives and Methods, Stages in Training Process. Job Design: Approaches and Techniques of Job Design.

### **UNIT 3**

Job Evaluation: Concept, Objectives and Methods/ Techniques. Employee Remuneration: Concept of Wage and Salary, Reward Management. Fringe Benefits and Incentive Payments. Performance Appraisal: Concept, Objectives, Process and Techniques.

### **UNIT 4**

Industrial Relations: Concept, Objectives, Approaches and Actors of Industrial Relations. Discipline: Disciplinary Procedure, Objectives and Aspects of Discipline. Grievance Procedure: Characteristics, Need and Model Grievance Procedure. Trade Unionism: Concept, Functions, Objectives and Problems of Trade Unions. Collective Bargaining and Industrial Disputes

### **References:**

1. Dessler, G. & Varkkey, B. (2015); Human Resource Management; New Delhi: Pearson; 14th Edition.
2. Armstrong, M. & S. Taylor. (2017); Armstrong's Handbook of Human Resource Management Practice London: Kogan Page; 14th Edition.
3. Aswathappa, K. (2010); Human Resource and Personnel Management; Tata McGraw-Hill Education; 6th v
4. Rao, P. S., & Rao, V. S. P. (2009); Personnel and Human Resource Management; Himalaya Publishing House; 5th Edition.
5. Bernardin, John H. (2012); Human Resource Management; McGraw Hill; 6th Edition.

**Course outcomes:** Students acquire skills of using end-user software for communication, data transformation and presentation.

**UNIT I:**

**Text processing software:** creating and saving a document, previewing and printing a document, editing, proofreading and formatting of documents. Presenting information in columns and tables, using graphics, symbols, diagrams and charts. Creating and modifying table of contents, index, bookmarks, cross references, hyperlinks, foot notes, end notes and bibliography. Creating form letters, e-mail messages and labels. Collaborating using tracking of changes, adding and reviewing comments, comparing and merging documents, password protecting of documents. Creating documents in alternate formats, mail merge.

**UNIT II:**

**Presentation software:** Creating and managing slides and presentation, entering and editing content on slides, presenting content in tables, inserting, creating and managing graphics, adding sound and animation to slides, reviewing, preparing and delivering presentation, customising and sharing presentations.

**UNIT III:**

**Spreadsheet Software:** Creating workbooks, working with data and tables, formatting and changing workbook appearance, managing and hiding worksheet data, ordering and summarising data, combining data from multiple sources, creating charts and graphs, protection of worksheet

**Performing calculations using Formulas and Functions:** Analysing alternate data sets, creating dynamic worksheets, printing worksheets and charts. Automating repetitive tasks, performing business intelligence analysis: What-if Analysis, Goal seek, Data Table, Lookup, Match, Index etc.

**UNIT IV:**

**Database:** Introduction to Database and Database Management System, Database Models, Type of Databases, Introduction to MS-Access, Creation of database tables, Data types, Basic query and report generation.

**References:**

1. Sinha PK, Sinha P., "Computer Fundamentals: Concepts, Systems & Applications", BPB Publications, 2004.
2. Saxena S.& Chopra P, Computer Application in Management, Vikas Publication,2006
3. Norton P., Introduction to computers, 9<sup>th</sup> reprint Edi., Tata Mcgraw Hill, 2008



**Course outcome:** The purpose of this course is to inculcate sense of preparedness, confidence building, create general knowledge and awareness regarding **Interview Preparation & Planning** among under graduate students.

**UNIT I:**

Communication skill, body language, verbal and non verbal, diction and accent, business writing skills.

**UNIT II:**

Time management, Stress management, General knowledge and general awareness, goal setting, non-ethnocentrism.

**UNIT III:**

Dressing up, grooming, CV writing skill and session on how to avoid typos, howlers, boast and bravado, making it to the point and no nonsense working document to highlight true strength and competence.

**UNIT IV:**

Corporate etiquettes, cross cultural communications, netiquettes, Mock Interview, Group Discussion sessions.

**References:**

1. Chakravarti, Dr T Kalyana; Chakravarthi, Dr T Latha; 2011, Biztantra.
2. Verma, Shalini, 2009, Soft Skill for the BPO sector, Pearson.

## NC1 - Foreign Language

### French Language

**Course Objectives:** To develop listening, speaking, reading & writing skills in French and also to introduce the learner to different aspects of life and culture of the people who speak the language.

**Learning Objectives:** This course will enable the students to listen and comprehend elementary structures of the spoken language, participate in simple conversations in various day to day situations. Further the students will be able to develop the creative aspect of language learning.

#### Unit-I: Lexical Acquisition

1. Alphabet
2. Numbers 0 to 100 (Ordinal, cardinal)
3. Time
4. Days, Months
5. Colours
6. Professions, occupations, nationalities

#### Unit-II : Grammar

1. Nouns
2. Indefinite & Definite articles
3. Adjectives –I
4. Prepositions
5. Pronoms toniques
6. Negation,
7. Interrogative expressions
8. Regular verbs (present tense): - er
9. Irregular verbs (present tense) :être, avoir, aller, venir, faire, etc.
10. Reflexive verbs (present tense) I: s'appeler, se lever etc.

#### Unit-III: Translation and Composition

1. Questions requiring Translation into French -English and vice-versa of Passages from the text and of simple sentences involving useful and familiar idiomatic constructions in French.
2. Questions requiring composition of ten to fifteen simple sentences on some easy topic (e.g. University, Class, Station, Town, House, Monuments, Hotel, Cinema, Theatre etc.)

#### Unit-IV: Communication Skills

1. Communication through body language
2. How to greet
3. Understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs.
4. How to ask and answer questions (reply, order, request)

#### References :

Le Nouveau Sans Frontières- I, Clé International.  
Collins gem French –English / English- French dictionary  
Dondo- Modern French course, Oxford, India.

## **German Language**

**Course Objective:** The course aims at enabling the students to grab the opportunities of jobs also at international level. It becomes easier for them to get placement in different spheres, banks as well as in corporate world, as knowledge of foreign language is one of the requirements for the candidate now a days.

**Learning Objectives:** In this course the students are taught all the three skills, reading, writing, speaking, at basic level.

### **Unit I**

Introduction to Germany, Basic grammar structure, Nouns (singular, plural), Numbers, Days, Months, Seasons, Colours.

### **Unit II**

Personal pronouns, Verbs, Conjunctions, Prepositions, Articles, Adjectives

### **Unit III**

Tenses, Sentence Construction, Interrogative Sentences, Affirmative Sentences, Negative Sentences

### **Unit IV**

Comprehension Texts, Paragraph Writing

### **References:**

1. Häussermann, U., Günther, C. C., Dietrich, G. (1997). Sprachkurs Deutsch 1: Unterrichtswerk für Erwachsene. Germany: Diesterweg.
2. Rusch, P., Müller, M., Scherling, T., Wertenschlag, L. (1997). Moment mal! : Lehrwerk für Deutsch als Fremdsprache ; [Materialien]. 1 : Glossary German-English. Austria: Langenscheidt.

# SEMESTER - IV

## P7: INTRODCUTION TO ANALYTICAL SOFTWARE

Total Session: 40

**Course outcomes:** Analytical software are used to perform analysis. In particular, we will use Excel, R, and SPSS to perform the same sorts of statistical analyses that helps in decision making in various problems.

### UNIT I

Overview of Business Analytics: Introduction to Analytics, Organization/sources of data, Importance of data quality, Dealing with missing or incomplete data, Data Classification.

### UNIT II

Introduction to MS-Excel Application: Introduction to Microsoft Excel, Worksheets and Workbooks, Formatting Cells and Data, Editing Worksheets and Cells, Introduction to Formulas, Creating a What-If Analysis, Adding Images and Graphics, Charts and Diagrams, Creating Data Lists, Pivot Tables and Charts, Templates and Macros, Retrieving External Data, Sorting and Filtering, Common Useful Functions, Introduction to VBA

### UNIT III

Getting started with SPSS: Tour of SPSS windows, menus, and dialogue boxes, Open, save, and close SPSS data and output files, Prepare a data entry codebook, Create a SPSS data file, Enter data into an SPSS data file, Check a data file for errors, Correct errors in the data file, Obtain descriptive statistics, Create a variety of graphs (histograms, bar graphs), Manipulating the data to form, new variables (computing totals, collapsing categories), Sorting the data file

### UNIT IV

Introduction to R- Packages- Scientific Calculator- Inspecting Variables- Vectors Matrices and Arrays- Lists and Data Frames- Functions- Strings and Factors- Flow, Control and Loops- Advanced Looping- Date and Times. Introduction to Python Packages- Fundamentals of Python- Inserting and Exporting Data- Data Cleansing, Checking and Filling Missing Data- Merging Data- Operations- Joins.

### References:

1. Gupta Vikas, (2008) 14 in one computer course kit, Dreamtech Publication
2. Andy Field: Discovering Statistics using SPSS, Sage Publications, 4e, 2019
3. Dalgaard, Peter, "Introductory statistics with R", Springer Science & Business Media, 2008.
4. Richard Cotton, "Learning R", O'Reilly, 2013 Suggestive digital platforms web links-
5. An Introduction to R: <http://cran.r-project.org/doc/manuals/R-intro.pdf>
6. SPSS Beginners Tutorials (<https://www.spss-tutorials.com/basics/#introduction-to-spss>)

**Course outcomes:** The objective of this paper is to give the basic knowledge about the Supply Chain Management for goods and services.

**UNIT-I**

Introduction, Definition of Supply Chain Management, Evolution of the Concept of Supply Chain Management, Logistics Vs Supply Chain Management; Supply Chain Management: Significance and Challenges; Key Drivers of Supply Chain Management, Typology of Supply Chains.

**UNIT- II**

Introduction, Three Components of SCM, Demand Management, Demand Forecasting; Introduction, Supply Management, Evolution of ERP, Concept of ERP in SCM, Quick Response and Accurate Response System in SCM, Use of Other Planning Strategies

**UNIT- III**

Introduction, Understanding the Benchmarking Concept, Benchmarking Process, Benchmarking Procedure

**UNIT-IV**

Introduction, New Developments in Supply Chain Management, Outsourcing Supply Chain Operations, Co-Maker ship, The Role of E- Commerce in Supply Chain Management, Green Supply Chain Management, Distribution Resource Planning, World Class Supply Chain Management.

**References:**

1. Michel H Hungo (2003) Supply Chain Management: PHI
2. Sunil Chopra (2007) Supply Chain Management: McGrwa Hill
3. Samir & Ballao (2003) Logistics Management: Pearson

**Course outcomes:** Customer Relationship Management, also known as CRM, helps businesses successfully implement strategies, practices and technologies aimed at winning and retaining customers profitably. The objective of this course is to equip the students with a sound foundation of CRM concepts and best practices in Industry.

**UNIT I**

Fundamentals of Customer Relationship Management: Meaning and definition of CRM, benefits of CRM, reasons for adopting CRM, Conceptual Foundations of Customer Relationship Management. Types, stages and issues in CRM.

**UNIT II**

Dimensions of Customer Relationship Management Customer Satisfaction: meaning and definition, Customer Satisfaction Models, Measuring Customer Satisfaction, ISO guidelines. Customer Loyalty: Concept, Principles, significance and dimensions of Customer Loyalty.

**UNIT III**

Information Technology in Customer Relationship Management Technological Developments in CRM. Information Technology Implementation in CRM. Features, advantages and functional components of eCRM. Important CRM Software. Customer Relationship Management through Information Technology Tools.

**UNIT IV**

Emerging Dimensions and Dynamics in Customer Relationship Management Customer Recall, Retention and Experience Management. Service Failure and Service Recovery Management. Application of Customer Relationship Management in Different Sectors. Role of Social Media.

**References:**

1. Jagdish N Sheth, Parvatiyar Atul, G Shainesh; (2013), Customer Relationship Management: Emerging Concepts, Tools and Applications Paperback ; McGraw Hill Education
2. Mukerjee; (2007), Customer Relationship Management: A Strategic Approach to Marketing Paperback ; Prentice Hall India
3. Rai A K; (2012), Customer Relationship Management: Concepts and Cases by Prentice Hall India
4. N Mullick; (2016), Customer Relationship Management Paperback, : Oxford University Press
5. William G. Zikmund, Raymond Mcleod, Faye W. Gilbert: (2003), Customer Relationship Management; Wiley Publication
6. Jill Dyche, (2001), Customer Relationship Management; Pearson Publication

**Course outcomes:** The Paper helps students to understand databases and the relational databases which helps them in decision making and solving business problems.

**UNIT I**

Introduction to Databases and Transactions: What is database system, purpose of database system, view of data, relational databases, database architecture, transaction management Data Models The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction

**UNIT II**

Database Design, ER - Diagram and Unified Modeling Language : Database design and ER Model : overview, ER - Model, Constraints, ER - Diagrams, ERD Issues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML. Relational database model: Logical view of data, keys, integrity rules. Relational Database design: features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).

**UNIT III**

Relational Algebra and Calculus

Relational algebra: introduction, Selection and projection, set operations, renaming, Joins, Division, syntax, semantics. Operators, grouping and ungrouping, relational comparison. Calculus: Tuple relational calculus, Domain relational Calculus, calculus vs algebra, computational capabilities.

**UNIT IV**

Constraints, Views and SQL

What is constraints, type of constrains, integrity constraints, Views: Introduction to views, data independence, security, updates on views, comparison between tables and views. SQL : data definition, aggregate function, Null Values, nested sub queries, joined relations. Triggers

**References:**

1. Silberschatz A., Korth H., Sudarhan S., "Database System and Concepts", fifth Edition McGraw - Hill,
2. Rob, Coronel, "Database Systems", Seventh Edition, Cengage Learning.

## **P4'' Quantitative Techniques – II**

**Total Sessions: 40**

**Course outcomes:** The course aims to build skills for statistical and mathematical inferences of business data and acquaint the students with various quantitative tools and techniques used in business decision making.

### **UNIT I**

**Differential Calculus:** Differentiation, Differentiation of a product of two function, Differentiation of a quotient of two functions, Differentiation of a function of a function, Differentiation of a logarithmic and exponential function, Differentiation of implicit function, Maxima and Minima, Simple problems. (Trigonometrical function are excluded),

### **UNIT II**

**Integral Calculus:** Fundamental rules of integration, Integration by substitution, integration by parts. Integration by decomposition into a sum using partial fractions (Simple Problems), Simple business applications (Trigonometrical functions are excluded)

### **UNIT III**

**Probability** – Definition - objective and subjective, addition and multiplication theorem of probability, conditional probability, Baye's theorem, probability distribution, binominal, poisson and normal.

### **UNIT IV**

Sampling Distribution- Sampling Process, Sampling Techniques-Probability and Non-Probability Sampling, Sample Size Decision. Hypothesis: Null Hypothesis & Alternative Hypothesis; Type-I & Type-II Errors; Hypothesis Testing: Z-Test & T-Test. Simple Problems.

### **References:**

1. Taha, Hamdy A.(2007) Operations Research, An Introduction, Pearson Education, 8<sup>th</sup> edition
2. Gupta,S.C. & Kapoor VK, (2002) Fundamentals of Mathematical Statistics, Sultan Chand & Sons Reprint Edition.
3. Arulmozhi ,G. and Muthulakshmi ,S(2009),Statistics for Management, The McGraw-Hill Education, ISBN: 9780070153684.
4. Sancheti & Kapoor, (2008) Business Mathematics ,Sultan Chand & Sons, Reprint Edi.
5. Bajpai N., (2011) Business Research Methods:, Pearson publisher.



## **VC2: Role Play and Simulation**

**Total Session: 40**

**Course Outcome:** To learn about industry working and daily facing situations in various departments. The subject provide command and knowledge to deal the situation in various hierarchy of management. Student will learn situation handling at various levels through simulation.

### **UNIT I**

Role play and simulation: Introduction of role play and simulation, difference between role play and simulation, Introduction of hierarchy in organization and their roles

### **UNIT II**

Role play and simulation: Maslow Theory, Herzberg Two Factor Theory, Johari Window Model: accommodating with real life examples, cases and videos.

### **UNIT III**

Instructional strategies: Role paly, simulations and live events at operational level, middle level and higher level, facilitating and debriefing simulation games: facilitator role

### **UNIT IV**

Role play and simulation: The future of simulation games: issues and challenges, coping change management, Coping with emerging and instant situations,

### **Reference:**

1. Riis, J. O. and Smeds, R. (1998), The Future of Simulation Games and Challenges, Chapman & Hall
2. Robins, S. P., Judge, T. A. and Vohra, N. (2018 )Organizational Behaviour, Pearson Educaion, 18<sup>th</sup> Edition
3. Law, Averill M. (2014), Simulation Modeling and Analysis (IRWIN INDUSTRIAL ENGINEERING), McGraw-Hill Education, 5<sup>th</sup> Edition
4. Gibson, David (2006), Games And Simulations in Online Learning: Research and Development Frameworks, IGI Global, 1<sup>st</sup> Edition

# **Degree**

**BBA**

**(Management Science)**

**Year 3 (Semester 5+6)**

# SEMESTER – V

## **P9: ENTREPRENEURSHIP & FAMILY BUSINESS-I**

**Total Sessions: 40**

**Course outcomes:** This course provides students with a solid introduction to the entrepreneurial process of creating new businesses, role of Creativity and innovation in Entrepreneurial start-ups, manage family-owned companies, context of social innovation and social entrepreneurship and issues and practices of financing entrepreneurial businesses.

### **UNIT-I**

The evolution of the concept of entrepreneurship. John Kao's Model on Entrepreneurship. Entrepreneurship: Meaning and objective. Idea Generation, identifying opportunities and Evaluation; Building the Team / Leadership; Strategic planning for business.

### **UNIT-II**

Stimulating Creativity; Organisational actions that enhance/hinder creativity, Managerial responsibilities, Creative Teams; Sources of Innovation in Business; Managing Organizations for Innovation and Positive Creativity.

### **UNIT-III**

Introduction to Social Entrepreneurship; Characteristics and Role of Social Entrepreneurs; Innovation and Entrepreneurship in a Social Context; Start-Up and Early Stage Venture. Business Strategies and Scaling up.

### **UNIT-IV**

The Entrepreneur; Role and personality; Family Business: Concept, structure and kinds of family firms; Culture and evolution of family firm. Financing The Entrepreneurial Business: Arrangement of funds; Traditional sources of financing, Loan syndication, Consortium finance, role played by commercial banks

### **References:**

1. Burns, P. (2001). Entrepreneurship and small business. New Jersey: Palgrave.
2. Drucker, P.F. (2006). Innovation and entrepreneurship: Practice and principles. USA: Elsevier.
3. Gersick, K. E., Davis, J. A., Hampton, M. M., and Lansberg, I. (2000), Generation to generation: Life cycles of the family business. Boston: Harvard Business School Press. Kumar
4. .S.C. Poornima, M.K. Abraham, K. Jayashree (2011); Entrepreneurship Development; New Age International Publishers, 1<sup>st</sup> Edition.
5. A.Sahay, M. S. Chhikara (2007); New Vistas of Entrepreneurship: Challenges & Opportunities; Excel Books, 1<sup>st</sup> Edition.

## **P10: Business Policy & Strategic Management - I**

**Total Sessions: 40**

**Course outcomes:** The purpose of this course is to develop an understanding of underlying concepts, tools, frameworks, issues and challenges involved in the area of Business Policy & Strategic Management - I for Under-graduates. The course aims to achieve development of an understanding of the increasing competition as well as not for profit business policies, strategies and the practice in organizations to be aware of the different circumstances and situations arising from ever changing strategic situation.

### **UNIT-I**

Introduction & Concept of Strategy, Corporate Policy as a field of study, Nature. Importance, purpose and objective of business policy, Chief Executive job, roles and responsibilities of board of Directors, An overview of strategic management, its nature and process, Formulation of strategy, Environment, environment scanning, environment appraisal, Identifying corporate competence & resource.

### **UNIT-II**

Corporate Strategy, Personal and Ethical Values, Business ethics, Industry structure, Reconciling divergent values, Modification of values, moral components of corporate strategy, community considerations and corporate social responsibility (CSR) .

### **UNIT-III**

Corporate portfolio analysis, competitor & SWOT analysis, strategic audit & choice, strategic plan, routes to sustainable competitive advantage (SCA).

### **UNIT-IV**

Strategy Implementation, Structural implementation, organisational design and change, behavioural implementation, leadership, corporate culture. corporate politics and use of power, functional implementation - financial, marketing. Operation personnel (HR) policies and their integration, strategic evaluation and control.

### **References:**

1. Wheelen, Thomas L , Hunger, J David & Rangarajan, Krish; Concepts in Strategic Management & Business Policy, 9th Ed, Pearson Education,
2. David, Fred R , 12th Ed, Strategic Management – Concepts & Cases, PHI,
3. Kazmi, Azhar; Business Policy, McGraw Hill,
4. Pearce, John A , Robinson, Richard B , Mital, Amita , 10th Edition., Strategic Management – Formulation, Implementation & Control, McGraw Hill

**Course outcome:** This paper would make students learn about the latest version MS Windows operating system. The application software covered under this paper would include MS Office.

### **UNIT I**

Introduction to DOS (Disk Operating System): DOS Components – I/O Systems, BIOS, COM, IBM, DOS-COM, start-up sequence, file name, hard disk; Use of function keys; File commands; Dir, Copy, Delete, Rename, Type-Print Etc. Disk Commands – Format, Diskcopy Backup, Restore, Chkdsk, Batch Files, Editor; Creating and editing files, commands and special editing keys, Setting up MS-DOS; System and autoexec.bat files; use of wild cards, redirecting commands; input/output fitters, pipes.

### **UNIT II**

Operating System-Windows Concepts of CUI & GUI, MS-Windows as GUI operating system, parts of windows, capabilities – interface, menu driven, ready internet connectivity, easy navigation, simple keep up and management of files, inbuilt product – notepad, paint brush word pad, windows explorer.

### **UNIT III**

Tools of Office Support- Introduction to word processing software, Introduction to Presentation software, Introduction to Databases and DBMS Concept, Database Models. Working on MS Access: Creation of Table, Query etc.

### **UNIT IV**

Tools of Business Support: Introduction to MS excel, Worksheet Addressing, Name Range, Basic formula and function, Table and Chart, Sort and Filters, Conditional formatting, nested conditions, Marco, OLE Concept. Some advance tools like-Data Validation, what if analysis, sensitivity analysis; goal seek analysis, Pivot Table, Optimization analysis, Lookup function, Security and protection of worksheet etc.

### **References:**

1. Rajaraman, V. (2004). Introduction to Information Technology. PHI.
2. Sinha, P.K., Priti Sinha (2002). Foundation of computing. BPB Publications.
3. Ram, B. (2003). Computer Fundamentals. New Age Publications

**Course outcomes:** The course of Consumer Behaviour aims at enabling students to understand the process of consumer behaviour, issues and dimensions, various internal and external factors that influence consumer behaviour and to apply this understanding to the development of marketing strategy.

**UNIT I**

Consumer Behaviour: Definition, Nature, characteristics, Scope, Relevance & Application; Importance of consumer behaviour in marketing decisions; Consumer Vs Industrial Buying Behaviour and Market Segmentation and Bases for Market Segmentation.

**UNIT II**

Determinants of Consumer Behaviour: Role of Motivation; Personality and Self Concept; Attention and Perception; Consumer Learning; Consumer Attitudes- Formation and Change; Consumer Values and Lifestyles External Determinants of Consumer Behaviour: Influence of Culture and Sub Culture; Social Class; Reference Groups and Family Influences.

**UNIT III**

Consumer Decision Making Process: Problem Recognition- methods of problem solving; prepurchase search influences- information search; alternative evaluation and selection; outlet selection and purchase decision (compensatory decision rule, conjunctive decision, rule, Lexicographic rule, affect referral, disjunctive rule).

**UNIT IV**

Post Purchase Behaviour; Situational Influences; Cognitive Dissonance Diffusion of Innovation: Definition of innovation, product characteristics influencing diffusion, resistance to innovation, adoption process. Consumer Involvement: Role of Consumer Involvement; Customer Satisfaction; Consumer behaviour in Marketing Strategy, Technology's impact on Consumers.

**References:**

1. Leon G. Schiffman & Leslie Lazar Kanuk, (2019), Consumer Behavior; pearson publication
2. Michael R. Solomon, (2017), Consumer Behavior , Tata McGrawhill
3. David L. Loudon & Albert J. Della Bitta, (1988), Consumer Behavior
4. Wayne D. Hoyer; Deborah J. MacInnis and Pinaki Dasgupta, (2010), Consumer Behavior
5. Seth Jagdish, Jain Varsha, Don E. Schultz; (2019), Consumer Behavior A Digital Native, Pearson Publication

Majumdar Ramanuj, (2010), Consumer Behavior Insight from Indian Market, EEE Publication

## **P9': BUSINESS ETHICS**

**Total Session: 40**

**Course outcomes:** The aim of the course is to develop basic understanding about Business Ethics among the students. It also seeks to establish the importance of adopting ethical practices in business organizations.

### **UNIT I**

Business Ethics- An Overview-Concept, nature, evolving ethical values, Arguments against business Ethics.

Ethical theories and approaches - The Teleological approach and the Deontological approach. Universalism vs. Ethical relativism, Utilitarianism, Ethical principles in business.

Ethics and Morality, Ethical dilemma, Resolving ethical dilemma, Ethical decision making, Ethical competency, Conflict of interest.

### **UNIT 2**

Work life in Indian Philosophy: Indian ethos for work life, Indian values for the work place, Work-life balance. Gandhian Philosophy of Wealth Management-Philosophy of Trusteeship

Values - Concept & Relevance in Business, Types of values, Values & ethical behaviour, Professional values

### **UNIT 3**

Application of Business Ethics in the world of business (Intellectual property rights like designs, patents, trademarks, copy rights). Ethics in marketing (consumer rights, advertising, dumping). Ethics in finance (financial disclosures, insider trading, window dressing). Ethics in information technology and systems usage (data confidentiality). Ethics in human resources management (whistle blowing, discrimination), Environmental ethics (Carbon trading).

### **UNIT 4**

Corporate Social Responsibility-Social Responsibility of business with respect to different stakeholders, Carroll's Pyramid of Corporate Social Responsibility, CSR and strategy, Shareholder theory of the firm, voluntary guidelines, Regulatory mandates for CSR

Corporate Governance - Concept, Definition, Corporations and their characteristics, Global Corporate Governance Practices

### **References:**

1. Ethics and the Conduct of Business, by Boatright (Pearson Education)
2. Business Ethics and Corporate Governance. ICFAI Center for Management Research, Hyderabad.
3. Chakraborty, S. K. Values and Ethics for Organizations. Oxford India Press.
4. Crane, A., & Matten, D. Business Ethics. Oxford University Press.
5. Petrick, J., & Quinn, J. Management Ethics: Integrity at Work. Response Books.
6. S K Mandal. Ethics in Business and Corporate Governance, McGraw Hill Education.
7. Praveen B Malla. Corporate Governance: History, Evolution and India Story, Routledge.
8. Sunita Sharma. Corporate Governance in India, New Century Publication

**Course outcomes:** The objective of the course is to familiarize the participants with legal perspective of the business and to give the basic knowledge about the rules and regulation of execution of Business.

**UNIT I**

The Indian Contract Act 1872: Scope of the Act, Essential of A Valid Contract, Agreement, Performance of Contracts, Breach of Contract & Remedies, Quasi-Contracts, Contract of indemnity and guarantee : meaning and its distinction, rights and duties of indemnifier, indemnified and surety, discharge of surety's liability. Bailment and pledge: meaning and distinction, Rights and duties of bailor and bailee, pawnor and pawnee.

**UNIT II**

The Sale of Good Act, 1930: Formation of Contract, Conditions & Warranties, Rights of an Unpaid Seller, Performance of the Contract of Sale, Caveat empetor, Ownership of goods and transfer, unpaid seller and his rights.

**UNIT III**

The Partnership Act: Definition and nature of partnership, rights and duties of partners, types of partners, dissolution of partnership.

The Negotiable Instruments Act, 1881: Nature and Types of negotiable instruments, Negotiation and Assignment, Holder-in-Due Course, Dishonour and Discharge of Negotiable Instrument; Arbitration

**UNIT IV**

The Companies Act, 1956: Nature and Type of Companies, Formation of Companies, Memorandum and Articles of Association, Prospectus, Share capital, Membership, Meetings and Winding-Up

**References:**

1. Gulsan & Kapoor : Business Law including Company Law, Excel Book, 3rd Edition.
2. Singh, Avtar : Principles of Mercantile Law, Eastern Book Company, 12th Edition.
3. Kapoor N.D: Elements of Mercantile Law, Sultan Chand & Sons. 38th Edition.
4. Shukla M.C. : A Manual of Mercantile Law, S. Chand, 13th Edition.
5. Bare Acts. : Indian Contract Act, 1872. Sale of Goods Act, 1930 Partnership Act, 1932. The Negotiable Instruments Act, 1881 .

**INTERNSHIP PROJECT**



# SEMESTER – VI

## **P12: ENTREPRENEURSHIP & FAMILY BUSINESS-II**

**Total Sessions: 40**

**Course outcomes:** The course is designed as a broad overview of entrepreneurship, including identifying a winning business opportunity, gathering funding for and launching a business, growing the organization and harvesting the rewards. It is an integrative course—one that combines material introduced to the students in core courses and applies it to the design and implementation of new ventures. The students are expected to have completed courses in Management Principles, Marketing, HRM, Productions & Operations, Economics, Accounting & Finance.

### **UNIT-I**

Understanding Women Entrepreneurship: Concept, Evaluation, Importance and functions of women entrepreneurship, Topologies and categories of women entrepreneur, Entrepreneurship as a Career Option. Entrepreneurial Leadership. Types of New Ventures, Tax implications of various forms of Ventures. Procedures for setting up a Business in India. Creativity and Innovation. Bottlenecks to Creativity and innovation. Disruptive Technology and generating commercial value from Innovation.

### **UNIT-II**

Entrepreneurship and Intellectual Property Rights (IPR): Patents, Trademarks and Copyrights. Business Plan: Purpose and Contents of a Business Plan. Marketing Plan: Need for Marketing Research, Industry Analysis, Competitor Analysis, Market Segmentation, Target Markets, Market Positioning, Marketing Mix, Marketing Plan and Market Strategy.

### **UNIT-III**

Family genogram. Developing Business family's genogram, Using the Genogram to identify family scripts and themes. Circumplex Model of Marriage and Family Systems (understanding Family Cohesion and Family Flexibility), Application of Circumplex Model, Clinical Rating Scale and Developing Circumplex Model.

### **UNIT-IV**

Vries's Five Critical Phases of Change (concern, crisis, confrontation, crystallization, and change). A model of individual change; The process of change within Family Enterprises; Understanding the change process in families.

### **References:**

1. Burns, P. (2001). Entrepreneurship and small business. New Jersey: Palgrave.
2. Drucker, P. F. (2006). Innovation and entrepreneurship: Practice and principles. USA: Elsevier.
3. Kumar A (2012); Entrepreneurship; Pearson, 3<sup>rd</sup> Edition.
4. Poornima M.C. (2006); Entrepreneurship Development: Small Business Enterprises; Pearson, 1<sup>st</sup> Edition.

**Course outcome:** The purpose of this course is to develop an understanding of issues and challenges involved in the area of Business Policy & Strategic Management – II for Under-graduates. To comprehend strategic management process, understand interrelationship between formulation and implementation and apply administrative and leadership skills for successful implementation of strategies.

**UNIT-I:**

Nature and Scope of Strategic Management. Concept of Core Competence, Capability and Organisational learning; Management of Strategic Change; Process of Strategic planning and Implementation, Activating Strategies, Strategy and Structure.

**UNIT-II:**

Behavioural Implementation: An overview of: Leadership, Corporate Culture, Corporate Politics and Use of Power, Functional / Operational Implementation: An overview of Functional Strategies.

**Unit III:**

Strategy Evaluation and Control, Mc Kinsey's 7s Framework, Balanced Score Card, Triple Bottom-line, Strategic drift, Mergers and Acquisitions: Takeover and Defence Tactics, Laws For Mergers And Acquisitions, Regulatory Framework of Takeovers in India, Cross Border Mergers and Acquisitions..

**Unit IV:**

Tailoring Strategy to Fit Specific Industry and Company Situations: Strategies for Competing in Emerging Industries; Strategies for competing in Turbulent, High-Velocity Markets; Strategies for Competing in Maturing Industries; Strategies for Competing in Fragmented Industries; Strategies for Firms in Stagnant or Declining Industries; Strategies for Sustaining Rapid Company Growth; Strategies for Industry Leaders; Strategies for Runner-up Firms; Strategies for Weak and Crisis Ridden Businesses.

**References**

1. Thompson, Strickland, Gamble and Jain. 2010, 16th edition, Strategic Management, McGraw Hill.
2. David, Fred R (2000), 12th Ed, Strategic Management – Concepts & Cases, PHI,
3. Kazmi, Azhar (2003) Business Policy, McGraw Hill,
4. Wheelen, Thomas L , Hunger, J David & Rangarajan, Krish; Concepts in Strategic Management & Business Policy, 9th Ed, Pearson Education

**Course outcomes:** Understand the fundamental principles of e- Business and e- Commerce; Learn the technologies enabling e-commerce.

**UNIT I**

Introduction to ecommerce: Meaning and concept of ecommerce, ecommerce vs e-business, advantages and disadvantages of ecommerce, value chain in ecommerce, Porter's value chain model, competitive advantage and competitive strategy, different types of ecommerce like Business-to- Business (B2B), Business- to- customer (B2C), Customer-to-customer (C2C), customer- to-business(C2B),G2C. E-commerce: Business Models and Concepts

**UNIT II**

E-Commerce- A Consumer Oriented Approach: Traditional v/s E-Retailing, Key success factors in E-retailing, Models of E-retailing, and Characteristics of E-retailing. E-services: Categories of Eservices, Web-enabled services, Information selling on the web, Entertainment, Auctions and other specialized services.

**UNIT III**

Technology in ecommerce: An overview of the internet, basic network architecture and the layered model, internet architecture, network hardware and software considerations, intranets and extranets,The making of world wide web, web system architecture, ISP, URL's and HTTP, cookies.

**UNIT IV**

Building and hosting your website: choosing an ISP, registering a domain name, web promotion, internet marketing techniques, e-cycle of internet marketing, personalization, mobile agents, tracking customers, customer service, CRM and e- value. Web page design using HTML and CSS: Overview of HTML, basic structure of an HTML document, basic text formatting, links, images, tables, frames, form and introduction to CSS. Security threats: Security in cyberspace, kinds of threats and crimes: client threat, communication channel threat, server threat, other programming threats, frauds and scams. Business to Business e-commerce: Meaning, benefits and opportunities in B2B, B2B building blocks.

**References:**

1. KennethC. Laudon and Carol G.Traver, E-commerce: business, technology, society, Addison sWesley.
2. Elias.M.Awad, Electronic Commerce, Prentice-Hall of India Pvt Ltd.
3. EfraimTurban, JaeLee, DavidKing, H.Michael Chung, "Electronic Commerce–A Managerial Perspective", Addison Wesley

## **P14 Y Mathematical Modelling**

**Total Sessions: 40**

**Course outcomes:** The basic objective of this course is to impart knowledge of mathematical modeling techniques to be used for business decisions & management.

### **UNIT I**

Need, basic outlines & techniques of mathematical modeling. Mathematical modeling through geometry, algebra, trigonometry & calculus. Limitations of mathematical modelling techniques.

**Linear Programming: Introduction:** formulation & solution of simple linear programming problem through graphical.

### **UNIT II**

**Decision theory:** Introduction, Decision situations, Types of decisions-making environment, Decision making certainty, Risk and uncertainty.

**Replacement decisions:** Introduction, methodology of replacement decisions, replacement of items that deteriorate with time (with & without change in money value).

### **UNIT III**

**Queuing (Waiting Line) Theory:** Introduction characteristics of elementary queuing systems, management aspects of queuing theory, patterns of arrivals & departures. Single channel service system with Poisson Arrivals & Poisson departure.

### **UNIT IV**

**Simulation Techniques:** Introduction, advantages & simple applications of statistical simulation techniques. Types of Simulation, Methods for Gathering Statistical Observations.

### **References:**

1. Kapoor, V.K. & Kapoor Sumant (2014): Operations Research, Sultan Chand & Sons,
2. Sharma, J.K (2012), Operations Research : Theory and Application, MACIN, 5th Edition
3. Taha, Hamdy A.(2007) Operations Research, An Introduction, Pearson Education, 8<sup>th</sup> edition
4. Chawla K.K., Gupta V., Sharma BK, (2014) Operations Research (Quantitative Analysis For Management), Kalyani Publishers
5. Hira D. S., Gupta Prem Kumar (1976), Operation Research, S. Chand.

**P11': CORPORATE GOVERNANCE AND CORPORATE SOCIAL RESPONSIBILITY**

**Total Session: 40**

**Course outcomes:** The objective of this course is to familiarize the students with the conceptual background, theories and techniques of Corporate Governance and teaches the basic techniques of how an organization manages its people to contribute for the society through Corporate Social Responsibility.

**UNIT I**

Introduction to Corporate Governance: Meaning, Significance, Functions and Objectives. Evolution and Development of Corporate Governance in India. Pillars and components. Recent Development in Corporate Governance.

**UNIT2**

Corporate Governance Theories- Organizational Theories (including Stewardship, Resource and Institutional Theory), Economic Theories (such as Agency, Finance and Managerial Theory) and the Stakeholder Theory. Corporate Governance and Corporate Performance - guidelines in companies. Case Study.

**UNIT 3**

Corporate governance and Corporate social responsibility -Introduction, Early roots of corporate social responsibility. Does corporate social responsibility improve financial performance? Sustainability and a stakeholder perspective. The Criticism of Corporate Social Responsibility. Sustainability reporting.

**UNIT 4**

Implementing Corporate governance standards in different jurisdictions, including the United States, European Union countries and emerging countries. International Aspects of Corporate Social Responsibility; Stakeholder engagement.

**References:**

1. Monks, R., Minow, N.: Corporate Governance; 4rd edition, Wiley-Blackwel publishing, 2008
2. Crowther, D., & Aras, G. (Eds.). (2012). *Global perspectives on corporate governance and CSR*. Gower Publishing, Ltd..

**Course outcomes:** Students will be able to understand and articulate fundamental concepts of information systems management. Apply IT to solve common business problems. Plan and implement effective IT solutions to business problems. Apply the ethical aspects of information technology use in the organization.

**UNIT I**

Information Systems: Concept & Technologies, Role of information Systems in Business. Influence of Information Systems in Transforming Businesses. Global E Businesses and Collaborations, Strategic roles of Information Systems. Behavioural, Technical and Socio-technical approaches. Enhancing Business Processes through Information Systems. Types of Business Information Systems. TPS, MIS, DSS and EIS. Organising the Information Systems function in Business. Ethical and Social issues of Information Systems.

**UNIT II**

Using Information Systems to Achieve Competitive Advantage: Porter's Competitive Forces Model and The Business Value Chain Model. Aligning Information Systems with Business. Decision Making and Information Systems: Types of Decisions and the Decision-Making Process, Business Value of Improved Decision Making. Decision Support for Operational, Middle and Senior Management. Concepts of Database and Database Management System.

**UNIT III**

Functional Information Systems: Marketing, Human Resource, Financial and Operational Information Systems. Cross Functional Information Systems, Enterprise Systems. Supply Chain Management Systems. Customer Relationship Management Systems. Business Value of Enterprise applications and challenges in Implementing.

**UNIT IV**

Implementing Information Systems as Planned Organisational Change: Business Process Reengineering. Systems Analysis and Systems Design. Modeling and Designing Systems: Structured and Object- Oriented Methodologies, Traditional Systems Life Cycle, Prototyping, End-User Development, Application Software Packages and Outsourcing. Implementing Information Systems. Introduction to Change Management.

**References:**

1. Laudon Kenneth C. and Laudon Jane P, Management Information Systems Managing the Digital Firm; Pearson Publication, 15e , 2018
2. Jawadekar Waman S., Management Information Systems A Global Digital Enterprise Perspective; McGraw Hill, 2013.
3. R.Priyadharshini, Dr.S.Shajahan, Management Information Systems, New Age International Publishers, 2004.

**MINOR PROJECT**

# **BBA(MS) Research**

**BBA (Management Science)**

**Year 4 (Semester 7+8)**

# SEMESTER – VII

## P15 DECISION SCIENCES

**Total Session: 40**

**Course outcomes:** The basic objectives of this course is to impart knowledge of different quantitative models & operations research techniques used in business decisions and management.

### UNIT I

Introduction, advent & scope of operations research techniques their fields of specialized applications along with an overview of different techniques.

**Linear Programming:** Introduction, formulation & solution of simple linear programming problem through graphical & simplex method.

### UNIT II

**Game theory:** Introduction, definitions, Two-person zero sum game pay off matrix, Pure strategies; games with saddle point, The rule of dominance, Mixed strategies; games without saddle point.

### UNIT III

**Transportation problem:** Methods for finding initial solution, North west corner method; Least cost method; Vogel's approximation method, Optimality test, Stepping stone method; Modified distribution method (MODI)

### UNIT IV

**Assignment Problem:** Introduction & mathematical models for assignment. Hungarian method of assignment problem, special cases in assignment problems: maximization case in assignment problem and prohibited assignment, unbalanced assignment problem.

### References:

2. Kapoor, V.K. & Kapoor Sumant (2014): Operations Research, Sultan Chand & Sons,
3. Sharma, J.K (2012), Operations Research : Theory and Application, MACIN, 5th Edition
4. Taha, Hamdy A.(2007) Operations Research, An Introduction, Pearson Education, 8<sup>th</sup> edition
5. Chawla K.K., Gupta V., Sharma BK, (2014) Operations Research (Quantitative Analysis For Management), Kalyani Publishers
6. Hira D. S., Gupta Prem Kumar (1976), Operation Research, S. Chand



**Course outcomes:** Students will be able to understand the characteristics of Project and Project Management Knowledge. The students will understand the managerial process along with tools and techniques used in Project management Knowledge. Students will understand the scheduling and monitoring process in Project.

**UNIT I**

Definitions and Characteristics of Project, Scope of Project Management, Types of Projects, Project Life Cycle, Project Management Process: Introduction, Tools & Techniques of Project Management, Entrepreneurial Skills, Market & demand analysis, Collection of Primary & Secondary information, Demand forecasting, Market planning.

**UNIT II**

Technical Analysis, Manufacturing process / technology, Material inputs & utilities, Product Mix, Plant Capacity, Location and site, Machinery & Equipment, Structures & Civil work, Environmental aspects, Project Charts & Layouts, Project Time Lines.

**UNIT III**

Project appraisal: Cost benefit analysis (Cash flow projections), Financial evaluation: Capital budgeting techniques-discounted and non-discounted, Project rating index, critical examination of evaluation techniques,

Economic, commercial, social cost benefit analysis in public and private sectors, investment criteria and choice of technique, Treatment of risk and uncertainty—types and risk measuring techniques, risk sensitivity analysis, probability approach single as well multiple projects, allocation of limited capital

**UNIT IV**

Project Implementation: Forms of project organization, Project control & control charts, Human aspects of project management, Prerequisites for a successful project implementation, Introduction to project network & determination of critical path, Preparation of comprehensive project report, Project Termination-Types and process.

**References:**

1. Jack R. Meredith, and Samuel J. Mantel Jr. (2008), Project Management: A Managerial Approach, John Wiley & Sons, 7<sup>th</sup> Edition.
2. Marwah, Sanjiv (2011), Project Management, Dreamtech Press, 1<sup>st</sup> Edition
3. Chandra, Prasanna (2019), Projects: Planning, Analysis, Selection, Financing, Implementation and Review, McGraw-Hill, 9<sup>th</sup> Edition.
4. Gopalan, M.R. (2014), Project Management Core Textbook, Wiley, 2<sup>nd</sup> Indian Edition.
5. Shukla, M. B. (2007), Entrepreneurship And Small Business Management, Kitab Mahal, 1<sup>st</sup> Edition

## **P17 BUSINESS ANALYTICS**

**Total Session: 40**

**Course Objective:** Understand the fundamentals of business analytical, data handling and related research issues.

### **UNIT I**

Overview of Business Research: Role of Statistical Packages in Research. Reliability and Validity of data. Basic Operation of SPSS: Data Import, Data entry, Handling Missing Values, Data Transformation and Manipulation, Data sorting and editing. Exploratory Data Analysis: Tabulation of data, Frequency table, Descriptive Statistics, Graph and Plot formulation.

### **UNIT II**

**Basic Module using SPSS:** Crosstabulation, Bivariate Correlation, Simple linear Regression, Multiple Regression Analysis.

### **UNIT III**

**Testing of Hypothesis:** P value concept, Z - test, t – test, ANOVA, Chi – Square Test, Non – parametric testing, Analyzing Categorical data.

### **UNIT IV**

**Multivariate Analysis:** Logistic Regression, Factor Analysis, Discernment analysis, Cluster Analysis, Conjoint Analysis, Analysis of Covariance, MANOVA.

### **References:**

1. Andy Field (2019), Discovering Statistics using SPSS, Sage Publications, 4e,
2. Srivastava & Rego(2017), Business Research Methodology, TMH.
3. Narguandkar(2019), Marketing Research: Text & Cases, TMH,
4. Cooper & Schindler (2015) Business Research Methods,12th Edition, Mcgraw-Hill
5. Luck D. & Rubin D. (2006) Marketing Research, 7th edition, PHI, New Delhi.

**Course outcomes:** To study the further database techniques beyond which covered in the first year, and thus to acquaint the students with some relatively advanced issues. At the end of the course students should be able to: gain an awareness of the basic issues in objected oriented data models, learn about the Web-DBMS integration technology and XML for Internet database applications.

### **UNIT I**

Overview of Object-Oriented concepts and characteristics, Objects, OIDs and reference types, Database design for ORDBMS, Comparing RDBMS, OODBMS & ORDBMS, Advance Database Management System – Concepts & Architecture, Spatial data management, Web based systems, Overview of client server architecture, Databases and web architecture, N- tier Architecture, Business logic – SOAP, Multimedia databases, Mobile database etc.

### **UNIT II**

Parallel databases Introduction, Parallel database architecture, I/O parallelism Inter-query and Intra-query parallelism, Inter operational and Intra- operational parallelism, Design of parallel systems, Parallel databases mining.

### **UNIT III**

Distributed Databases Introduction, DDBMS architectures, Homogeneous and Heterogeneous Databases, Distributed data storage, Distributed transactions, Commit protocols, Availability, Concurrency control & recovery in distributed databases, Directory systems

### **UNIT IV**

Knowledge base Systems Integration of expert in database application & object database overview, Introduction to Data warehousing, Architecture, Dimensional data modelling- star, snowflake schemas, fact constellation, OLAP and data cubes, Operations on cubes Data pre-processing, Introduction to Mobile Database management, Web data management, Cloud data management.

### **References:**

1. Peter Rob, Carlos Coronel, Database systems : "Design implementation and management"- 4 th Edition, Thomson Learning Press
2. Raghu Ramkrishnan, Johannes Gehrke, Database Management Systems - Second Edition, Tata McGrawhill Publication.
3. Alexis Leao, Mathews Leon, Database Management System – Vikas Publication.
4. Ramez Elmasri ,Shankant B. Navathe, Fundamentals of Database Systems – Pearson Publication.

**Course outcomes:** The objective of this course is to impart necessary and practical knowledge of components of Internet of Things and develop skills required to build real-life IoT based projects.

**UNIT I**

Introduction to IoT : Architectural Overview, Design principles and needed capabilities, IoT Applications, Sensing, Actuation, Basics of Networking, M2M and IoT Technology Fundamentals- Devices and gateways, Data management, Business processes in IoT, Everything as a Service(XaaS), Role of Cloud in IoT, Security aspects in IoT.

**UNIT II**

Elements of IoT: Hardware Components- Computing (Arduino, Raspberry Pi), Communication, Sensing, Actuation, I/O interfaces. Software Components- Programming API's (using Python/Node.js/Arduino) for Communication Protocols-MQTT, Bluetooth.

**UNIT III**

IoT Application Development: Solution framework for IoT applications- Implementation of Device integration, Data acquisition and integration, Device data storage- Unstructured data storage on cloud/localserver, Authentication, authorization of devices

**UNIT IV**

Security and Privacy for IOT, Block chain Technology, Challenges Associated with Secure IoT Deployment, Communicational Technologies and Protocols for IOT

**References:**

1. Vijay Madiseti, Arshdeep Bahga, Internet of Things, "A Hands on Approach", University Press
2. Dr. SRN Reddy, RachitThukral and Manasi Mishra, "Introduction to Internet of Things: A practical Approach", ETI Labs
3. Jeeva Jose, "Internet of Things", Khanna Publishing House, Delhi
4. Adrian McEwen, "Designing the Internet of Things", Wiley Publication
5. Raj Kamal, "Internet of Things: Architecture and Design", McGraw Hill Publication

**Course outcomes:** To understand Enterprise- wide systems and technologies relevant to business and develop resource plans for the enterprise accordingly

**UNIT I**

**Introduction to Enterprise Resource Planning**, Definition of Enterprise Resource Planning (ERP); Evolution of ERP; Characteristics, Features, Components and needs of ERP; ERP Vendors; Benefits & Limitations of ERP Packages, Introduction of the term Business Process Reengineering (BPR), BPR Methodology, Current BPR tools, Introduction to material requirement planning (MRP),

**UNIT II**

**Enterprise Modeling and Integration of ERP**, Need to focus on Enterprise Integration / ERP; Information mapping; Role of common shared Enterprise database; System Integration, Logical vs. Physical System Integration, Benefits & Limitations of System integration, ERP's Role in Logical and Physical Integration.

**UNIT III**

ERP Architecture and Implementation Methodology of ERP, Generic Model of ERP system; Core Modules functionality; Types of ERP architecture, Client Server Architecture, Web - based Architecture, Service Oriented Architecture (SOA) ; Difficulty in selecting ERP, Approach to ERP selection, Request for proposal approach, proof - of - Concept approach; General Implementation Methodology of ERP, Vanilla Implementation; Evaluation Criteria of ERP Packages; Project Implementation Team Structure

**UNIT IV**

Introduction to SAP, oracle APPS, SAP, Integrated SAP Model, SAP Architecture, SAP R/3 System & my SAP, SAP Modules; Oracle Apps, Oracle AIM Methodology, Oracle Fusion Modules; A Comparative assessment of ERP Packages

**References:**

1. Agarwal M.K. & A.N. Agarwal, Indian Economy: New Age International
2. Thomas F. Wallace, ERP: Making It Happen: The Implementers' Guide to Success with Enterprise Resource Planning, Wiley Publication
3. Michael W. Pelphrey, Directing the ERP Implementation: A Best Practice Guide to Avoiding Program Failure Traps while tuning system performance; CRC Publication.

**Course outcomes:** Develop the skills to cyber security issues with a technological ground and then relate them to complex cyber world legal problems.

**UNIT I**

Introduction- Introduction to Information Systems, Types of Information Systems, Development of Information Systems, Introduction to Information Security and CIA triad, Need for Information Security, Threats to Information Systems, Information Assurance and Security Risk Analysis, Cyber Security.

**UNIT II**

Application Security- (Database, E-mail and Internet), Data Security Considerations-(Backups, Archival Storage and Disposal of Data), Security Technology-(Firewall , VPNs, Intrusion Detection System), Access Control. Security Threats -Viruses, Worms, Trojan Horse, Bombs, Trapdoors, Spoofs, E-mail Viruses, Macro Viruses, Malicious Software, Network and Denial of Services Attack.

**UNIT III**

Introduction to E-Commerce, Threats to E-Commerce, Electronic Payment System, e- Cash, Credit/Debit Cards. Digital Signature, Cryptography Developing Secure Information Systems, Application Development Security, Information Security Governance & Risk Management, Security Architecture & Design Security Issues in Hardware, Data Storage & Downloadable Devices, Physical Security of IT Assets - Access Control, CCTV, Backup Security Measures.

**UNIT IV**

Information Security Standards-ISO, IT Act, Copyright Act, IPR. Cyber Crimes, Cyber Laws in India; IT Act 2000 Provisions, Intellectual Property Law, Copy Right Law, Semiconductor Law and Patent Law , Software Piracy and Software License

**References:**

1. Jyoti Rattan, Cyber laws and information technology, Bharat law house pvt ltd.
2. Bhushanmayank, Cyber Security, BPB Publication
3. Ashok kr Jain, Cyber Law, Ascent Publications

**Course Outcomes:** Develop understanding on various kinds of research, objectives of doing research, research process, research designs and sampling. Have basic knowledge on qualitative research techniques, and adequate knowledge on measurement & scaling techniques as well as the quantitative data analysis. Basic awareness of data analysis-and hypothesis testing procedures

**UNIT I**

Introduction: Meaning of Research, Objectives of Research, Types of Research, Research Process, Research Problem formulation; Research Design: Features of a good research design; Different Research Designs; Measurement in Research; Data types; Sources of Error

**UNIT II**

Measurement and Scaling: Primary Level of Measurement- Nominal, Ordinal, Interval, Ratio, Comparative and Non-competitive Scaling Techniques, Questionnaire Design, Sampling-Sampling Process, Sampling Techniques-Probability and Non-Probability Sampling, Sample Size Decision.

**UNIT III**

Data Collection: Primary & Secondary Data; Survey Method of Data Collection, Classification of Observation Method; Fieldwork and Data Preparation. Hypothesis: Null Hypothesis & Alternative Hypothesis; Type-I & Type-II Errors; Hypothesis Testing: Z-Test, T-Test, ANOVA, Concepts of Multivariate Techniques.

**UNIT IV**

Meaning, Types and Layout of Research Report; Steps in Report Writing, Tabular & Graphical Presentation of Data, Citations, Bibliography and Annexure in Report, Avoid Plagiarism; Use of Statistical Software to Analysis the Data.

**References:**

1. Satyabhushan D., Malhotra NK., (2015) Marketing Research: An Applied Orientation,7<sup>th</sup> Edition, Pearson publisher.
2. Bajpai N., (2011) Business Research Methods: Pearson publisher.
3. Cooper & Schindler (2015) Business Research Methods,12<sup>th</sup> Edition, Mcgraw-Hill.
4. Green, Tull&Albaum (2010) Research for Marketing Decisions,5<sup>th</sup> Edition, PHI Pvt. Ltd, New Delhi.
5. Leveine ,Khrehbiel& Berenson (2013) Business Statistics,6<sup>th</sup> Edition, Pearson Education.
6. Luck D. & Rubin D. (2006) *Marketing Research, 7<sup>th</sup> edition, PHI, New Delhi*

**SEMESTER VIII**  
**MAJOR PROJECT (24 CREDITS)**