

Mysore Rd, Jnana Bharathi, Bengaluru, Karnataka 560056

### DEPARTMENT OF COMMERCE



SYLLABUS (SEMESTER SCHEME) 2024 -2025

### Dr. R. SARVAMANGALA

Dean and Chairperson DEPARTMENT OF COMMERCE Jnanabharathi Campus, Bangalore – 560 056.

### **BOARD OF STUDIES**

Sl. No	Name& Address	Designation
01	Dr. R. Sarvamangala Chairperson & Dean, Department of Commerce, Jananabharathi Campus Bangalore University, Bengaluru-560056	Chairperson
02	Dr. Gurumuthy K H Principal, Department of Commerce, Government First Grade College, Kuduru, Magadi-561101	Member
03	Dr. Mohammed Farooq Pasha Associate Professor, Department of Commerce, Government First Grade College, Kengeri, Bengaluru-560060	Member
04	Dr. Ganesh N K Associate Professor, Department of Commerce, Government First Grade College, Ramanagara-562159	Member
05	Dr. Ambarish R Principal, Dharmasagara First Grade College, Dommasandra, Anekal Taluk, Bengaluru-562125	Member
06	Dr. Tabraz Pasha Associate Professor, Department of Commerce, Don Bosco College, Kumbalagodu, Bengaluru-560074	Member
07	Prof. Shankaracharya Principal, Department of Commerce, VEIT College, Jayanagara, Bengaluru-560011	Member
08	Prof. Balaji Associate Professor, Department of Commerce, Government First Grade College, Bidadi-562109	Member
09	Dr. K. Sivamurugan Associate Professor, Department of Commerce, ST Claret College, Jalahalli, Bengaluru-560013	Member
10	Prof. Ravikiran T N Principal , Transcend Degree College Yelachenahalli, Kumaraswamy Layout, Bengaluru, Karnataka 560078	Member
11	Dr. Girish B N Associate Professor, Department of Commerce, Government First Grade College, Chinthamani-563125	Member
12	Dr. Ravi Kumar Associate Professor, Department of Commerce, Government Arts College, Dr. Ambedkar Veedhi, Bengaluru-560001	Member



### REGULATIONS FOR UNDER GRADUATE B.B.A DEGREE

### (SEP -SEMESTER SCHEME) 2024 –25

#### **I. PROGRAM OUTCOMES:**

- 1. To prepare Students to pursue careers in Marketing, Accounting and Taxation, Auditing, Financial Analysis and Management and allied disciplines
- 2. To develop business analysts for organizations, capital markets and commodity markets and securities market, business, industry, trade and commerce
- 3. To develop competent human capital for creative thinking and problem solving in business sectors and for nation building
- 4. To create entrepreneurial environment by producing and channeling innovative, creative and promising young entrepreneurs for the economy
- 5. To develop business philosophers with a focus on social responsibility and ecological sustainability.
- 6. To churn out IT enabled global managers for solving real life business problems and addressing business development issues with a passion for quality competency and holistic approach.
- 7. To inculcate, ingrain and internalize the young minds to become ethical managers with interdisciplinary knowledge and skills.
- 8. To empower students to take up higher education to become business scientists, researchers, consultants and teachers, with needed core competencies.
- 9. To empower students for pursuing professional courses like Chartered Accountancy, Cost and Management Accountancy, Company Secretary and other allied offline and online programs
- 10. To induce students to take up professions in manufacturing, services and knowledge sector in tune with the changing business landscape
- 11. To prepare students to take up competitive examinations such as UPSC, KPSC and other competitive examination authorities where business disciplines are earmarked.

12. To imbibe leadership skills both in their chosen professional filed for achieving personal and professional excellence and thereby create moral leadership for business and nation development

#### II. ELIGIBILITY FOR ADMISSION:

Candidates who have completed Two years Pre – University course of Karnataka State or its equivalent as notified by the Government from time to time are eligible to seek admission for this programme. The students of other states and foreign countries are eligible in accordance with state and central government guidelines from time to time

#### III. DURATION OF THE PROGRAMME

The programme is for Three (03) years consisting of Six Semesters altogether. A candidate shall complete his/her degree within six (06) academic years from the date of his/her admission to the first semester. A Student who successfully completes Three (03) years of the programme will be awarded Bachelor's Degree in Business Administration (B.B.A) by Bangalore University

#### IV. MEDIUM OF INSTRUCTION

The medium of instruction shall be English. Wherever necessary the instructions will be in bilingual. However, a candidate is permitted to write the examination either in English or in Kannada

#### V. CLASS ROOM STRENGTH OF STUDENTS

There shall be Maximum of 60 students in each section.

#### VI. ATTENDANCE:

- a) For the purpose of calculating attendance, each semester shall be taken as a Unit.
- b) A student shall be considered to have satisfied the requirement of attendance for the semester, if he/she has attended not less than 75% in aggregate of the number of working periods in each of the subjects.
- c) A student who fails to complete the programme in the manner stated above shall not be permitted to take the University examination.

#### VII. SKILL DEVELOPMENT / RECORD MAINTENANCE AND SUBMISSION:

- a. In every semester, the student should maintain a Record Book in which the exercises given under each subject are to be recorded. This Record has to be submitted to the concerned faculty for evaluation at least 15 days before the end of each semester.
- b. Every student should also submit the practical record book/report/presentation on "Business Skill Development' of every semester and submitted to the concerned faculty for evaluation, at least 15 days before the end of each semester.
- c. Students should visit organizations in and around vicinity of the

institution or any other place for the purpose of gaining practical exposure and there after maintain the record to record the student's experience of industrial visit and study tour. This Record has to be submitted to the concerned faculty for evaluation at least 15 days before the end of each semester

- d. Every college is required to establish a dedicated business lab / computer lab to enable students get practical knowledge of business activities and also enable online learning
- e. The BOE is authorized to make random surprise visits to the colleges and verify record books and validate the internal marks awarded.

#### VIII. TEACHING AND EVALUATION:

To teach B.B.A programme, the candidate with M. Com, MFA, MIB, MBA (F&A) MBS graduates with B. Com, B.B.M, BBA & BBS as basic degree from a recognized university are only eligible to teach and to evaluate the subjects (except languages & compulsory subjects) Languages constitution values and environment studies (EVS) subjects shall be taught by the teachers as recognized by the respective board of studies.

The subjects like Business Data Analysis, Business quantitative analysis, corporate communication and computer Accounting-Tally prime and accounting software programme shall be taught by commerce faculty only

#### IX. SCHEME OF EXAMINATION:

- a. There shall be a university examination at the end of each semester. The maximum marks for the university examination in each paper shall be 80.
- b. Of the 20 marks of Internal Assessment,
  - i. Lab activities /skill-based activities shall be 5 marks
- ii. Tests marks shall be based on 1 Hour duration of the test 10 marks
  - . The attendance marks shall be 5 marks

### (20 marks from two tests, which are to be conducted during the semester)

- i) For First test of 20 marks (one hour time duration), questions to be given from the syllabus component (any of the units).
- ii) For Second test of 20 marks (one hour time duration), questions to be given from the skill development component of the syllabus.

  The average of the two tests must be taken as a score for internal assessments)
- c. Minimum 75% of attendance is eligible to take university exam The marks based on attendance shall be awarded as given below:

> 75-80% of total class held during the semester = 1 marks.

 $\triangleright$  80-85% = 2 marks

> 85-90% = 3 marks.

> 90-95% = 4 marks.

> 95-100% = 5 marks.

#### X. APPEARANCE FOR THE EXAMINATION:

- a) A candidate shall apply for all the parts in each examination when he/she appears for the first time. A candidate shall be considered to have appeared for the examination only if he/she has submitted the prescribed application for the examination along with the required fees to the university with minimum of 75% attendance in each subject
- b) A candidate who is permitted to seek admission to this degree program on transfer from any other University shall be eligible to claim exemption under Part I from the study of the respective language if he/she has studied and passed the language at the corresponding level.
- c) A candidate who is permitted to seek admission to this degree program on transfer from any other University shall also be eligible to claim exemption under Part II from studying and passing in those subjects which he/she has studied and passed at the corresponding level.
- d) A candidate who is permitted to seek admission to this degree program on transfer from any other University shall not be eligible for the award of ranks.

#### XI. MINIMUM MARKS FOR A PASS:

Candidates who have obtained a minimum of 35% marks in university examination and an aggregate of 40% marks in each subject shall be eligible for a pass or exemption in that subject.

#### XII. CLASSIFICATION OF SUCCESSFUL CANDIDATES:

### 1. Eight Point Alpha - Sign Grading Scale:

Marks	Below	41-	46-	51-	56-	61-	66-	71-	76-	81-	86-	91-	96-
	40	45	50	55	60	65	70	75	80	85	90	95	100
Grade Point Average	4	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10

Final Result / Grading Description

Semester/	90.1-100	80.1-	70.1-	60.1-	55.1-	50.1-55	40-	Below
Programme %		90.1	80	70	60		50	40
of Marks								
Semester GPA/		0.01.0	7.01.0	c 01 7			4.0	Below
Programme/	9.01-10	8.01-9	7.01-8	6.01-7	5.51-6	5.01-5.5	5.0	4
CGPA								
Alpha-Sign	О	A+	A	B+	В	С	Р	F
Grade								
Result/Class	Out	First	First	First	High	Second	Pass	Re-
Description	standing		Class	Class	Second	Class	Class	appear
T		Exemplary	ion		Class			

**2.** Ranks shall be declared on the basis of the aggregate marks obtained by the candidates in this degree programme (including (part I Part II and Part III) as a whole. However, only those candidates who have cleared each semester university examination in the first attempt only shall be eligible for award of ranks. The first **ten** ranks only shall be notified by the university

#### XIII. MEDALS AND PRIZES:

No candidates passing through an external examination shall be eligible for any scholarship, fellowship, medal, prize or any other award.

#### XIV. TERMS AND CONDITIONS:

- a) A candidate is allowed to carry-forward all the previous un-cleared papers to the subsequent semester/semesters.
- b) Such of those candidates who have failed/remained absent for one or more papers henceforth called as repeaters, shall appear for exam in such paper/s during the three immediately succeeding examinations. There shall be no repetition for internal assessment test.
- c) The candidate shall take the examination as per the syllabus and the scheme of examination in force during the subsequent appearances.
- d) In the event of any disputes or discrepancies, the aggrieved party jurisdiction of court is Bangalore

#### XV. PATTERN OF QUESTION PAPER:

Each question paper shall carry 80 marks and the duration of examination is 3 hours. The Question paper shall ordinarily consist of three sections, to develop

testing of conceptual skills, understanding skills, comprehension skills, articulation and application of skills. The question paper setter shall be asked to prepare Three sets of papers with a maximum of 10% repetition. The Question Paper will be as per the following Model:

<b>SECTION-A 1.</b> a, b ,c, d, e, f, g, h, i, j	(Conceptual questions)  Answer any SEVEN out of TEN questions. Each question carries 2 Marks	(07 X 02 = 14 Marks)
SECTION -B: 2,3,4,5.6	(Analytical questions)  Answer any THREE out of FIVE questions. Each question carries 8 Marks	(03 X 08 = 24 Marks)
SECTION-C: 7,8,9.10, 11	(Essay type questions)  Answer any THREE out of Five questions. Each question carries 14 Marks	(03 X 14 = 42 Marks)
	Total	80 Marks

**XVI.** COURSE MATRIX-See Annexure – 1 for B.B.A Degree (Regular) Course Matrix

# Bangalore University B.B.A DEGREE (SEP) COURSE MATRIX 2024-25 I SEMESTER B.B.A (SEP) -2024-25

			Working	Duration		Marks		Credits
	Subjects	Paper	hrs (L+T+P	of Exam (hrs.)	IA	Uni. Exam	Total	
Part 1	Language - I: Indian & Foreign Languages	L1	(3+1+0)	3	20	80	100	3
Languages	Language – II : English	EL-1	(3+1+0) 4	3	20	80	100	3
	Fundamentals of Accounting	BBA-1	4	3	20	80	100	4
Part 2	Principles of Management	BBA-2	4	3	20	80	100	4
Core Papers	Business Environment	BBA-3	4	3	20	80	100	4
	Quantitative Analysis for Business	BBA-4	4	3	20	80	100	4
Part 3 Compulsory	Constitution of India (CI)	CI-1	2	$1\frac{1}{2}$	20	30	50	2
				•	Total	Credits	650	24

### II SEMESTER B.B.A (SEP 24-25)

	0.11		Working	Duratio		Marks	5	Crodite
	Subjects	Paper	Hrs (L+T+P)	n of Exam (hrs.)	IA	Uni. Exam	Tot al Marks	Credits
Part 1 Languages	Language - I: Indian & Foreign Languages	L-2	(3+1+0)	3	20	80	100	3
	Language – II : English	EL-2	(3+1+0)	3	20	80	100	3
	Financial Accounting	BBA-5	4	3	20	80	100	4
Part 2 Core Papers	Production and operation management	BBA-6	4	3	20	80	100	4
	Organization Behaviors	BBA-7	4	3	20	80	100	4
	Data Analysis for Business Decisions	BBA-8	4	3	20	80	100	4
Part 3 Compulsory	Environmental studies (EVS)	EVS-1	(1+0+2) 2	$1\frac{1}{2}$	20	30	50	2
				•	<b>Total</b>	Credits	650	24

### III SEMESTER BBA (SEP) 2024-25

	Subjects	- wp		Duration of Exam		Marks	3	Credits
			(L+T+P)	(hrs.)	IA	Uni. Exam	Tot al Marks	
Part 1 Languages	Language - I: Indian & Foreign Languages	L-3.1	(3+1+0)	3	20	80	100	3
	Language – II : English	EL-3.2	(3+1+0) 4	3	20	80	100	3
	Corporate Accounting	BBA-9	4	3	20	80	100	4
Part 2 Core Papers	Business Research Methodology	BBA-10	4	3	20	80	100	4
	Banking Operations and Innovations	BBA-11	4	3	20	80	100	4
	Financial Institutions and Regulatory Bodies	BBA-12	4	3	20	80	100	4
Part 3 Compulsory	Computer Accounting- Tally Prime (CATP)	Job Skill -1 CA TP	2	$1\frac{1}{2}$	20	30	50	2
		·		•	<b>Fotal</b>	Credits	650	24

### IV SEMESTER BBA (SEP) 2024-25

	Subjects	Paper	Working Hrs	Duration of Exam	n			Credits
	J	•	(L+T+P)	(hrs.)	IA	Uni. Exam	Tot al Marks	
	Language - I: Indian & Foreign Languages	L-4.1	(3+1+0) 4	3	20	80	100	3
Languages	Language – II : English	EL-4.2	(3+1+0)	3	20	80	100	3
Part 2	Elements of Costing	BBA 13	4	3	20	80	100	4
Core Papers	Marketing Management	BBA 14	4	3	20	80	100	4
	Financial Management	BBA 15	4	3	20	80	100	4
	Human Capital Management	BBA 16	4	3	20	80	100	4
Part 3 Compulsory	Corporate Communication (CC)	Job Skill- 2 CC	(1+0+2) 2	$1\frac{1}{2}$	20	30	50	2
					l'otal	Credits	650	24

### V SEMESTER BBA (SEP) 2024-25

	Subjects	Paper	Working Hrs	Duration of Exam			Credits	
		Tupor	(L+T+P)	(hrs.)	IA	Uni. Exam	Tot al Marks	
Part 1	Entrepreneurship Management	BBA-17	4	3	20	80	100	4
Core Papers	Industrial Relations	BBA-18	4	3	20	80	100	4
	Direct Taxation	BBA-19	4	3	20	80	100	4
	Stock and Commodity Markets	BBA-20	4	3	20	80	100	4
Part 2 Elective	Elective Group- Paper-1	BBA-21 E-1	4	3	20	80	100	4
Papers	Elective Group- Paper-2	BBA -22 E.2	4	3	20	80	100	4
Part 3 Compulsory	Internship Learning (IL)	Job Skill-3 IL			50		50	2
					Tota	l Credits	650	26

### VI SEMESTER BBA (SEP) 2024-25

	Subjects	Paper	Working Hrs	Duration of Exam		Marks		Credits
			(L+T+P)		IA		Tot al Marks	
	Goods and Services Tax	BBA-23	4	3	20	80	100	4
	International Business	BBA-24	4	3	20	80	100	4
Part 1 Core Papers	Business Regulations	BBA-25	4	3	20	80	100	4
	Strategic Management	BBA-26	4	3	20	80	100	4
Part 2 Elective Papers	Elective Group- Paper-2	BBA27- E-3	4	3	20	80	100	4
Elective Tapers	Elective Group- Paper-2	BBA-28 E-4	4	3	20	80	100	4
Part 3 Compulsory	Research Project (RP)	Job Skill-			Project &Viva		100	4
		(RP)	<u> </u>	<u> </u>	80+20 <b>Total</b>	Credits	700	28

#### FINANCE GROUP - 1

Semester No.	Paper Code	Title of the Paper
v	BBA -21 EL-1	Financial Risk Management
<b>,</b>	BBA -22 EL-2	International Finance
VI	BBA -27 EL-3	Modern Investment & Portfolio Management
VI	BBA -28 EL-4	Personal Finance and Management

#### **MARKETING GROUP - 2**

Semester No.	Paper Code	Title of the Paper
v	BBA -21 EL-1	Consumer Behavior
v	BBA -22 EL-2	Sales & Distribution Management
VI	BBA -27 EL-3	Advertising Management
VI	BBA -28 EL-4	International Marketing Strategy

#### **HUMAN RESOURCE GROUP - 3**

Semester No.	Paper Code	Title of the Paper
v	BBA -21 EL-1	Compensation Management
V	BBA -22 EL-2	Strategic Human Capital Management
VI	BBA -27 EL-3	Performance Management
V1	BBA -28 EL-4	Cross Cultural Management

#### **INTERNATIONAL BUSINESS - 4**

Semester No.	Paper Code	Title of the Paper
v	BBA -21 EL-1	Foreign Trade Policy
V	BBA -22 EL-2	Global Business Environment
	BBA -27 EL-3	Export-Import Documentation & Logistics
VI	BBA -28 EL-4	International Finance and Foreign Exchange Management

#### **DATA ANALYTICS - 5**

Semester No.	Paper Code	Title of the Paper
v	BBA -21 EL-1	Big Data Analytics
V	BBA -22 EL-2	Marketing Analytics
VI	BBA -27 EL-3	Supply Chain Analytics
VI	BBA -28 EL-4	Human Capital Analytics

All the regulations, guidelines, Instructions, Scheme of Examination and Course Matrix are approved by BOS Chairperson and the Members.

Name of the Course: Fundamentals of Accounting

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

**Pedagogy**: Classroom lecture, tutorials, Group discussion, Seminar, Case studies, fieldwork etc.,

#### **Course Objective:**

The Subject Accounting for Business typically aims to introduce students to the fundamentals of accounting skills, integrate accounting principles with practical business applications, focussing on how accounting information is used in decision-Making within businesses.

#### **Course Outcomes:**

On successful completion of the course, the subject Accounting for Business typically focus on the skills and knowledge students should acquire.

- Understand the basic Concepts of Accounting.
- Pass Journal Entries and Prepare Ledger Accounts.
- Prepare Subsidiary Books.
- Prepare Trial Balance and Final Accounts of Proprietary concern.
- Reconciliation of Pass Book and Cash Book.

Syllabus:	
Module No. 1: INTRODUCTION TO ACCOUNTING	

Introduction – Meaning and Definition – Objectives of Accounting – Functions of Accounting – Uses of Accounting Information – Limitations of Accounting – Terminologies used in accounting – Accounting Process and Cycle – Basis of Accounting – Cash basis and Accrual Basis – Accounting Equations - Branches of accounting – Accounting Principles – Accounting Concepts and Accounting Conventions.

#### Module No. 2: ACCOUNTING PROCESS

14

Process of Accounting - Double entry system - Kinds of Accounts - Rules-Transaction Analysis - Journal - Ledger - Balancing of Accounts - Trial Balance - Illustrations on Journal, Ledger Posting and Preparation of Trial Balance.

#### Module No. 3: SUBSIDIARY BOOKS

14

Meaning – Significance – Types of Subsidiary Books –Purchases Book, Sales Book (With Tax Rate), Purchase Returns Book, Sales Return Book, Bills Receivable Book, Bills Payable Book. Types of Cash Book- Simple Cash Book, Double Column Cash Book and Petty Cash Book (Illustrations only on Two Column Cash Book and Petty Cash Book).

#### MODULE NO. 4: FINANCIAL STATEMENTS OF PROPRIETARY CONCERN

14

Introduction to Financial Statement, Income Statement /P&L A/c and Balance Sheet - Preparation of Statement of Profit and Loss and Balance Sheet of a proprietary concern with special adjustments like Depreciation, Outstanding and Prepaid Expenses, Outstanding and Received in Advance of Incomes, Provision for Doubtful Debts, Drawings and Interest on Capital.

Definition and purpose of Bank Reconciliation Statement (BRS) – Importance is reconciling Bank Statements and Bank Accounts prepared in Businesses – Causes for Differences between Cash Book and Pass Book – Timing differences, outstanding cheques and deposits in transit, Errors in the Cash Book and Bank Statements, Bank charges and Interest, Direct debits, standing instructions and auto payments, dishonoured cheques – Preparation of Bank Reconciliation Statement. Illustrations on BRS.

#### SKILLS DEVELOPMENT

- 1. List out the accounting concepts and conventions.
- 2. Prepare a Bank Reconciliation Statement with imaginary figures
- 3. Collect the financial statement of a proprietary concern and record it.
- 4. Prepare a financial statement of an imaginary company using spreadsheet
- 5. Any other activities, which are relevant to the course.

#### **BOOKS FOR REFERENCE:**

- 1. S.Anil Kumar, V. Rajesh Kumar and B.Mariyappa–Fundamentals of Accounting, Himalaya Publishing House.
- 2. Dr. S.N. Maheswari, Financial Accounting, Vikas Publication
- 3. S P Jain and K. L. Narang, Financial Accounting, Kalyani Publication
- 4. Radhaswamy and R.L. Gupta, Advanced Accounting, Sultan Chand
- 5. M.C. Shukla and Goyel, Advanced Accounting, S Chand.
- 6. Hanif and Mukherjee, Financial Accounting, McGraw Hill Publishers
- 7. Arulanandam & Raman; Advanced Accountancy, Himalaya Publishing House

Name of the Course: Principles of Management

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

**Pedagogy:** Classrooms lecture, Case studies, Tutorial classes, Group discussion, Seminar & Fieldwork etc.,

# Course Outcomes: On successful completion of the course, the students' will be able to

- a. To provide an Understanding about the Management in various organisations.
- b. To give complete insight about policies like planning and organising in any organisation.
- c. To upgrade the knowledge of students about present trends in recruiting and staffing.
- d. Students will have the complete knowledge of being a leader and will develop the right attitude for their life in decision making.
- e. Management decision and impact of Ethics in decision making gives a complete insight to the students for their future.

SYLLABUS:	Hours
MODULE 1: INTRODUCTION TO MANAGEMENT	

Concept of Management, Management- Art and Science, Management Vs Administration, Levels of Management, Functions of management, Management as a Profession, Managerial skills, Qualities and characteristics of managers. Quality Circle-Meaning, features and Objectives.

Evolution of Management thought: Early contributions: Taylor and Scientific Management, Fayol's (Introduction only) Administrative Management, Bureaucracy, Human Relations, and Modern Approach, Social responsibility of managers, Horizontal and Vertical Fit in HR System.

#### MODULE 2: PLANNING AND ORGANIZING

12

Concept of planning, Significance of planning, Classification of planning: Strategic plan, Tactical plan and Operational plan, Process of planning, Barriers to effective planning. MBO (Management by Objective), Management by Exception.

Decision Making: Strategies of decision making, Steps in rational decision-making process, Factors influencing decision making process, Psychological bias and decision support system.

Organizing: Defining organising, Principles of organising, Process of organising, Types of organizational structure, Span of control, Centralization vs. Decentralization of authority. Informal organization.

#### MODULE 3: STAFFING, DIRECTING & CONTROLLING

12

Staffing: Meaning and Definition, Concept, Objective of staffing, System approach to staffing, Manpower planning.

Controlling: Meaning and Definition, Concept, Importance of controlling, Types of control, Steps in control process.

Directing: Concept, Techniques of directing and supervision, Types of supervision, Essential characteristics of supervisor.

### MODULE 4: LEADERSHIP AND MOTIVATION.

12

Leadership vs Management, Process of Leadership, Importance of leadership, Characteristics of an effective leader. Modern styles of leadership- Transactional, Transformational, Servant leadership, Democratic, Autocratic, Laissez-Faire (Delegative), Bureaucratic, Charismatic, Coaching – Meaning and concepts only.

Motivation: Concept, Forms of employee motivation, Need for motivation. Theories of

motivation. Need for Motivation Theory, Theory of Herzberg, ERG Theory, Attribution Theory, Incentive theory, Safety theory.

# MODULE 5: ETHICS IN MANAGEMENT & RECENT TRENDS IN MANAGEMENT.

10

Decision Making: Meaning and Definition, Importance of timely decisions, Management approach in involving team in decision making, impact of internal and external factors in decision making.

Ethics in Management- Meaning and Definition, Hindrances in Ethical decision, Impact of policy matters in Ethical Decision making. Ethical issues in implementing Government norms and organizational policies. Managerial Ethics.

#### SKILL DEVELOPMENT

- Develop a concept of Leader Management Team and assign a recruitment process.
- Conduct a Group discussion about present recruitment policies.
- Prepare a chart showing the various types of leadership.
- Visit a Government School and motivate students about better education.
- List out the ethical issues faced by a HR manager in decision making.

#### **BOOKS FOR REFERENCE**

- 1. Durai, P. (2015). Principles of Management, Text and Cases. New Delhi: Pearson Education.
- 2. Koontz, H. (2010). Essentials of Management. New Delhi: Tata McGraw-Hill Education.
- 3. Stoner, Freeman & Gilbert Jr. (2009). Management. New Delhi: Prentice Hall.
- 4. Weihrich, H. & Koontz, H. (2010). Management- A Global Perspective: New Delhi: Tata McGraw-Hill Education.
- 5. Robbins & Coulter (2013). Management. New Delhi: Prentice Hall.
- 6. Robbins, S.P. & Decenzo, D. A. (2014). Fundamentals of Management: Essential Concepts and Applications. New Delhi: Pearson Education.
- 7. Luthans, F. (2010). Organizational Behaviour. New York: McGraw-Hill.

Name of the Course: Business Environment.

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

**Pedagogy:** Classrooms lecture, Case studies, Tutorial classes, Group discussion, Seminar & Fieldwork etc.,

#### **Course Objectives:**

The basic objective of this course is to familiarize the students with the nature and dimensions of evolving business environment in India, which influences managerial decisions.

# Course Outcomes: On successful completion of the course, the students' will be able to

- a. Understand relationship between environment and business, applying the environmental analysis techniques in practice
- b. Understand economic social cultural and technological environment
- c. Know state policies economic legislations and economic reforms laid by the government
- d. To understand the present Business Tends.
- e. Basic information about the investment policy of Government.

SYLLABUS:	Hours
MODULE 1: INTRODUCTION OF BUSINESS ENVIRONMENT	12

Concept and Nature of business environment, Need to study business environment, Elements of Business Environment, Significance of business environment, Environmental analysis and forecasting, Techniques of environmental analysis, Government-Business Interface, Changing Dimensions of Indian Business

#### **MODULE 2: ECONOMIC ENVIRONMENT IN BUSINESS**

12

Business - Economic System Interface, Industrial Development under different Plan Periods, New Industrial Policy of India, Public Sector Policy- Disinvestment Policy and EXIM Policy of India, Industrial Policy for North-East India. SEBI Act, Monetary and Fiscal Policy.

# MODULE 3: LEGAL ENVIRONMENT AND TECHNOLOGICAL ENVIRONMENT OF BUSINESS

14

Industrial licensing policy, FEMA and Competition Act. Intellectual Property Rights and Patent Law. Consumer Protection Act 1986 (central council and state council). Government Policy on Environment: Water Pollution Act, Air Pollution Act, Environment (Protection) Act, Environmental Audit, GST. Technological Environment: Recent Technological Advancement in Indian Business, E- Commerce, M-Commerce.

#### MODULE 4: POLITICAL AND SOCIO-CULTURAL ENVIRONMENT

12

Political systems, concepts, practices in India. Political institutions in India. Salient features of Indian societies. Concept of capitalism and socialism, Sun-rise sectors of India Economy. Challenges of Indian economy. Social responsibility of business, Characteristics, Components, Scope, relationship between society and business, Sociocultural business Environment, Social Groups, Foreign Investment in India.

#### **MODULE 5: PUBLIC SECTOR AS BUSINESS UNITS**

10

The contribution of Public sector enterprises in India, Privatization of Public sectors-Effects and Results, Disinvestment in Government or Public Sector, Foreign Direct Investment in India, its impact on Indian economy.

#### SKILL DEVELOPMENT

- Examine the impact of globalization on Indian business and industry.
- State the impact of current technology on Indian business.
- Study the current economic environment and its impact on business.
- Understand how businesses utilize resources from the natural environment.
- Students' review on the book The rise and fall of nations by Ruchir Sharma

#### **BOOKS FOR REFERENCE**

- 1. K. Aswathappa, Essentials of Business Environment, Himalaya Publishing House Pvt. Ltd, Ninth Edition 2007.
- 2. Rosy Joshi, Sangam Kapoor, Business Environment, Kalyani Publishers, Third Revised edition 2011.
- 3. Francis Cherunilam, Business Environment, Himalaya Publishing House, Himalaya Publishing House Pvt. Ltd., 22nd Edition 2013.
- 4. S.Adhikari- Business Environment
- 5. Misra and Pun-Business Environment
- 6. Ruddar Dutt and Sundaram K.P.S Business Environment
- 7. Chidambara K- Business Environment, Vikas Publishing House
- 8. The Rise and fall of Nations-Ruchir Sharma, Penguin Books limited, 2017

Name of the Course: Quantitative analysis for Business

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

**Pedagogy:** Classrooms lecture, Case studies, Tutorial Classes, Group discussion, Seminar & field work etc.,

#### **Course Objective:**

The course is designed to introduce students to the basic Quantitative skills you will need to understand, analyse, and solve mathematical problems encountered in business and finance, and in investment decision making.

#### **Course Outcomes:**

- **1.** Develop critical thinking skills to analyze and interpret problems involving ratios and proportions, and to choose appropriate strategies for solving them.
- **2.** Recognize and apply equations in practical situations beyond the classroom, connecting theoretical concepts to everyday scenarios and other academic disciplines.
- **3.** Students will demonstrate an understanding of fundamental concepts in set theory, including sets, elements, subsets, universal sets, and set operations
- **4.** Develop logical reasoning skills through the study of permutations and combinations, including understanding implications and proofs involving these concepts.
- **5.** Calculate returns on investments, understand the time value of money, and apply arithmetic principles to assess investment opportunities.

Syllabus:	Hours
Module No. 1: PERCENTAGES, RATIOS AND PROPORTIONS	

Percentages - Meaning of Percent, Meaning of Percentage-Difference between Percent and Percentage-Expression of Percent-Calculation of Percentage - Overview of ratios-Basic Terms of Ratios- Types of Ratios- Simple Problems- Overview of Proportions- Basic Terms-Properties of Proportion-Simple problems on Direct and Inverse proportion

#### Module No. 2: EQUATIONS & SET THEORY

16

Meaning and Types of Equations-Linear Equation – Meaning & Problems-Simultaneous Equation – Meaning and Problems with only two variables (Elimination method and Substitution method)-Quadratic Equation – Meaning and Problems under Factorization and Formula method. Meaning- Representation of a Set-Types of Set-Operations on Sets-Union-Intersection-Disjoint Sets-Complement of a Set-Difference of Two Sets-Venn Diagrams- Properties of Set Operations-De-morgan's Law- Practical Problems on Union and Intersection of Two Sets

# Module No. 3: BASIC CONCEPTS OF PERMUTATIONS AND 12 COMBINATIONS

Introduction - Fundamental principle of counting - Factorial Notation - Permutations-Permutation with Repetition -Permutation of Alike Objects -Permutation under Restriction - COMBINATION - Relation between Permutation and Combination -

Combinations under Restrictions- Combinations of Alike Objects	

#### **MODULE NO. 4: MATRICES AND DETERMINANTS**

10

Meaning- Types of Matrices-Addition-subtraction and Multiplication of Matrices. Determinants of order two and three-Adjoint & Inverse of a Matrix- Problems on linear equations in two variables using Cramer's rule.

#### **MODULE NO. 5: QUANTITATIVE FINANCE**

10

Definition of Interest and Other Terms- Simple Interest & Compound Interest-Effective rate of Interest- Present Value and Future Value-Perpetuity- Annuity- Sinking Fund-Valuation of Bonds-Calculating of EMI- Simple problems.

#### SKILLS DEVELOPMENT

- 1. Prepare a chart showing different types of ratios
- 2. Collect the total price of any two commodities with different quantities and calculate the price of each commodity using simultaneous equation methods.
- 3. By using imaginary data perform set operations and represent in Venn Diagram
- 4. By Selecting cricket team squad choose various combination of team of 11 and apply combination concepts.
- 5. Develop an Amortization Table for Loan Amount EMI Calculation

#### **BOOKS FOR REFERENCE:**

- 1. Saha: Mathematics for Cost Accountants, Central Publishers
- 2. R.G. Saha& Others Methods & Techniques for Business Decisions, VBH
- 3. Dr. Sancheti& Kapoor: Business Mathematics and Statistics, Sultan Chand
- 4. Zamarudeen: Business Mathematics, Vikas
- 5. R.S Bhardwaj: Mathematics for Economics & Business
- 6. Madappa, mahadi Hassan, M. Iqbal Taiyab Business Mathematics, Subhash
- 7. G.R. Veena and Seema: Business Mathematics and Statistics I.K. Intl Publisher

Name of the Course: FINANCIAL ACCOUNTING

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

**Pedagogy:** Classroom lecture, Tutorials, Group discussion, Seminar, Case studies, Fieldwork etc.,

#### **Course Objective:**

The Subject Financial Accounting aims to essential skills and knowledge needed to succeed in the field of accounting and to support broader business management roles.

**Course Outcomes:** On successful completion of the course, the students are well - prepared to learn and handle accounting tasks in a business environment and contribute to decision-making processes within the organisation.

- 1. Understand the Basic Concepts of Ind AS and its applicability.
- 2. Exercise the accounting treatments for Departmental Undertaking
- 3. Demonstrate various accounting treatments between Branches.
- 4. Learn the methods and accounting procedures of fire insurance claims
- **5.** Learn and understand concepts and applications of Bill of Exchange transactions

Syllabus:	Hours
Module No. 1: ACCOUNTING STANDARDS	8

Meaning and Objectives of Accounting Standards – importance and benefits – Standard setting Bodies (IASB, FASB, ICAI) – Indian Accounting Standards Vs. International Financial Reporting System (IFRS)- Procedure for issuing Standards in India – Need for IFRS Convergence into Ind AS –Opportunities and Challenges– Role of Institute of Chartered Accountants of India (ICAI) in issuance of Standards.

#### Module No. 2: DEPARTMENTAL ACCOUNTING

16

Meaning and Features of Departmental Undertaking-Examples of Department Specific Expenses and Common Expenses -Need and Basis of Apportionment of Common Expenses. Preparation of Trading and Profit and Loss Account in Columnar Form and General Profit and Loss Account. Illustrations on inter- departments in vertical form involving adjustment on Closing Stock, Depreciation and Inter Departmental Transfers at Cost Price.

#### Module No. 3: BRANCH ACCOUNTING

16

Meaning – Objectives – Types of Branches –Meaning and features of Branches – Dependent Branches – Independent Branches – Foreign Branches. Methods of maintaining books of accounts by Head office - Debtor System, Stock & Debtors System, Wholesale Branch System and Final Account system. Illustrations on preparation of Dependent Branch A/c in the books of Head Office under Debtors System only when the goods are supplied at (a) Cost Price and (b) Invoice Price.

#### MODULE NO. 4: ACCOUNTING FOR FIRE INSURANCE CLAIMS

10

Meaning, Features and Principles of Fire Insurance. Meaning of Fire Claim. Procedure for making a Fire Insurance Claim. Concept of Loss of Stock, Salvage and Average Clause. Illustrations on ascertainment of claim amount covering the adjustments for over-valuation and under-valuation of stock and abnormal line of items.

#### MODULE NO. 5: ACCOUNTING FOR BILLS OF EXCHANGE

10

Introduction to Bills of Exchange – Definition and characteristics of bills of exchange – parties involved – drawer, drawee, acceptor, payee – Types of Bills of exchange – Documentary, Clean, Inland, Foreign, Trade and Accommodation bill – Essential elements in BOE, Types of Endorsement – Blank, Special and Restrictive endorsements – Discounting of Bills, Acceptance, Payments, Negotiability and Transferability, Dishonour and noting. Illustrations.

#### SKILLS DEVELOPMENT

- 1. List out the countries that adopted and converged with IFRS around the world
- 2. List out 2 Departmental Undertakings with the following details: Name & Address of the Departmental Undertaking. List of departments.
- 3. Collect Insurance claim form and fill the necessary details to claim Fire Insurance
- 4. Using spreadsheet, Prepare Statement of Insurance claims, Columnar Departmental Trading and Profit and Loss account and Balance sheet.
- 5. Collect Bills of Exchange forms and Draw and Accept the bills.

#### **BOOKS FOR REFERENCE:**

- 1. Anil Kumar, Rajesh Kumar and Mariyappa, "Financial Accounting", HPH
- 2. Dr. S.N. Maheswari: Financial Accounting, Vikas Publications New Delhi
- 3. S P Jain and K. L. Narang: Financial Accounting- I, Kalyani Publishers
- 4. Radhaswamy and R.L. Gupta: Advanced Accounting, Sultan Chand
- 5. Dr.Janardhanan: Financial Accounting, Kalyani Publishers
- 6. Srinivas putty Advanced financial Accounting-HPH
- 7. M.C. Shukla and Grewal, Advanced Accounting

Name of the Course: Production and Operation Management

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

**Pedagogy:** Classrooms lecture, Case studies, Tutorial classes, Group discussion, Seminar & Fieldwork etc.,

#### **Course Objective:**

To familiarize the students with the role of operations and its interaction with other activities of a firm and their integration in a highly competitive global environment. To enable the students to apply the understanding of production processes in quantitative analysis of problems arising in the management of operations.

### Course Outcomes: On successful completion of the course, the students' will be able to

- a. To provide a complete insight about the Manufacturing industry in India.
- b. Enhance the knowledge of Manufacturing industries and opportunities.
- c. To Enhance the complete knowledge about various methods of production and product management.
- d. Implication of modern technology in the productional aspects and also to introduce to the latest methods of inventory management.
- e. Complete understanding of waste management, getting best out of industry waste and proper disposal of the industry waste.

# SYLLABUS: Hours MODULE 1: PRODUCTION AND OPERATIONS MANAGEMENT 14

Production System- Meaning and definition – Classification – Objectives, need – types – Advantages and disadvantages. - Process Planning - Plant Location - Plant Lay out - Introduction to Production Planning. Inputs, Process and outputs;

Operation Management: Meaning and definition - Classification of operations; Responsibilities of Operations Manager; New Product Development, Selection and Design of Product / Services.

Application of automation, VUCA (volatility, uncertainty, complexity ambiguity) in production and operations,

#### MODULE 2: MANUFACTURING PLANT LOCATION AND LAYOUT

10

Meaning and definition –Factors affecting location, Theory and practices, cost Factor in location – Plant layout Principles – Space requirement – Different types of facilities – Organization of physical facilities – Building, Sanitation, Lighting, Air Conditioning and Safety.

### MODULE 3: PRODUCTION PANNING QUALITY CONTROL

14

Introduction; Meaning; Quality, characteristics of goods and services; Tools and techniques for quality improvement: check sheet, histogram, scatter diagram, cause and effect diagram, Pareto chart, process diagram, statistical process control chart; Quality assurance; Total quality management (TQM) model; Service quality, concept of Six Sigma and its application.

Quality control – Statistical Quality Control, Quality Management, six- sigma, Control charts and Operating characteristics curves, Accepting Sampling Procedures, Quality circles, Meaning of ISO.

#### **MODULE 4: INVENTORY MANAGEMENT**

12

Meaning and Concepts -Objectives, Capacity planning, Corresponding Production Planning, Controlling, Scheduling, Routing. Management of Inventory- JIT, ABC etc.

Production planning techniques for various process choices, Techniques of production control, Aggregate planning techniques.

Project, jobbing, batch, line, mass, continuous; Process types in services: professional services, services shops, mass services; Plant location; Layout planning.

#### MODULE 5: MAINTENANCE AND WASTE MANAGEMENT

10

Introduction – Meaning – Objectives – Types of maintenance, Breakdown, Spares planning and control, Preventive routine, Relative Advantages, Maintenance Scheduling, Equipment reliability and Modern Scientific Maintenance methods - Waste Management–Scrap and surplus disposal, Salvage and recovery.

#### SKILL DEVELOPMENT

- Visit any manufacturing industry and prepare a complete report on the production line.
- List out the inventory issues faced by any manufacturing industry.
- Prepare a detailed chart of implementation of JIT in a Soft drink/Cosmetic/Garment industry.
- Conduct a classroom seminar on Production planning and quality control Products to be used as example- Iron and Steel, Automobiles, Ship building, Cement factory, Sugar Factory.
- Visit any small-scale industry and conduct an awareness program on Waste management.

#### **BOOKS FOR REFERENCE**

- 1. Adam Jr Everetl E. R J, PRODUCTION AND OPERATIONS MANAGEMENT, Prentice-Hall, 1992, 2000 5th ed.
- 2. Chary, PRODUCTION AND OPERATIONS MANAGEMENT, Tata McGraw-Hill, 1997 9th
- 3. Hill T, OPERATIONS MANAGEMENT, Palgrave, 2000
- 4. Haleem A, PRODUCTION AND OPERATIONS MANAGEMENT, Galgotia Publication, 2004
- 5. Shanker Ravi, Industrial Engineering, Galgotia Publication.
- 6. Kanishka Bedi, PRODUCTION & OPERATIONS MANAGEMENT, Oxford University Press

Name of the Course: ORGANIZATIONAL BEHAVIOR

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

**Pedagogy:** Classrooms lecture, Case studies, Tutorial classes, Group discussion, Seminar & Fieldwork etc.,

#### **Course Objectives:**

This course is designed to equip the students with the tools necessary to understanding the dynamics of individual and group behavior for efficient and effective utilization of human resources in the organizations.

## Course Outcomes: On successful completion of the course, the students' will be able to

- 1. To understand the behavior of individual and groups in the Organization.
- 2. To access the potential impact of organizational factors (such as change, culture, and structure) on organizational behavior.
- 3. To Analyze and apply the practical experience in the field of Management and Organization Behavior
- **4.** To demonstrate the leadership styles and apply the concepts of personality, perception, attitude, and motivation.
- 5. To develop skills and ability to work as individual and in groups to achieve organizational goals.

SYLLABUS:	Hours
MODULE 1: INTRODUCTION TO ORGANIZATIONAL BEHAVIOR	12

Introduction to organizational behavior, overview of historical and current perspective of organizational behavior, Significance of organizational behavior, Foundations of Individual behavior, fundamental principles of organizational behavior, organizational behavior models, emerging challenges and opportunities in organizational behavior, Future of organizational behavior.

#### MODULE 2: PERSONALITY ATTITUDE AND PERCEPTION

10

Meaning & Definition, personality traits, determinants of personality, theories of personality. Meaning, types, components and formation of attitudes, change in attitude, barriers to change. Meaning and process of perception, need and factors influencing perception, link between perception and decision-making.

#### MODULE 3: LEADERSHIP AND MOTIVATION

12

Meaning and concept of leadership, difference between leadership and management, types of leadership styles, Women as leaders. Concept and importance of organizational citizenship behavior (OCB), difference between performance and OCB, transactional and transformational leadership, Meaning, nature, and importance of motivation, theories of motivation, motivating performance.

#### **MODULE 4: GROUP BEHAVIOR AND GROUP DYNAMICS**

14

Meaning and concept of leadership, difference between leadership and management, types of leadership styles, Women as leaders. Concept and importance of organizational citizenship behavior (OCB), difference between performance and OCB, transactional and transformational leadership,

Meaning, nature, and importance of motivation, theories of motivation, motivating performance..

# MODULE 5: CONTEMPORARY DYNAMICS IN ORGANIZATIONAL BEHAVIOR

12

The role of artificial intelligence (AI) in change management, communication, data analysis, and

training in the organization. Stress management, power and politics, conflict management, family and work life balance, role of ethics in organizational behavior.

#### SKILL DEVELOPMENT

- The simulation technique could be applied by making small groups of students as teams to select, analyze, and develop a plan for determine a key problem that an organization is facing and to examine and apply OB concepts in an organization.
- Students should prepare a structured questionnaire, interact with the employees of the organization to observe their organizational citizenship behavior and analyze their personality.
- Students should conduct extensive literature survey to review the impact of AI on change management, communication, data analysis, and training in the organization and prepare report with findings and learning outcomes

#### **BOOKS FOR REFERENCE**

- 1. Fred Luthans: Organisational Behaviour McGraw hill
- 2. Stephen Robins: Organisational Behaviour
- **3.** Shashi.K.Gupta: Organisational Behaviour Himalaya Publications
- **4.** K.Ashwathappa: Organisational Behaviour Himalaya Publications
- 5. Sharma, S Organizational Behaviour, Tata McGraw-Hill Education,
- **6.** Hellriegel, Slocum and Woodman- Organisational Behaviour- South Western
- 7. Thomson Learning.
- **8.** John W Newstrom- Organisational Behavior

Name of the Course: Data Analysis for Business Decisions

Course Credits	No. of Hours per Week	Total No. of Teaching Hours
4 Credits	4 Hrs	60 Hrs

**Pedagogy:** Classrooms lecture, Case studies, Tutorial Classes, Group discussion, Seminar & field work etc.,

#### **Course Objectives:**

To familiarize the students with various Statistical Data Analysis tools that can be used for effective decision making. Emphasis will be on the application of the concepts learnt to various managerial situations

#### **Course Outcomes:**

- After successful completion of the course students will be able to summarize and analyze statistical data to solve practical business-related problems.
- After successful completion of the course students will be able to interpret the relevance of statistical findings for business problem solving and decision making.
- Developing critical thinking skills to select and apply the appropriate measure of central tendency based on the nature and distribution of data, ensuring accurate interpretation and decision-making.
- Ability to apply correlation and regression analysis to various business problems, such as forecasting sales, understanding customer behavior, optimizing marketing strategies, and analyzing financial data.
- Effectively communicating time series analysis findings and forecasting results to stakeholders, including non-technical audiences, to support strategic planning and decision-making in business contexts.

Syllabus:	Hours
Module No. 1: INTRODUCTION TO STATISTICS	12

Introduction, Meaning, Definitions, Features, Objectives, Functions, Importance and Limitations of Statistics -Data Series.- Individual, discrete and continuous. Classification of Data-Requisites of Good Classification of Data.-Types of Classification – Quantitative and Qualitative Classification (Concepts only)- Types of Presentation of Data – Textual Presentation, Tabular Presentation, One-way Table-Important terminologies – Variable, Quantitative Variable, Qualitative Variable, Discrete Variable, Continuous Variable, Dependent Variable, Independent Variable, Frequency, Class Interval, Tally Bars-Simple Problems- Graphical Representation of Data- Pie Chart- Bar Graph

### Module No. 2: Measures of Central tendency & Dispersion

14

Meaning and Objectives of Measures of Tendency- Definition of Central Tendency-Requisites of an Ideal Average, -Types of Averages--Arithmetic Mean-Median-Mode-Empirical Relation between Mean, Median & Mode-Graphical Representation of Median & Mode-Ogive Curves-Histogram- Problems-Meaning of Dispersion-Standard Deviation, Co-efficient of Variation-Problems

### Module No. 3: CORRELATION & REGRESSION ANALYSIS

12

Correlation: Meaning and Definition - Uses - Types - Karl Pearson's coefficient of correlation - probable error - Spearman's Rank Correlation Coefficient. Regression: Meaning, Uses, Regression lines, Regression Equations. Correlation Coefficient through Regression Coefficient

#### Module No. 4: TIME SERIES

10

Introduction – Meaning – Uses –Components of Time Series –Methods of Trends- Method of Moving Averages Method of Curve Fitting by the Principle of Least Squares - Fitting a straight-line trend by the method of least squares and Computation of Trend Values (when  $\Sigma X = 0$ ) including Graphical presentation of trend values – Problems.

#### Module No. 5: THEORY OF PROBABILITY

12

Probability: Definitions and examples -Experiment, Sample space, Event, mutually exclusive events, Equally likely events, Exhaustive events, Sure event, Null event, Complementary event and independent events. Mathematical definition of probability, Definition of Conditional Probability. Statements of Addition and Multiplication laws of probability. Problems on Probabilities, Conditional probabilities, Probabilities using Addition and Multiplication laws of probabilities (without use of permutations and combinations).

#### SKILL DEVELOPMENT

- Collect data from at least 5 friends about their monthly expenditure on Mobile Recharge,
   Cosmetics, Chats and Other Expenses and present the same in a Tabular Form
- Collect data about marks scored in Accountancy in PUC from at least 30 students of your class and calculate Arithmetic Mean
- Collect the data about the age of at least 10 married couples and compute correlation coefficient
- Collect the turnover of a company for 7 years and predict the sales of 8th year by using method of least square
- Conduct random experiments (coin, dice and pack of cards) and record the results by using probability laws

#### **BOOKS FOR REFERENCE:**

- 1. Anand Sharma: Statistics For Management, HPH
- 2. S P Gupta: Statistical Methods- Sultan Chand, Delhi
- 3. D.P Apte; Statistical Tools for Managers.
- 4. Dr. B N Gupta: Statistics (Sahityta Bhavan), Agra.
- 5. S.C Gupta: Business Statistics, HPH
- 6. N.V.R Naidu: Operation Research I.K. International Publishers
- 7. Ellahance: Statistical Methods, Kitab Mehel.
- 8. Sanchethi and Kapoor: Business Mathematics, Sultan Chand
- 9. Veerachamy: Operation Research I.K. International Publishers
- 10. S. Jayashankar: Quantitative Techniques for Management