



**ST. ALBERT'S COLLEGE ERNAKULAM
(AUTONOMOUS)
Affiliated to Mahatma Gandhi University, Kottayam, Kerala**

SYLLABUS FOR POSTGRADUATE PROGRAMME

**Master of Business Administration
(MBA Full Time)
With effect from 2016 Admissions Onwards**

Approved by the Board of Studies

Preface

As envisaged in the recent regulations of Autonomous colleges in India by University Grants Commission, autonomous colleges enjoy the academic freedom to enrich the curriculum by incorporating recent trends and needs. Curriculum and syllabus of each academic program has to be revised periodically to impart major objectives like global competency, skill component, values and regional relevance. Academicians and scholars in the respective area of knowledge have to express a missionary zeal for this great purpose.

In 2016, when St. Albert's College was granted autonomy, we adopted the curriculum and syllabus followed by the Mahatma Gandhi University, Kottayam for the year 2016. The MBA Programme of St. Albert's College (Autonomous) enables the candidates to acquire conceptual, technical and human skills to meet the requirements of industry, business and society. It prepares the candidates with knowledge, skills, and strategic perspectives essential for business leadership. The MBA Programme consists of 28 subject courses, Organization Study and 1 project work. There are 2 viva voce for MBA programme, comprehensive subject viva in first year and comprehensive viva in second year. All theory courses carries 100 marks each, out of which 40 marks for continual evaluation and 60 marks for comprehensive evaluation by College/University. The first and second semesters have 800 and 900 marks respectively. The third and fourth semesters have 900 and 600 marks and the total marks for the MBA Programme is 3200.

All semesters are of 20 weeks duration out of which 16 instructional weeks, which comprises of 5 days a week and 5 hours per day, are provided for class work. The remaining 4 weeks are intended for examinations and other extracurricular activities

COURSE OBJECTIVES

St. Albert's College (Autonomous) MBA program is designed with the following objectives:

1. To develop young men and women into professional managers to manage all sectors of the organized economic activity.
2. To equip the youngsters with conceptual and interpersonal skills and social purpose for managerial decision-making and its execution in real situations.
3. To develop and encourage the entrepreneurial capabilities of young generation to make them effective change agents.
4. To meet the demand for trained and professional people in the country at the top level management of business and industrial organizations in the light of the new economic and industrial policy of the country.

COURSE DURATION

The MBA (Full Time) programme of St. Albert's College (Autonomous) shall be spread in two years duration with 4 Semesters. Each semester shall comprise of a minimum of 16 instructional weeks of 5 days each of 5 hours a day (total contact hours 400). Continuous Internal Evaluation during the course period and University examination at the end of each semester shall be conducted.

ELIGIBILITY FOR ADMISSION

A pass in any Bachelor's Degree Examination of Mahatma Gandhi University or an equivalent degree of any other universities duly recognized by M.G. University with not less than 50% marks in the aggregate for all parts of examination or a Master's Degree examination with 50% marks in aggregate.

SC/ST students:

A pass in any Bachelor's Degree examination is needed for SC/ST candidates

ADMISSION PROCEDURE

The admissions to the MBA full time programme shall be strictly on the basis of merit as determined by the entrance examinations KMAT Kerala / CMAT / CAT, and Group Discussion and Personal Interview conducted at the institution level. We follow the guidelines and time schedule provided by Mahatma Gandhi University and Admissions Supervisory Committee (ASC) appointed by Govt. of Kerala.

The rank list shall be prepared on the basis of sum of following components:

Table 1: Admissions – Components of Rank List

Component	Weight
Entrance Examination Score	70%
Group Discussion	15%
Personal Interview	15%

Based on the score in the entrance test, candidate shall be short-listed for Group Discussion and Personal Interview. While preparing the rank list, if there is same index marks for more than one candidate, he/she will be ranked on the basis of actual marks obtained in the qualifying exam. Even after this, if there is a tie, they will be ranked on the basis of date of birth; i.e. the elder person is to be ranked higher. Based on the performance on the written test, group discussion and interview, merit list will be prepared and published by the college.

The Reservation Rules are applicable as per the Government norms.

FEE STRUCTURE

The fees structure decided by Fee Regulatory Committee (FRC) appointed by Govt. of Kerala is applicable to all private self-financing colleges. Any form of CAPITATION is strictly prohibited.

LIST OF COURSES OF MBA PROGRAMME**FIRST SEMESTER**

Course No	Title	Internal Evaluation Marks	External Evaluation Marks	Total Marks
CC01	Principles of Management	40	60	100
CC02	Managerial Communication	40	60	100
CC03	Managerial Economics	40	60	100
CC04	Accounting for Management	40	60	100
CC05	Quantitative Methods for Management	40	60	100
CC06	Legal Environment of Business	40	60	100
CC07	Computer Application in Business	40	60	100
CC08	Organisational Behavior	40	60	100
	Total	320	480	800

SECOND SEMESTER

Course No	Title	Internal Evaluation Marks	External Evaluation Marks	Total Marks
CC09	Financial Management	40	60	100
CC10	Marketing Management	40	60	100
CC11	Human Resource Management	40	60	100
CC12	Operations Management	40	60	100
CC13	Environment Management	40	60	100
CC14	Operations Research	40	60	100
CC15	Research Methodology	40	60	100
CC16	Management Information Systems	40	60	100
CC17	Viva-Voce		100	100
	Total	320	580	900

THIRD SEMESTER

Course No	Title	Internal Evaluation Marks	External Evaluation Marks	Total Marks
CC18	International Business	40	60	100
CC19	Business Ethics & Corporate Governance	40	60	100
EC 1	ELECTIVE 1 (Major Specialization)	40	60	100
EC 2	ELECTIVE 2 (Major Specialization)	40	60	100
EC 3	ELECTIVE 3 (Major Specialization)	40	60	100
EC 4	ELECTIVE 4 (Major Specialization)	40	60	100
EC 5	ELECTIVE 5 (Minor Specialization)	40	60	100
EC 6	ELECTIVE 6 (Minor Specialization)	40	60	100
CC 20	Organization Study	40	60	100
	Total	360	540	900

FOURTH SEMESTER

Course No	Title	Internal Evaluation Marks	External Evaluation Marks	Total Marks
CC21	Strategic Management	40	60	100
EC 1	ELECTIVE 7 (Major Specialization)	40	60	100
EC 2	ELECTIVE 8 (Major Specialization)	40	60	100
EC 3	ELECTIVE 9 (Minor Specialization)	40	60	100
CC22	Project & Comprehensive Viva Voce	-	200	200
	Total	160	440	600
TOTAL MARKS		3200		

LIST OF ELECTIVES

1. Marketing Management
2. Financial Management
3. Human Resource Management
4. Information Systems
5. Production and Operations Management

COURSE CALENDER

The academic calendar has been designed to ensure that the course will be completed within the stipulated two years' time.

SCHEME OF THE COURSE

1. The Full time Two-year MBA programme will have four semesters each having 18 work weeks.
2. The First and Second semesters each will have 8 full Courses with 75 contact hours each. All these courses are core courses. Each course carries 100 marks (Internal 40 and External 60). In addition, an External Viva-Voce examination will also be conducted at the end of the Second Semester. There will be a total of 1700 marks for First and Second Semesters (800+900).
3. The Third Semester will have 8 courses with 75 contact hours each and a placement in connection with an organization centered study. Out of the 8 courses two are compulsory and other 6 are electives. Of the six electives 4 courses from one major functional area opted by the student and remaining 2 in another minor functional area opted by the student. Every student has to undergo a placement work and produce a report on an organization centered study based on the organization to which he/ she is deputed. This study and the report will be treated as full course carrying 100 marks. The internal marks for the organization study will be awarded by means of seminar presentation cum viva-voce conducted by a board appointed for this purpose by the Faculty Council of the Institute. Students are permitted to do their organization study only in a nationally or internationally

reputed business organization for a period not less than 4 weeks. While selecting the organization students should make sure those four functional areas such as Production, Marketing, Finance and HR Departments are available in those organisations. There will be a total of 900 marks in the third semester.

4. For the Forth Semester, there are 4 full courses of which one is compulsory. Of the remaining 3, two subjects will be from the major functional area opted by the student and one form the minor area opted by the student. In addition the students are required to do a project Work of a problem centered nature and the Dissertation is to be submitted before the commencement of Fourth semester examination. Total duration of this project study is 8 weeks and total marks for the dissertation is 200. Project work should be done in a nationally or internationally reputed organization. Students are expected to select the project study from any one functional area that they have opted as their major functional area. Training should be done strictly under the supervision of an executive allotted by the organization. An attendance certificate should be obtained from the organization as a proof of the successful completion of the training and the same should be incorporated in their project report. For the preparation of the Project report the Head of the Department will entrust one Faculty Member to supervise the student. There will be comprehensive viva at the end of the fourth semester along with the evaluation of the project report.

5. The electives offered in the third and fourth semesters will be depending on the preference, aptitude of the students, availability of the Faculty and other facilities in the institution.

6. Total marks for third and fourth semester will be 1500 (900+600).

7. All clauses of MBA Regulation (Full Time) 2010, except which are under the consideration of Hon. High Court of Kerala are applicable along with these scheme and syllabus.

8. List of courses mentioned in the MBA Regulation (Full Time) 2011 is replaced and modified by the list of courses appended in the new scheme and syllabus.

SCHEME OF EXAMINATION AND RESULTS

Assessment of students:

Assessment of students for each course / subject will be done by internal continuous assessments and end semester examinations. Internal assessment shall be conducted throughout the semester. It shall be based on internal examinations and assignments as decided by the faculty handling the course. Assignments includes homework, problem solving, group discussions, quiz, term project, spot test, software exercises etc. Details of assignments of every semester shall be submitted by the faculty members in an assignment book to the principal / director of the institution. This is to facilitate uniformity in the internal evaluation process.

End semester examinations of all subjects will be conducted by the university.

There shall be four sets of examinations to be conducted at the end of each semester of 3 hours duration for each course.

The marks required for a pass is 50%. There is separate minimum for all courses and for internal and external (University) examinations.

Continual Evaluation or internal assessment

Continual Evaluation or internal assessment shall be conducted throughout the semester. It shall be based on internal examinations and various types of assignments as decided by the Faculty Member who is handling the course. Assignments include homework, problem solving, group discussions, quiz, term projects, spot tests, role play, software exercises etc. Details of assignments in every semester shall be submitted by the Faculty Members in an assignment book to the Principal / Head of the Department. This is to facilitate uniformity in the internal evaluation process. The internal evaluation is based on internal assessment that includes but not limited to participant's attendance (5), active class participation (5), assignments (10), internal seminars/role plays/presentations/Quiz (5), Corporate report (5) and continuous evaluation tests (10).

The internal assessment marks shall be awarded by the concerned Faculty Member in charge of the course based on the guidelines mentioned above. A systematic record for the award of continual evaluation marks shall be maintained in the Department duly signed by the concerned Faculty Members and counter signed by the Head of the Department. It should be placed in the notice board seven days before the commencement of University Examinations.

In case a candidate fails to secure the required minimum of 50% marks in internal continual evaluation, he / she may secure it by repeating the course altogether in a regular class or by taking the course with a Faculty Member assigned by the Head of the Department in a subsequent semester provided that the candidate has failed to obtain the 50% marks in the first instance, but such improvement in continual evaluation in the same paper cannot be attended more than once.

Candidates who have secured not less than 60% marks in the aggregate of total marks for all papers in four semesters (both internal and external together) in the examination shall be declared to have passed the MBA degree examination in first class.

Candidates who obtain an average of not less than 75% of the total marks (as explained in clause 4 above) shall be declared to have passed the MBA degree examination with Distinction.

The internal assessment marks shall be awarded by the concerned faculty member in charge of the course based on the guidelines stipulated in clause 3 above. A systematic record for the award of internal assessment marks shall be maintained in the department duly signed by the concerned faculty members and counter signed by the Head of the Department. It should be placed in the notice board two weeks before finalising the marks.

In case a candidate fails to secure the required minimum of 50% marks in internal assessment, he may secure it by repeating the course altogether in a regular class or by taking the course with a faculty member assigned by the Head of the Department in a subsequent semester provided that the candidate has failed to obtain the 50% marks in the first instance, but such improvement in sessionals in the same paper can not be attended more than once.

Candidates for the MBA degree shall be eligible to undergo the course of study in the next semester and take the examination of that semester, irrespective of the results of the

examinations of the previous semester provided they have completed all the formalities of attendance, payment of all fees due to the university and registration for the examinations in the earlier semesters.

REGISTRATION FOR EACH SEMESTER

Every candidate should register for all subjects of the end semester examinations of each semester. A candidate who does not register will not be permitted to attend the end semester examinations. He shall not be permitted to attend the next semester.

1. No student shall be allowed to appear for the university examinations (written and viva-voce), if he/she has not secured 75 % attendance for each course.
2. For a student to claim specialization in any functional area he/she must have taken a minimum of 6 courses in that area of specialization.

IMPROVEMENT

Candidates shall be allowed to improve the result of any subject along with the examination of their immediate junior batch. There will be no supplementary examination.

EXAMINATION MONITORING CELL

Head of each institution should constitute an examination-monitoring cell at the institution for supervising all examinations especially the internal examinations. This cell with a senior faculty member as convener shall consist of minimum three faculty members (one shall be a lady). A clerical staff having computer skill shall be assigned for assisting the examination monitoring cell.

The following are the collective responsibilities of the examination-monitoring cell.

1. Schedule and conduct all internal examinations
2. Act as the examination squad to keep a vigil on all internal and university examinations.
3. To receive any complaints from students regarding issues like out of syllabus questions, printing mistakes etc. of end semester examinations. The cell shall

investigate these complaints and if necessary forward to university with specific commends.

4. To receive any complaints from students regarding internal examinations, award of marks and any allegation of victimization. Enquire such incidents and give a report to the head of institution for necessary action.

5. To function as a wing of the office of the Controller of the Examinations of the university at institution level.

CLASS COMMITTEE

Head of institution shall take necessary steps to form a class committee for each class at the beginning of classes of each semester. This committee shall be in existence for the concerned semester. The class committee shall consist of Head of Department as Chairman of the committee, Faculty advisor of the class, a senior faculty member of the department and three student representatives (one of them should be a girl). There should be at least two meeting of the class committee every semester. It shall be the responsibility of the Head of Department to convene meetings.

Responsibilities of Class Committee

1. To review periodically the progress and conduct of students in the class.
2. To discuss any problems concerning any subject in the concerned semester.
3. Maintain strict vigil against ragging.
4. Any other relevant issues.

MBA Degree Programme Syllabus appended

CCO1 PRINCIPLES OF MANAGEMENT

MODULE 1 : Introduction to Management

Definitions - Managerial Effectiveness & Efficiency - Levels of Management and Skills – Managerial roles – Evolution of Management Thought – Functional Areas of Management – Management Process – Management and administration, Pedigree of Management, Management as a Profession.

MODULE II: Planning and Decision Making

Nature & Importance of planning – Types of Planning – Steps in Planning with Illustration – Prerequisites of Planning - Limitations - MBO – Process, Hierarchy of Plans, Principles of Planning. Decision Making – Programmed & Non – Programmed Decisions – Decision Making Process, Techniques, forecasting, Conditions of Risk, Uncertainty – Group Decision Making.

MODULE III: Organising

Organizing – Formal and Informal Organisation, Organising Process – Bases of Departmentation, Decentralisation – Span of management – Authority and Power – Delegation of Authority – Line and Staff Relationships, functional, Project and Matrix Structures – Centralization Vs Decentralization, Modern Organisations; Learning, Net working and Virtual Organisations – Principles in Organising.

MODULE IV: Staffing, Motivation, Leading & Communication

An overview of Staffing Function – Staffing Process Motivation – motives, motivators, Motivational Theories Leadership – Elements of Leadership, Leadership Styles, Traditional and Modern theories Communication – Communication process and barriers in Communication Principles of Motivation, Leadership and Communication

MODULE V: Controlling, Co-ordination and Emerging Trends in Management

Controlling – Importance – Levels of Control – Control Process – Different types of Control – Effective Controlling – Control techniques – Co-ordination – Principles of Control and Co-ordination Management of Creativity & Innovation – The Creative Process – Knowledge Management – An overview – Business Process Re engineering –

References:

1. Koontz, H & Heinz, W (2013). Tata McGraw Hill Publications
2. Stoner, J.F., Freeman, E.R., & Gilbert, D.R. (2012). Management (6th ed.). Pearson Publications
3. Samuel C, Certo and Tervis Certo, Modern management : Concepts and skills, Pearson Publications
4. Andrew J Dubrin, Essentials of Management, Thomson Southwestern, 9th edition, 2012.
5. Stephen P Robbins, David A.De Cenzo and Mary Coulter, Fundamentals of management, Prentice Hall of India, 2012.

CC 02 - MANAGERIAL COMMUNICATION

Module 1

Principles of communication – Types of communication – Methods and media of communication – Process of communication – Barriers to communication – Strategies for improving communication effectiveness.

Module II

Organizational Communication – Principles of effective organisational communication – Causes of poor organizational communication – Types of organisational communication – Grapevine communication – Communication for inter personal influences – Effective leadership communication – Cross culture communication, Crisis Communication.

Module III

Verbal and non verbal communication in business – Public speaking skills – Business presentations – Role of audio visual aids and computers in oral presentations Interviewing – art of negotiation – Listening skills – Mannerisms – Body language. Technology and communication- Video conferencing

Module IV

Written Communication – Structures and methods of written communication – writing process –letter for different kinds of situations – Enquiries – Customers' complaints – Collection letters – Sales promotion letters – Memoranda – Directives and instructions – Notices – Reports – Memos – Agendas – Proposals – Minutes – Professional papers – Agreement documents – Press releases – Preparation of resumes.

Module V

Conducting meetings – Procedure – Preparing agenda , minutes and resolutions – Conducting seminars and conferences – Group discussion – Drafting speech – Report writing – Structure of reports – Long and short reports – Formal and informal reports – Technical reports – Norms for including Exhibits and Appendices.

References

1. Raymond V Lesikar et. Al., *Business Communication – Marketing connections in a digital world*, TMH, New Delhi.
2. Herta A Murphy & Charles E Pick , *Effective Business Communication*, TMH, New Delhi.

CC 03- MANAGERIAL ECONOMICS

Module I

Introduction: Basic economic problems – Economic System – Micro and Macro economics – Managerial economics – Nature and scope – Fundamental concepts of Managerial economics – Incremental concept, Discounting concept, Opportunity cost concept, Time concept, Equi-marginal concept – Business Decision making – Certainty, Risk and Uncertainty – Applications of economics in managerial decision making.

Module II

Demand Analysis: Demand – Demand function – Demand distinctions – Elasticity of Demand – Different types of elasticity – Applications – Measurement of Elasticity. Demand forecasting – Techniques. Utility – Equilibrium of the consumer using cardinal and ordinal utility (Indifference curves) – Income effect and substitution effect.

Module III

Supply: Theory of Production – Production function – Laws of Returns – Economies of scale and Economies of scope – Isoquants – Best Production possibility – Cost Analysis – Cost concepts – Short run and long run cost curves – Managerial uses of Long run cost curves – Revenue Analysis – Revenue curves.

Module IV

Market: Definition – Classification of Markets – Importance of understanding market structure – Different types of market based on competition – Perfect and Imperfect competition – Monopoly – Price and output determination under perfect competition, monopoly, monopolistic competition and oligopoly – Kinked Demand curve – Monopoly price discrimination and its conditions – Non Price competition.

Module V

Instruments of Macro Economic Policy: Circular Flow of Income – National Income – Concepts of National Income – Methods of measuring National Income – Product Approach, Income Approach and Expenditure Approach – Business Cycle – Inflation and Deflation – Fiscal Policy – Budget Deficit and Debt – Government Budgetary Policy – Monetary Policy – Instruments of Monetary Policy – Balance of Payment.

References

1. P.L. Mehta – *Managerial Economics Analysis, Problems and Cases* – Sultan Chand & Sons, New Delhi.
2. V.L. Mote – *Managerial Economics* – Tata McGraw Hill, India, New Delhi.
3. K.K. Dewett – *Modern Economic Theory: Micro and Macro Analysis* – Orient Book Distributors, New Delhi.

CC 04- ACCOUNTING FOR MANAGEMENT

Module I

Meaning , Definition and needs of accounting business decisions : Forms of accounting and users of accounting information - Framework of accounting postulates - principles - conventions -concepts -procedures methods etc. accounting equations and types of accounts -rule of recording business transactions.

Module II

Preparation of basic accounts – journal to trial balance, income statement- position statements- (P&L A/C and Balance Sheet) and adjustment entries.

Module III

Ratio Analysis -its meaning and uses - study of liquidity ratios and leverage ratios - Study of profitability ratios and activity ratios -Meaning - uses and preparation of functions flow statements -meaning, uses and preparation of cash flow statements.

Module IV

Costing as an aid to management- presentation of various costs in proper format - marginal costing and absorption costing- cost volume profit analysis- its assumption and calculation- managerial uses of break even analysis; activity based costing- Budgetary control.

Module V

Meaning and uses of standard costing-procedure of setting standards- variance analysis-one way and two way analysis of variance- overall cost variance- material variance-labour variance and overhead variance- material price variance- material usage variance-material yield variance- material mix variance-labour cost and time variance- labour mix and yield variance - overhead volume and expenditure variance -responsibility accounting and report writing.

References

1. M.N.Arora, *Accounting for Management*, Himalaya Publishing House, New Delhi.
2. Colin Drury, *Management and Cost accounting*, Cengage Learning , New Delhi.
3. S N Maheswari, and S K Maheswari, *Advanced Accountancy*, Vikas Publishing House, New Delhi.
4. Dearden J and Bhattacharya S K , *Accounting for Management – Text and cases* , Vikas Publishing House, New Delhi.

CC 05 -QUANTITATIVE METHODS FOR MANAGEMENT

MODULE I

Matrices – Types – Addition – Subtraction – Multiplication – Inverse – Determinant and solving systems of equations – Matrix Method & Determinant Method.

MODULE II

Probability – Basics Probability concepts – Addition and multiplication Theorems of Probability, Marginal, Joint and Conditional Probability – Baye's theorem and its business applications. Probability distributions – Random variable – Expected value – Binomial, Poisson, Normal distributions – Business applications.

MODULE III

Hypothesis – Confidence level & Significance level – types of errors – Parametric tests – Tests involving one population mean and two population means and proportions – Z test – t test.

MODULE IV

Correlation – Types – Karl Pearson's correlation coefficient – Spearman's Rank correlation coefficient – Coefficient of Determination. Regression – Line of best fit – Least square method – Regression lines – Business applications

MODULE V

Business forecasting – Time Series analysis – Components – Types – Seasonal – Trend – irregular – cyclic. Methods – Straight line – semi average – Application of Time series in Business forecasting. Concept – Types – Price – Quantity – value – Fishers Index number. Business applications of Index Numbers.

References:

1. Levin, Richard I, Rubin David S, Statistics for Management, Prentice Hall India.
2. Sharma J K, Business Statistics, Pearson Publication.
3. Naval Bajpai, Business Statistics Darling Kindersely (I) Pvt.Ltd.,
4. Sanchetti, D.C.Kapor, V.K,Business Mathematics: Sultan Chand & Sons,
New Delhi.

CC 06- LEGAL ENVIRONMENT OF BUSINESS

Module I

Introduction – Sources of law and interpretation of law – Classification of Law-Principles of natural justice – History of Indian judicial system.

Module II

Law of contract – Essential features of contract-offer-acceptance-consideration --- Different types contract - Performance of contract- Discharge of contract – Breach of contract, Damages-Indemnity and Guarantee.

Module III

Negotiable Instruments Act- 1881-cheques – Bills of Exchange – Promissory Notes - Definitions and Characteristics of Negotiable Instruments – Dishonor and Discharge of Negotiable Instruments- Latest laws relating to Negotiable Instruments. Sale of goods Act- 1930-Conditions , Warranty, Agreement to sell.

Module IV

Company Law –Types of companies – Incorporation – Memorandum - Articles of Association – Prospectus . Winding up of companies – Types.

Module V

Consumer Protection Act 1986 – Consumer Redressal Mechanisms- Foreign Exchange Management Act -1999- Objectives and Features - Cyber laws –Intellectual Property Rights. Patents, Trademarks, Designs, - implications on business.

References

1. Dr.Avathar Sing, *Company law*, Eastern book Company, New Delhi.
2. A.K. Majundar and Dr. G.K.Kapoor, *Company Law & Practice,s* Sultan Chand & Sons, New Delhi.
3. B.S.Moshal, *Mercantile Law*, Ane Books, New Delhi.

CC07- COMPUTER APPLICATION IN BUSINESS

Module I

Introduction to Computers: Hardware - Software - Systems Software, Application. Software and Packages - Introduction to Embedded Software– Computer Architecture . Fundamentals of Operating Systems- Windows & Linux.

Module II

Operating systems- Windows – MS Office- Text processing using word- Functions. MS-Excel - , Graphs, Basic statistical formulae using MS Excel , MS-Power Point -Creating Effective Presentations.

Module III

Microsoft Access - Introduction to DBMS concepts, Creating a Database. Database functions – Database creation – Sorting, Indexing and report- Programming using software. Applications of computers in documentation, Preparation and making reports, Preparation of questionnaires, presentations, Tables Charts and graphs.

Module IV

Data Communication and Computer networks. LAN and WAN- Communication through computer networks- Security, Analog & Digital Signals, Bandwidth, Network Topology, Packet Transmission.

Module V

World Wide Web and Business Community, Internet, E- Mail with TCP/IP. ERP fundamentals- Introduction to SAP.

References

1. Leon & Leon *Introduction to Computers*, Vikas publishing House, New Delhi.
2. June Jamrich Parsons, *Computer Concepts*, Thomson Learning, New Delhi.
3. Comer , *Computer networks and Internet*, Pearson Education, New Delhi.
4. White, *Data Communications & Computers Network*, Thomson Learning, New Delhi.

CC08- ORGANISATIONAL BEHAVIOUR

MODULE I: Introduction of Organisational Behavior and Individual Behaviors

Definitions of OB – Nature & Scope – Importance of OB in modern organizations
Organizational Behavior Models Individual behaviours:- Personality, Belief, Values, Attitudes, Perception, Attribution and Learning, Theories of Personality, Perception, Attitude and Learning

MODULE II: Motivation

Theories of Motivation; Application of Motivation at work place; QWL, Job Enlargement, Job Enrichment, Job Rotation, Job re-engineering; Motivation, Job Satisfaction and Morale

MODULE III: Leadership & Power

Leader vs. Manager, Leadership Styles, Concepts and Theories – Trait, Behavioural and Situational; Transactional and Transformational Leadership; Leadership Effectiveness; Tools for measuring Leadership; Power; Sources of Power.

MODULE IV: Group Behavior

Group Formation and Development; Group Dynamics; Team Building, Structure of Groups; Group Efficiency; Group Norms; Cohensiveness; Group Effectiveness; Group Decision Techniques; Application of Fundamental Interpersonal Relations Orientation – (FIRO-B); Kinesics-Body Language.

MODULE V: Culture, Stress, Change, Development, Conflict and E.Q

Creating and Sustaining Organisational Culture; Organisational Change; Resistance to Change, Managing Change; Work Stress; Sources and Consequences, Organisational Role Stress; Emotional Intelligence & EQ; Conflict; T.A & Johari Window; Organisational Change; Resistance to Change; Managing Change; Work Stress; Sources and Consequences; Organisational Role Stress; Emotional Intelligence & EQ; Conflict; T.A & Johari Window; Organisational Development.

References:

1. Fred Luthans, Organisational Behaviour, New York, McGraw Hill, 2011.
2. A.F Stoner and Charles Wenkel, Management, Prentice Hall of India, New Delhi, 2010
3. Stephen P. Robins, Organisational Behaviour, Pearson Education, 2011
4. Uday Pareek and Sushama Khanna, Understanding Organisational Behaviour, Oxford University, New Delhi, 2011
5. David Keith, Human Behaviour at Work, McGraw Hills, 2002
6. Danial C. Fieldman and Hugh Arnold, Managing Individual and Group Behaviour in Organisational, McGraw Hills, 2010.
7. Edwin Gerlof, Organisational Theory and Design, McGraw Hills, 2011
8. Porter LW, Lawler EE & Hackman R, Organisational Behaviour, McGraw Hills, 1988
9. Subha Rao P., Organisational Behaviour, Himalaya Publishing House, Mumbai, 2010

10. Robert Kreitener and Angelo Kinieki, Organisational Behaviour, Tata McGraw Hill, New Delhi, 2008

11. Mc Shane & Von Glinov, Organisational Behaviour, 5th Edition, Tata McGraw Hill, 2011

CC09 -FINANCIAL MANAGEMENT

Module I

Financial Management - Scope - Role of Financial Management in Business-Time value of money-Risk and Return- Risk diversification.

Module II

Long-term investment decisions – Capital budgeting, Different techniques –Traditional and modern methods (DCF method) – Capital Rationing – Risk Analysis in Capital budgeting – An overview of Cost of Capital.

Module III

Financing decisions – Operating, Financial and combined leverage – Capital Structure – Meaning and importance- Theories of capital structure – Net income, Net operating income and MM approach (Hypothesis).

Module IV

Dividend decisions – Dividend policy (Walter Gordon and MM approach) – Types of Dividend- Legal and Procedural aspects of payment of Dividend.

Module V

An overview of Working Capital Management – Inventory, Cash and Receivable management and Management of surplus – Working Capital Financing and Long term Financing, Current Liabilities Management – size and sources- Money Market – Banks – Regulation of Working Capital Finance in India.

References

1. Van Horne James, *Financial Management Policy*, Prentice Hall India
2. I M Panday, *Financial Management*, Vikas Publications, New Delhi.
3. Prasanna Chandra, *Financial Management*, Tata Mc Graw Hill, New Delhi.
4. Khan M Y& Jain P K, *Financial Management*, Tata Mc Graw Hill, New Delhi.
5. Lawrence J Gitman, *Principles of Managerial Finance*, Pearson Education limited. New Delhi.
6. James C Vanhorne, John M Wachowicz Jr, *Fundamentals of Financial Management*, Pearson Education Limited, New Delhi.

CC10- MARKETING MANAGEMENT

Module I

Marketing – Nature and scope- Marketing as the central function of an organization- Evolution of Marketing- Marketing as Creating, Communicating and Delivering –Value- Value chain – Customer satisfaction as the end of the value chain- Marketing Environment – Internal and External environment- Marketing Research- Marketing Information System.

Module II

Strategic Marketing Planning-Elements of Marketing Plan- Buyer Behavior – Consumer buying decision process- Consumer adoption process- Organizational Buying – Process, Market segmentation- Targeting- Positioning- Identifying and analyzing competitors- Designing competitive strategies -for leaders, challengers, followers.

Module III

Concept of Product- Classification of products- Goods Vs Services- Major product decisions-Product line and Product mix- An overview of Brand Management- Packaging and Labeling- Product life cycle- New product development- Pricing- Factors affecting Price Determination- Pricing Policies and Strategies.

Module IV

Marketing Channels – Functions and Flows- Channel Design, Channel Management- Selection- Training- Motivation and Evaluation of channel members- Retailing and Wholesaling-Teleshopping – Shopping through Internet. Integrated Marketing Communication Process and Mix-Advertising- Personal selling-Direct Marketing- Sales Promotion, Publicity and Public Relations – Comparative advantages and disadvantages- Managing the Sales Force .

Module V

Marketing Controls – Tools and Techniques of Marketing Control- Marketing of Services- Industrial Marketing- Marketing Challenges in the Globalized era- Green Marketing- Consumerism- Rural Marketing in India- Recent trends – Mobile Marketing and other Digital forms like Video platforms, Review sites in Internet.

References

1. Kotler Philip & Keller Kevin, *Marketing Management*, Pearson Education, India
2. Czinkota Micheal. R & Ronkainen Iikka. *International Marketing*, Cengage Learning.
3. Ramaswamy V.S & Namakumari. S *Marketing Management – Global Perspective, Indian Context*, , MacMillan.
4. Kotler Philip, Keller Kevin, Koshy Abraham & Jha Mithileshwar *Marketing Management – A South Asian Perspective*, Pearson Education.

CC11- HUMAN RESOURCE MANAGEMENT

Module I

Introduction to Human Resource Management-Importance-Scope and Objectives. Evolution. Line and Staff aspects of HRM, Line managers Human Resource duties. New approaches to organising HR. Strategic Human Resources Management, Strategic HRM tools.

Module II

Job analysis: Methods for collecting Job Analysis Information, Writing Job Description & Job Specification. Human Resource Planning and Recruiting: The Recruitment and Selection process- Planning and Forecasting, Internal and External sources of candidates, Managing HR in challenging times Employee Testing and Selection: Basic testing concepts, Types of Tests. Interview: Process and Types, Guidelines for Interviews

Module III

Orientation, The Training Process, Training Needs Analysis, Training Techniques- On - the-Job & Off-the -Job Training Methods, OJT Process , Training Evaluation. Management Development Programs : Case Study and other Modern Training Method . Performance Management & Appraisal: Process and Techniques. Career Planning and Management Concepts.

Module IV

Establishing Pay Rates: Steps, Job Evaluation. Wage and Salary administration- Steps and factors affecting, Incentives. Benefits and services: Statutory Benefits - Non-statutory Benefits - Insurance Benefits - Retirement Benefits, Flexible Benefits Programs. QWL

Module IV

Industrial relations: Significance, Objectives, Approaches. Industrial Disputes- Causes, Forms, Preventive Machinery. Collective Bargaining: Basic Concepts . Trade unions: Definition, Objectives, Functions Social Security in India, Employee welfare, Grievance Handling and Discipline-Sources and forms of Grievances -Grievance Procedure, Disciplinary Procedure.

References

1. Gary Dessler & Biju Varkkey, *Human Resource Management*, Pearson.
2. VSP Rao, *Human Resource Management: Text and cases*, Excel Books, New Delhi.
3. Mizra S. Saiyadain, *Human Resources Management*, 4th Ed, Tata McGraw Hill.
4. Raymond Noe, *Employee Training and Development*, Tata McGraw Hill.
5. K Aswathappa, *Human Resource Management- Text & Cases*, Tata McGraw Hill.
6. Wayne Mondy, *Human Resource Management*, Pearson, India.
7. Joe Martocchio, *Strategic Compensation: A Human Resource Management Approach*, Pearson, India.

CC12- OPERATIONS MANAGEMENT

Module I

Introduction to Production and Operations Functions, Interaction of Operations Management with other functional areas of Management – Manufacturing and Non Manufacturing operations and their Classifications – Operations Strategy as a part of Corporate Strategy – Operations Planning and Control – Operations Forecasting: Forecasting methods.

Module II

Facility Locations – Cost competition and Hidden factors – Steps in location selection – Types of Manufacturing Systems and Layout – Facility Layouts – Layouts by Products and Process – Life balancing – Design of Operations Systems : Aggregate planning and Master Scheduling, MRP, CRP. Material Handling: Principles, Equipments for Materials Handling.

Module III

Work study, Time and Method study: Definition – Importance – Aims and Procedures – Implications on Productivity – Work measurement – Work sampling – Work environment – Industrial safety – Value analysis.

Module IV

Materials Management – Functions – Material planning and Budgeting – Value Analysis - Purchase functions and Procedure - Inventory control – Types of Inventory – Safety stock – Inventory Control Systems – Perpetual – Periodic – JIT –KANBAN. Managin Vendors; Vendor Analysis, Rating and Selection – Procedure and Criterions.

Module V

Maintenance Management Function – Types of Maintenance – Total Productive Maintenance (TPM). Statistical Quality Control (SQC). Cost of Quality (COQ). ISO 9000 certification. Total Quality Management.

References

1. Everest E Adam, Ebert – *Production and Operations Management* – PHI – publication, India
2. Joseph G Monks – *Operations Management (Theory and Problems)* –McGraw Hill Intl.
3. Chase, Aquilano, Jacobs *Production and Operations Management*, Tata McGraw Hill.

CC13- ENVIRONMENTAL MANAGEMNT

Module I

Environment: Components of environment: Lithosphere, Hydrosphere, Atmosphere, Biosphere, Ecology, Eco-system : Components – Biotic and abiotic components, Bio-diversity : Definition, Principles, Bio-diversity in India.

Module II

Natural resources and Energy management: Depletion of natural resources, Fossil fuels, Energy sources: Conventional sources, Renewable sources, Energy Management: Definition, Energy management techniques, Energy Audit, Population growth, Global Warming, Ozone depletion, Carbon credit, Climate change.

Module III

Implementation Impact of Industrial and Business activities on the Environment, Environmental Degradation, Industrial Pollution – Types and Impacts, Managing Industrial Pollution, Waste Management, Developing Recycling Technologies.

Module IV

Sustainable Development: Definition, Elements, Indicators, Principles, Guidelines for sustainable development, Concern for environment: Eco-friendly manufacturing, Packaging, Green marketing, Green funding, Institutional support for establishing and maintaining Environment Friendly Business.

Module V

Environment Impact Assessment, Environmental Audit, Environment Management System, Environmental Legislations, ISO 14000, Governmental Institutions for Environmental Management.

References

1. Bala Krishnamurthy, *Environmental Management: Text and Cases*, PHI.
2. Arindita Basak, *Environmental Studies*, Pearson Education.
3. Kaushik, Anubha, *Environmental Studies*, New Age International.
4. Betz, Fredrick, *Managing Technology*, Prentice Hall, Englewood cliffs, New Jersey.
5. Rohatgi, P.K, Rohatgi K and Bowonder. B, , *Technological Forecasting*, Tata Mc Graw Hill

CC14- OPERATIONS RESEARCH

Module I

Introduction to Operations Research, Evolution of the field , Scope, Merits and Limitations – Concept of Optimization – Decision making through Operation Research – Nature and significance of operations research – Models and Modeling in OR – General methods for solving OR models – Methodology of OR, Application and Scope of OR – Basic OR models.

Module II

Programming techniques – Linear programming and applications – Linear programming Graphical methods- Simplex methods , Maximization problems – Minimization problems and Problems involving Artificial Variables – Concepts of Duality – Sensitivity analysis.

Module III

Transportation problem – Transportation algorithms – North West corner method (NWCM) – Least Cost Method (LCM) – Vogel's Approximation Method (VAM) – Modi method – Degeneracy in transportation problem.

Module IV

Assignment problem – Solution methods of assignment problem - Network Analysis, PERT and CPM, Time estimation, Critical Path , Basic Concepts of Crashing , Resource leveling, Resource Smoothing, Familiarization with Project Management Software Packages.

Module V

Inventory and waiting line models – Inventory control – Deterministic models – Queuing models – Simulation – Monte – Carlo simulation.

References

1. Hamdy A Taha, *An Introduction to Operations Research*, Prentice Hall, ,
2. Ronald L. Rardin, *Optimization in Operations Research*, Pearson Education, India
3. Dr. J.K. Sharma, *Operations Research* –Macmillan India Ltd.

CC15- RESEARCH METHODOLOGY

Module I

Nature and scope of Research-Role of research in decision-making - Values and Cost of Information - Research process.

Module II

Research design (exploratory, descriptive, experimental)- Population, Sample, and Sampling design-Probability sampling- Non-probability sampling-Techniques- Sampling error and Non-sampling error.

Module III

Data collection - Primary data & Secondary data -Methods & Instruments of data collection – Reliability & Validity, Questionnaire design- Attitude measurement and scaling- Administration of Surveys.

Module IV

Tabulation and analysis of data - Use of Statistical Software Packages , Hypothesis testing – Confidence level & Significance level- Parametric & Non Parametric tests-Tests involving one population mean and two population means , z – test, t – test, chi – square test , F test. ANOVA – one way and two way ANOVA. Basic concepts of Multivariate statistical techniques- Multiple regressions- Discriminant analysis, Factor analysis- Cluster analysis.

Module V

Qualitative research methods - Case study method – Content analysis - Focus group – Projective Techniques – In-depth interview. Research reports - Different types of reports– Different formats of research reports- oral presentations of reports. Research applications in functional areas of management.

References

1. Kothari, C. R, *Research methodology: methods and techniques*, New Age Publications, New Delhi.
2. Donald R.Cooper and Pamela S.Schindler - *Business Research Methods* - Tata McGraw Hill, India
3. Naresh K Malhotra – *Marketing Research: An Applied Orientation*, Pearson Education, New Delhi.

CC16 - MANAGEMENT INFORMATION SYSTEMS

Module I

Foundations of information systems: frame work for business users – Roles of information systems – system concept – Organization as a system – components of information systems – IS activities – Types of IS.

Module II

Business Information systems – Marketing Information Systems – Manufacturing – Information Systems – Human Resource Information Systems , Financial Information Systems – Transaction Processing System.

Module III

Management and Information & Decision Support Systems – Management Information Systems – Expert systems – Examples, Executive Information Systems, Artificial Intelligence Technologies .

Module IV

Strategic roles of IS – Breaking Business Barriers –Business Processes Reengineering – Improving Business Quality – Creating Virtual Company – Using Internet Strategically – Building knowledge Creating Company – Challenges of Strategic of IS – Enterprise – wide systems and E- Business Applications.

Module V

Managing information systems – Enterprise Management – Information Resource Management – Technology Management – IS planning methodologies – Critical Success factors – Business Systems Planning – Computer Aided Planning Tools. Security & Ethical Challenges _ IS controls – Facility Controls – Procedural Controls – Computer Crime – Privacy issues.

References

1. O'Brien, James A *Management Information Systems*, Tata McGraw Hill, New Delhi,
2. Marvin Gore, *Elements of Systems Analysis & Design*, , Galgota Publications.

CC18- INTERNATIONAL BUSINESS

Module I

Introduction to International Business – Nature & Dimension of International business – Environment of International Business – Economical, Political, Demographical, Global, Social, Cultural, Technological, Legal – Entry strategies for International Business.

Module II

Process of Globalization – Globalizations of Indian Business – WTO, Regional block – International commodity agreement – Global Trade – Global Supply Chain and Logistics Management – Investment Environment.

Module III

International Economic Institutions – IMF, World Bank, UNCTD, UNIDO – Asian Development Bank, - International Trade centre – Foreign Exchange Market Mechanism – Determinants of Exchange rate.

Module IV

Export and Import Procedure – Licensing & Joint ventures - International Investment – FDI – Production linkages, Foreign – Investment in India, Cross Border – Forex reserve – Over view of Currency Exchange and Risk Management.

Module V

Social responsibility of business,.Country Evaluation & Selection – International Asset Protection, Foreign Trade Policy, Social issues in International Business, Labour issues, Environmental issues .

References

1. Dr.Francis CherruniIam, *International Business Environment*, Himalaya Publishing House
2. Shyam Shukla, *International Business*, Excel Book, New Delhi
3. Rakesh Mohan Joshi, *International Business*, Oxford University Press, New Delhi.

CC19- BUSINESS ETHICS & CORPORATE GOVERNANCE

Module I

Introduction – Ethics and morality, Ethics and law, Ethics and ethos, Business Ethics, Concepts, Importance and benefits, Ethical theories, Values and its relevance in Management, Values for Managers, Ethics in Business and Indian Value system, Various approaches to ethics-Indian examples.

Module II

Ethical Corporate Behavior, its Development, Ethical leadership with examples, Ethical Decision Making, Work ethics: nature and scope, Ethical issues at workplace, Ethics and cultural issues, Environmental Ethics, Ethical dilemma, ethical displacement.

Module III

Ethics in Functional Areas: Operations, Marketing, Finance, HR & I. Technology, Recent challenges in ethics, Ethics in different countries.

Module IV

Corporate Governance, Corporate Governance initiatives in India and abroad. Corporate Governance failures with examples, General ethical issues and the court verdicts in the domain of business ethics, obligation to stakeholders.

Module V

CSR and its significance in Business, social audit – Ethical Issues-Corruption, - whistle blowing-competition-privacy-trade secrets, IP rights, Harassment & Discrimination.

References

1. Manisha Paliwal,. *Business Ethics* Newage International press. New Delhi.
2. Patyrick J. A. & Quinn J. F. *Management Ethics*, Response Publishing, New Delhi.
3. Sherlekar, *Ethics in Management*, Himalaya Publishing, New Delhi.

CC21-STRATEGIC MANAGEMENT

Module I

Introduction to Strategic Management – Concept of Strategy, Process of Strategy, Strategic Framework; Vision, Mission, Objectives and Goals. Strategic Analysis – Environmental Analysis, Competitive forces, Internal analysis SWOT Analysis.

Module II

Business level strategies – Cost leadership, Differentiation, Focus. Corporate level strategies- Stability strategies, Expansion strategies – Intensification, Integration, International expansion, Diversification strategies, Merger, Acquisitions, Strategic alliance, Turnaround strategies.

Module III

Implementation and Control – Leadership in Strategic Management; Portfolio Analysis, BCG Matrix, GEC Model, etc, Control Process Analysis and Follow-up Action for Control, Evaluation Strategy.

Module IV

Corporate Management; Corporate Policy, Corporate Governance, Top Management, Code and Laws of Corporate Management, Corporate Scenarios and Strategy; Strategies for Stable and Dynamic markets, Strategies for Global Markets.

Module V

IT and Strategy, R&D and Strategy, Knowledge Management – Knowledge Sources, Knowledge Creation, KM framework, Trends and Challenges in KM. Innovation and creativity, Innovation Culture. Building Creative Organization. Corporate Social Responsibility, Ethics and Values, Philanthropy.

References

1. Glueck, W F and Lavch, L. R *Business policy and Strategic Management*, McGraw Hill, New Delhi.
2. Porter, E, Michael *Competitive Advantage – Creating and sustaining Superior Performance*. Free press London.
3. Shrivastava, R.M.(1999) *Management Policy and Strategic Management* Himalaya Publishing House, Mumbai.
4. A.C.Hax and NS, *Strategic Management: An Integrative Perspective*, Prentice Hall, India.
5. Gregory G.Dess and Alex Miller, *Strategic Management*, McGraw Hill. India

MARKETING MANAGEMENT ELECTIVES

MM01 - AGRI BUSINESS AND RURAL MARKETING

Module 1: Agricultural Marketing: Nature and Scope, Objectives of Agriculture Marketing, Challenges in Agricultural Marketing, Marketing of Agricultural Inputs – Features – Seeds - Fertilizers – Pesticides – Tractors

- Challenges and Opportunities. An Overview of Indian Agro-chemical Market. Marketing of Agricultural Products – Definition and Scope - Features of Agricultural Products, Classification of Agricultural Markets - Methods of Sale - Channels of Distribution.

Module II: Introduction to Rural Marketing: Definition and Scope of Rural Marketing, Components of Rural Markets, Classification of Rural Markets, Rural vs. Urban Markets. Population, Occupation Pattern, Income Generation, Location of Rural Population, Expenditure Pattern, Literacy Level, Land Distribution, Land Use Pattern, Irrigation, Rural Development Programs, Infrastructure Facilities, Rural Credit Institutions, Rural Retail Outlets.

Module III: Rural Marketing Mix Strategies: Rural Product Strategies and Brand Management –Rural Pricing Strategies – Rural Distribution Strategies – Rural Promotional Strategies, Challenges in Rural Communication, Target Audience.

Module IV: Rural Media- Mass Media, Non-Conventional Media, Personalized Media, Importance of the two-step flow of Communication, Media Typology, Media Model, Media Innovation, Influence of Consumer Behaviour on Communication.

Module V: The Future of Rural Marketing: Focused Marketing Strategies, Market Research, Consumer Finance, Rural Vertical, Retail and IT Models, Public-Private Partnership, E-Rural Marketing, Role of Government and NGOs in Rural Marketing.

References:

1. Badi & Badi *Rural Marketing*, Himalaya Publishing New Delhi.
2. Mamoria, C.B., Badri Vishal *Agriculture problems in India*, McGraw Hill, New Delhi.
3. Arora, R.C. *Integrated Rural Development*, McGraw Hill, New Delhi.

MM02 - BUSINESS TO BUSINESS MARKETING

Module I: Introduction to Business Marketing: Meaning and Scope, Differences between Industrial and Consumer Goods – Types of Organizational Customers - Demand for Industrial Goods - Business Market Segmentation, Targeting and Positioning - Role of CRM.

Module II: Organizational Buying: Factors Influencing Organizational Buying - Models of Buyer Behavior - Buying Centre Roles - Organizational Buying Process Stages – Buy Classes - Organizational Buying Practices - Enquiries and Tenders - Supplier Evaluation - Buyer Seller Relationship.

Module III: Role of Marketing in Product Development Process - Managing Industrial Product Lines - Managing Across Product Life Cycle - Product Revitalization/Elimination Decisions – Characteristics of Pricing in B to B Market- Factors influencing Pricing - Pricing Methods and Strategies – Leasing.

Module IV: Industrial Channels of Distribution: Types of Distribution Systems - Choice of Channel Systems - Channel Partners - Managing Channel Conflicts - Distribution Logistics - Personal Selling - Sales Force Management - Post Sales Service - Customer Satisfaction and Evaluation.

Module V: Industrial Goods Promotion - Branding of Industrial Products - Creating Corporate Image - Industrial Advertising - Role of Internet in Business Market - Industrial Marketing Control.

References

1. Vitale & Giglierano, *Business to Business Marketing* Thomson South-Western
2. U C Mathur, *Business to Business Marketing*, New Age International Publishers
3. Robert R Reeder, Edward G. et al, *Industrial Marketing*, Prentice Hall of India

MM03 - CONSUMER BEHAVIOUR

Module 1: Introduction to Consumer Behaviour: Nature and Importance of Consumer Behaviour, Application of Consumer Behaviour in Marketing - Factors influencing Consumer Behaviour - Consumer Research Process Models of CB - Nicosia, Howard & Sheth, Engel-Kollat Blackwell Models - Levels of Consumer Decision Making - EPS,LPS,RRB.

Module II: Individual Determinants of Consumer Behaviour: Motivation: Needs/Motives & Goals, Dynamic Nature of Motivation, Arousal of Motives. Personality: Nature, Theories, Self concept, Psychographic and Life Style - Perception: Process, Consumer Imagery, Perceived Risk- Learning: Principles, Theories - Attitude: Structural Model of Attitude, Attitude formation & Change.

Module III: Group Determinants of CB: Reference Group Influence: Types of Consumer Relevant Groups, Factors affecting Group Influence, Application of Reference Group Concept - Family: Functions of Family, Family Decision Making, Family Life Cycle - Opinion Leadership and Personal Influence - Diffusion of Innovation: Adoption process, Diffusion process.

Module IV: Environmental Influences on CB: Social Class, Life Style Profile of Social Class Application to CB, Social Class Mobility - Culture: Meaning, Characteristics, Factors affecting Culture, Role of Customs, Values and Beliefs in Consumer Behaviour, Sub-culture: Meaning, Sub-culture Division and Consumption Pattern in India, Types of Sub-cultures, Cross-cultural Consumer Analysis: Similarities and Differences among People, Cross-cultural Marketing Problems in India, Strategies to Overcome Cross-cultural Problems.

Module V: Organisation and Consumers: Factors Influencing Organisational Buying Behaviour – Consumer and Marketer - Marketing Communication and Persuasion, Developing Persuasive Communication – Market Regulation – Customer Dissatisfactions – Consumer Protection Act.

References

1. David L. Loudon and Albert J Della Bitta, *Consumer Behaviour*, Tata McGraw Hill.
2. Leon G.Schiffman and Leslie Lasar Kanuk, *Consumer Behaviour*, Pearson Education, India.

MM04 - DIGITAL MARKETING

Module I: Principles and Drivers of New Marketing Environment - Digital Media Industry - Reaching Audience Through Digital Channels- Traditional and Digital Marketing - Introduction to Online Marketing Environment - Dotcom Evolution - Internet Relationships - Business in Modern Economy - Integrating E-Business to an Existing Business Model - Online Marketing Mix - Mobile Marketing - Digital Signage.

Module II: Purchase Behavior of Consumers in Digital Marketing Format - Online Customer Expectations - Online B2C Buying Process - Online B2B Buying Behavior -Website Designing - Website Content - Forms of Search Engines – Working of Search Engines - Revenue Models in Search Engine Positioning – SEO - Display Advertising – Trends.

Module III: Product Attributes and Web Marketing Implications - Augmented Product Concept - Customizing the Offering - Dimensions of Branding Online - Internet Pricing Influences - Price and Customer Value - Online Pricing Strategies and Tactics – Time-based Online Pricing - Personalized Pricing - Bundle Pricing.

Module IV: Internet Enabled Retailing - Turning Experience Goods into Search Goods -Personalization through Mass Customization - Choice Assistance - Personalized Messaging - Selling through Online Intermediaries - Direct to Customer Interaction - Online Channel Design for B2C and B2B Marketing.

Module V: Integrating Online Communication into IMC Process - Online Advertising – Email Marketing - Viral Marketing - Affiliate Marketing - Participatory Communication Networks - Social Media Communities - Consumer Engagement - Co-Created Content Management-Interactive Digital Networks - Customer – Led Marketing Campaigns- Legal and Ethical aspects related to Digital Marketing.

References:

1. Smith P R Chaffey Dave, *E-Marketing Excellence: The Heart of E-Business*, Butterworth Heinemann, USA
2. Strauss Judy, *E-Marketing*, Prentice Hall, India

MM05 - INTEGRATED MARKETING COMMUNICATION

Module I: Introduction to Integrated Marketing Communication (IMC) - IMC as an Integral Part of Marketing – Buying Decision Process - Communication Response Hierarchy – Setting Communication Objectives: DAGMAR Approach -Budgeting for Marketing Communication.

Module II: Fundamentals of Advertising Campaigns - Brand Positioning through Advertising- Planning Process - The Creative Brief - Creating an Appeal - Strategic Approaches: Generic Approach – USP - Brand Image – Positioning - Public Service Advertising - Celebrity Endorsement - Elements of Print Advertisement - Scriptwriting for Radio and Television - Legal and Ethical aspects of Advertising- Kids Advertising.

Module III: Advertising Agencies – Roles – Types - In House Agencies - Direct Response Agencies - Sales Promotion Agencies - PR Firms - Interactive Agencies –Advertising Agency Structure - Client Agency Relationship - Agency Selection - Agency Compensation.

Module IV: Promotion Tools: Sales Promotion - Trade Oriented Sales Promotion - Direct Marketing – PR – Publicity – Sponsorships – Merchandising - Van

Promotions -Mobile Advertising – Word-of-Mouth -Village Fairs - Trade Shows - Exhibitions and Event Management – OOH - Transit Advertising

- Personal Selling - World Wide Web Communications - Strategies for combining Advertisements and Promotional Tools for IMC.

Module V: Online Marketing Communication Process - Setting Online Communication Objectives - Online Advertising - Online Sales Promotion

- Online PR - Direct Marketing through Internet. - Impact of Consumer Generated Communication - Virtual Community Influence on IMC.

References:

1. George E Belch & Michel E Belch, *Advertising & Promotion and Integrating Marketing Communication Perspective* Tata McGraw Hill.
2. Clow, Baach, *Integrated Advertising Promotion and Marketing Communication*, Pearson Education. India.

MM06 - MARKETING RESEARCH

Module I: Introduction, Definition, Need, Relevance and Scope of Marketing Research, Types of Research - Qualitative and Quantitative Research, Steps in Research Proposal, Limitations – Cost & Time Constraints, Industrial Versus Consumer Marketing Research, Ethical Issues in Marketing Research. Marketing Research Organizations in India, Role of Information in Marketing Research, Use of Internet in Marketing Research.

Module II: Marketing Research Process, Research Problem Identification, Research Objectives, Literature Review, Identification of Variables, Hypothesis Formulation, Research Design.

Module III: Sources of Data, Population and Sampling Frame, Sampling Concepts and Methods, Units of Study, Measurement Scales, Methods of Data Collection, Data Collection Tools, Questionnaire Design, Interview Techniques, Survey Methods.

Module IV: Coding and Tabulation of Data, Data Presentation, Data Analysis Techniques, Hypothesis Testing, Application of Software Packages for Data Analysis, Report Writing and Report Presentation: Steps in Report Writing, Documentation and Referencing, Interpretation of MR Reports. Case Studies in Marketing Research.

Module V: Applications of Marketing Research in Business: Market Segmentation Studies, Market Potential Studies, New Product Research, Brand Positioning Research, Brand Perception Research, Brand Equity Research, Advertising Research, Consumer Behaviour Research, Pricing Research, Distribution Effectiveness Studies, Effectiveness of Promotions, Customer Satisfaction and Perception Studies.

References

1. G.C.Beri, *Market Research*, Pearson Education, New Delhi.
2. Naresh K. Malhotra, *Marketing Research: An Applied Orientation*, TMH, New Delhi.
3. Cooper & Schindler, *Marketing Research, Concept & Cases*. Tata McGraw Hill, India

MM 07 - PRODUCT AND BRAND MANAGEMENT

Module 1: Introduction to Product- Meaning & Classification, Product Management – Definition, Scope and Importance, Role of Product Manager, Challenges affecting Product Management, Product Mix and Line Decisions – Managing Line Extensions.

Module II: Marketing Planning Process: Category Attractiveness Analysis, Competitor Analysis, Consumer Analysis and Sales Forecasting, Developing Product Strategy - Setting Objectives, Selection of Strategic Alternatives, Differentiation and Positioning.

Module III: New Product Planning: New Product Development – Process and Challenges, New Product Launches; New Product Failure and Revitalization of New Products.

Module IV: Understanding the role of branding: Concept of Brand - Types of Brand, Brand and Life Cycle, Brand Equity, Brand Loyalty, Brand Awareness, and Brand Evaluation, Perceived Quality, Brand Associations, Brand Personality and Brand Image, Role of Brand Ambassadors.

Module V: Brand Identity, Launching New Brands, Developing and Managing Brands, Sustaining a Brand, Handling Name Changes and Brand Transfers, Brand Extension and Strategies, Globalizing Brands, Decline, Ageing and Revitalization of Brands.

References

1. Kevin Lane Keller, *Strategic Brand Management*, Pearson Education, India.
2. U.C. Mathur, *Product management* – Excel Books, New Delhi, India.

MM08 - RETAIL BUSINESS MANAGEMENT

- Module 1:** Retailing - Definition, Functions, Importance, Types of Retailing, Organized & Unorganized, Store and Non-store; Retailing in India - Current Scenario, Retailing from International Perspectives; Consumer Buying Decision Process, Influencing Factors, Consumer Shopping Behaviour.
- Module II:** Retail Planning - Purpose, Method, Structure and Monitoring the Plan; Retail Marketing mix - Strategies; Retail Brand Management - Positioning, Personality, Merchandise Management, Meaning, Methods, Assortment and Inventory; Purchase Negotiation, Supply Channel and Relationship, SCM Principles, and Retail Logistics.
- Module III:** Retail Location Decisions - Trading Area Analysis; Types of Locations; Site Evaluation; Store Design - Layout and Space Management; Visual Merchandising and Displays; Retail Pricing - Approaches, Influencing Factors, Price Sensitivity and Mark down Policy – EDLP.
- Module IV:** Retail Promotion - Setting Objectives, Role of Advertising, Sales Promotion, Personal Selling, Public Relations and Relationship Marketing in Retailing; Human Resource Issues and Considerations, Customer Service Management.

Module V: Impact of Information Technology in Retailing, Integrated Systems and Networking, EDI, Bar Coding, RFID, Customer Database Management. Electronic Retailing - Role of Web, Online Retailing, Factors to be considered in having a Website, Limitations of Web and Future Trends, Consumerism and Ethics in Retailing, Social and Green issues. Retail Audit.

References:

1. Michael Levy, Barton Weitz, *Retail management*, McGraw Hill
2. Chetan Bajaj, Rajnish Arya, Nidhi Varma Srivatava, *Retail Management*, Oxford Publishing, India

MM09 - SALES AND DISTRIBUTION MANAGEMENT

Module I: Introduction to Sales Management: Definition and Meaning – Sales Vs Marketing, Scope of Sales Management – Objectives & Functions of Sales Department – Theories of Sales - Buyer Seller Dyads – Aidas Theory – ‘Right Set of Circumstances’ Theory – Buying Formula Theory – Behavioural Equations Theory, Sales Forecasting Methods – Sales Planning and Control: Goal Setting, Performance Measurement, Diagnosis and Corrective Actions.

Module II: Sales Organization and Developing the Sales Force: Sales Department Organization – Sales Management Structure – Sales Management Positions – Role and Functions of Sales Manager – Inter Department Relations – Characteristics of a Successful Salesman. Recruiting, Selection and Training of Sales Force - Work Assignment to Sales Personnel – Routing and Scheduling of Sales Force – Objectives of Sales Quotas – Types of Quotas – Quota Setting and Administration – Concept, Objectives and Procedure of Setting Sales Territories.

Module III: Motivation, Compensation to Sales Force and Controlling – Personal Selling: Motivating the Sales Team: Motivation Programs, Monetary and Non-monetary Compensation, Evaluation of Sales Force - Controlling of Sales Force – Sales Records and Reporting Systems – Controlling of Expenses – Sales Budget – Sales Audit. Personal Selling – Salesmanship

– Process - Preparation, Prospecting, Pre-Approach, Sales Presentation, Closing of Sales – Modes of Sales Presentation – Sales Resistance – Objections and Obstacles – Buyer Dissonance – Reducing Buyer Dissonance.

Module IV: Distribution Channels: Physical Distribution - Definition, Importance – Participants in Physical Distribution Process - Marketing Channels – Definition and Importance - Different Forms of Channels - Functions of Marketing Channels - Unconventional Channels - Channels for Consumer Goods, Industrial Goods and Services – Integrated Marketing Channels – Horizontal, Vertical, Multi Channel Marketing Systems - Channel Selection Process and Criteria, Channel Conflicts and Resolution - Channel Effectiveness Evaluation - International Marketing Channels.

Module V: Supply Chain Management: Supply Chain Management – Concept – Significance – Components - Logistics Planning, Order Processing – Material Handling – Transportation – Insurance - Warehousing – Inventory Management – Reverse Logistics.

References:

1. Tapan K. Panda, Sunil Sahadev – *Sales And Distribution Management* – Oxford Publishing, India
2. Still, Cundiff, Govoni – *Sales Management: Decisions, Strategies & Cases* – Prentice Hall, India.
3. Anderson R, *Professional Sales Management* – Englewood Cliff, New Jersey, Prentice Hall, India.

MM10 - SERVICES MARKETING

Module 1: Introduction to Services Marketing: Services Marketing – Characteristics

– Classification of services – Role of services in economy – Factors stimulating the transformation of service economy – Growth of services in Indian economy – Differences between Goods and Services Marketing.

Module II: Customer Behaviour & Strategic Issues: Customer decision making – Customer expectations and perceptions – Components of customer expectations – Service encounters – High contact services and Low contact services – Market segmentation and Targeting – Positioning and differentiation of services – Managing demand and capacity.

Module III: Services and the Marketing Mix: Traditional marketing mix applied to services – Inadequacy of 4Ps – Developing service concepts – Service Product Development – Branding of services – Pricing of services – Educating customers and Promoting services – Managing People for service

advantage - Difference between mediocrity and success – Process in services, Service Blueprinting – Crafting the service environment – Servicescape – Physical Evidence.

Module IV: Managing Relationships and Service Quality: Relationship Marketing and Building loyalty – Achieving Service Recovery – Service quality and its significance – Measuring service quality – Service quality gap model SERVQUAL – Strategies for improving service quality – Monitoring service quality.

Module V: Marketing Services – Specific Industries: Tourism, Travel & Transportation Services Marketing – Marketing of Financial Services: Banking, Insurance, Mutual Funds – Communication and Information Services: Telecom, Courier – Media Services – Professional Services

Marketing: Healthcare, Consultancy, Information Technology, Advertising – Marketing of Educational Services – Charities Marketing.

References:

1. Christopher Lovelock, Jochen Wirtz, Jayanta Chatterjee – *Services Marketing: People, Technology, Strategy*, Pearson, New Delhi.
2. Helen Woodruff, *Services Marketing*, Longmen Group, New Delhi.
3. Adrian Payne, *The Essence of Services Marketing*, Prentice Hall, India

FINANCIAL MANAGEMENT ELECTIVES

FM 01 - BANK MANAGEMENT

- Module I** Evolution of Commercial Banks-Banking System-Structure of Commercial Bank-RBI Role & functions- Method of Credit Control-- Banking Regulation ACT –Recent trends in Indian Banking Sector.
- Module II** Functions of Commercial Banks- Agency Services –General utility services-Credit Creation- Banker–Customer Relationship-Bankers as a trustee & an Agent-Appropriation of Payment- Right of Lien &Set off– Garnishee Order-Law of Limitation.
- Module III** Banking Technology; Electronic Banking-Core Banking –Distribution Channels- Remittance Facilities &Clearing System-Online Banking- Electronic Fund Transfer System- RTGS, SWIFT.
- Module IV** Evaluating Banking Performance –ROE Model- CAMEL Rating-GAAP Probability Analysis- Balance Score Card-Asset Liability Management- NPA- BASEL Norms.
- Module V** International Banking- Types-Offshore Banking- Bank for International Settlement (BIS)-London Inter Bank Offered Rate (LIBOR) -Bank Accounts- NOSTRO,VOSTRO,LORO, Indian Rupee & Foreign Currency Accounts- EXIM Bank – Facilities to Exporters & Importers.

References:

1. IIB& F, *Central Bank Management*, McMillan Publishers.
2. Institute of Banking & Finance, *Principles and Practice of Banking*, McMillan publishers, New Delhi.
3. Muraleedharan D, *Modern Banking-Theory and Practice*’, PHI Learning Pvt. Ltd.
4. Shekhar K C & Lekshmy Shekar, *Banking Theory and Practice*, Vikas Publication House, New Delhi.

FM 02- FINANCIAL DERIVATIVES AND RISK MANAGEMENT

Module 1 Sources and Types of business risk –Implications of business risk-risk perception of individuals and institutions-Alternatives for managing financial risk –diversification –reinsurance –contingency contracts-Derivatives in the Indian Context – Trading infrastructure.

Module II Risk Management using derivatives- Forwards and Futures –Commodity Futures- Financial Derivatives- Stock Futures and Index Futures – Interest Rate Futures – Currency Futures –Designing Futures Contracts – Hedging Positions in Futures.

Module III Stock options – Basic Properties of Options –Stock and Index Options Valuation –Sensitivity of Option Prices - Binomial Option Pricing – Black and Scholes Option Pricing using Black and Scholes Formula-Trading strategies using options –Hedging Positions in Options - Synthetic options and portfolio insurance.

Module IV Interest rate swaps; forward rate agreements and interest rate futures.

Module V Accounting and Administration of Derivatives - Regulation of derivatives activity.

References:

1. John C Hull “*Fundamentals of Futures and Options Markets,*” Pearson, seventh edition.
2. Elton Edwin J and Gruber Martin J, *Modern Portfolio Theory and Investment Analysis*, John Wiley & Sons,
3. Russel Fuller , *Modern Investments and Security Analysis*, McGraw Hill.

FM 03- INSURANCE SERVICES

- Module 1** Concept of risk- risk identification and evaluation- risk management techniques- risk avoidance- loss control- risk retention-risk transfer, the nature of insurance- principle of insurance contract- requirements of an insurance contract.
- Module II** Life, health and income insurance - types of life insurance- life insurance

contract provisions- loss of health – health insurance policies- disability income insurance- annuity scheme- pension schemes- structure and characteristics.
- Module III** Property and liability loss exposure – types of loss exposure- direct and indirect losses- liability damages- civil and criminal law provisions.
- Module IV** Accounts of insurance companies- Valuation balance sheet- Insurance claims- Fire- consequential loss (fire).
- Module V** Market structure of insurance services- functions of insurers- reinsurance – types of insures- channels of distribution of insurance services- regulation of insurance services-IRDA – Role, duties and powers- liberalisation of insurance services in India.

References:

1. George E. Rejda, *Principles of Risk Management and Insurance*, Pearson Education.
2. Harold D Skipper, W. Jean Kwon- *Risk Management and Insurance- Perspectives in a Global Economy*, Blackwell Publishing.
3. M N Mishra, S B Mishra- *Insurance Principles and Practice- S Chand*. Publishing, New Delhi.

FM 04- INTERNATIONAL FINANCIAL MANAGEMENT

- Module 1** Introduction – Significance of Foreign Exchange Rate- Growing importance of International Finance – Introduction to foreign exchange markets – Exchange rate determinants – Supply and Demand Factors.
- Module II** International Financial System - Exchange rate systems in the world – Role of IMF and World Bank – Impact of regional economic integrations– Global integration of economic systems and exchange rate issues relating to Developing countries.
- Module III** International Financial Markets- Major international financial markets – Euro banking and Euro currency market – American and Japanese capital markets.
- Module IV** International Financing- Modes of International equity financing – Depository receipts – Issue Mechanisms – International credit instruments – Euro bonds and Notes – International credit syndication mechanism – Recent developments in the Euro Market – Risk factors in International finance.
- Module V** International Investing-Capital budgeting for international investment – FDI – International portfolio investing – Opportunities and challenges.

References:

1. Levi Maurice D, *International Finance*, McGraw Hill, India.
2. Apte P.G., *International Financial Management*, Tata McGraw Hill, New Delhi.
3. Pilbeam Keith, *International Finance*, McMillan Press, India.
4. Madura Jeff , *International Financial Management*, Thompson, India

FM 05- MANAGEMENT OF FINANCIAL SERVICES

- Module 1** Overview of Financial services sector – Characteristics of Financial services – role of financial services sector in the Economy – Institutional Framework of Indian financial system-Role and Functions of NBFCs, RBI guidelines on NBFCs.
- Module II** Merchant banking: functions of merchant bankers – SEBI guidelines on merchant bankers. Leasing-Types: Hire purchase.
- Module III** Factoring: concept, mechanism, types of factoring, benefits and functions of factoring – factoring Vs Forfeiting, Factoring Vs Bills Discounting – Factoring; International and Indian scenario. Depositories – mechanism and functions – credit cards and retail financing.
- Module IV** Mutual funds: concept – functions – types of funds – constitution of mutual funds – SEBI regulation of AMCs – Evaluating mutual fund performance. Asset securitisation.
- Module V** Credit rating: features and advantages – credit rating process. Venture capital: meaning – origin and growth of venture capital – stages of venture capital financing – venture capital industry in India.

References:

1. Shanmugham R, *Financial Services*, Wiley India Pvt. Ltd., New Delhi, 2010.
2. Khan M.Y., *Financial Service*, Tata McGraw Hill Publication Limited, New Delhi.
3. Bhole L.M and Jitendra Mahakud,, *Financial Institutions and Markets: Structure, Growth and Innovations*, Tata McGraw Hill Publication Limited, New Delhi.
4. Dr. Roshna Varghese & Dr. K. Sreeranganadhan, *Corporate Disclosure by Indian Companies*, Serals Publications, New Delhi.

**FM 06- MANAGEMENT ACCOUNTING AND CONTROL
SYSTEMS**

- Module I** Relationship between Strategy and Management Accounting – Role of cost and management accounting in strategy formulation and performance measurement –Management accounting and strategic cost management: Indian perspective – Application of new management accounting techniques in the current business environment –Techniques for profit improvement and cost reduction.
- Module II** Activity Based Costing – Implementing ABC – Activity Based Budgeting – Customer Profitability Analysis.
- Module III** Target Costing –JIT — Quality Costing - Life Cycle costing -Total Cost Maturity Model of Confederation of Indian Industry for improving cost competitiveness of Indian industry.
- Module IV** Pricing Strategies - Product pricing and Transfer Pricing – Methods of Transfer pricing -Value Chain Analysis.
- Module V** Performance Measurement Systems – The Balanced Score Card – Key Performance Indices and Critical Success Factors.

References:

1. Robert Anthony and Vijay Govindarajan, *Management Control System*, Tata McGraw Hill Publishing. India
2. Norman .B Macintosh, Paolo Quattrone, *Management Accounting and Control Systems*, John Wiley and Sons, New Delhi.
3. John K Shank & Vijay Govindarajan, *Strategic Cost Management - The new Tool for Competitive Advantage*, Free Press
4. Robert S Kaplan and David P Norton, “*Balance Score Card – Translating Strategy into Action*”, Harvard Business Press, New Delhi.

FM 07- PROJECT MANAGEMENT

Module I

Project management and project selection: Project selection models, Project portfolio process, Analysis under uncertainty, Project organization, Matrix organization.

Module II

Work breakdown structure, Systems integration, Interface coordination, Project life cycle, Conflict and negotiation. Project Evaluation and Selection-Project cash flow – Project appraisal – Analysis of risk – SCBA (Social Cost Benefit Analysis).

Module III

Project implementation: Estimating Project Budgets, Process of cost estimation, Scheduling: Network Techniques PERT and CPM, Risk analysis using simulation, CPM - crashing a project, Resource loading, leveling, and allocation.

Module IV

Monitoring and information systems: Information needs and the reporting process, computerized PMIS, Earned value analysis, Planning - Monitoring - Controlling cycle, Project control: types of control processes, design of control systems, control of change and scope.

Module V

Project auditing: Construction and use of audit report, Project audit life cycle, Essentials of audit and evaluation, Varieties of project termination, the termination process. Project financing in India – Financial assistance for projects – Sources and schemes and various incentives for new projects.

References

1. Chandra Prasanna, *Projects Planning: Analysis, selection, implementation and review*, Tata McGraw Hill.
2. Larson Erik W. & Gray Clifford F, *Project Management: The Managerial Process*, McGraw Hill.
3. Jack R. Meredith, and Samuel J. Mantel Jr., *Project Management – A Managerial Approach*, John Wiley and Sons.
4. Harold Kerzner, *Project Management – A Systems Approach to Planning”, Scheduling and Controlling*, John Wiley and Sons.
5. Larry Richman, “*Project Management: Step-by-Step*” PHI Learning Private Limited.

FM 08 - SECURITY ANALYSIS & PORTFOLIO MANAGEMENT

- Module I** Concept of Investment-Investment Instruments- Introduction to the financial system, Financial Markets- Primary and Secondary Market, Stock Exchanges-Depository System- Indices- SEBI and Regulations.
- Module II** Investment Alternatives – Risk –Return Analysis –Systematic and Unsystematic Risk- Bond Valuation – YTC/YTM/Bond duration. Bond Returns &Prices. Bond Rating-Bond Management Strategies.
- Module III** Share Valuation-Factors influencing Share Price Movements-Share Valuation Models-Cash Flow Valuation Models-Earnings Valuation Models-Fundamental Analysis-E.I.C.
- Module IV** Technical Analysis –Chart patterns/Moving Average/RSI/ROC/MACD-Efficient Market Hypothesis-Random walk theory.
- Module V** Portfolio Management –Portfolio Analysis, Portfolio Selection- Markowitz Model-CAPM, Portfolio Revision &Portfolio Evaluation.

References:

1. Fisher Donald and Jordan Ronald, *Security Analysis & Portfolio Management* Prentice Hall of India.
2. Francis Jack Clark, *Investment Analysis and Management*, McGraw Hill.
3. Chandra Prasanna, *Investment Management*, Tata McGraw Hill.

FM 09 - TAX MANAGEMENT

- Module 1** Tax- meaning-Direct Tax- Indirect Tax-History of Income Tax in India-Basic Terms- Capital and Revenue-Residential status-tax incidences-exemptions.
- Module II** Heads of Incomes, - Income from salary - Income from house property-Income from other source.
- Module III** Income from business and profession and capital gain.
- Module IV** Carry forward and set off-clubbing –Deductions-Income tax Authorities –Assessment procedures.
- Module V** Taxation of companies-M A T-Tax planning-tax evasion-tax planning-tax management.

Reference:

1. Dr. H.C.Mehrotra & S.P.Goyal, *Income Tax Law and Practice*, New Age Publication, India
2. Singhanian V.K., *Corporate Tax Planning*, TMH.
3. Gupta and Gupta, *Corporate Taxation in India*, Himalya Publishing House, New Delhi.
4. Singhanian, Vinod, “*Direct Taxes – Law and Practice*”, Taxmann Publications.

FM 10 -WORKING CAPITAL MANAGEMENT

- Module I** Concept and meaning of working capital – Liquidity and profitability – identification of factors affecting working capital requirements – theories of working capital- Approaches to estimation of working capital – operating cycle approach.
- Module II** Management of inventories – determination of optimum inventory – Inventory management techniques – Levels of inventory.
- Module III** Overview of management of receivables – credit and Collection policy – Credit standards – Credit terms – Credit analysis – management of payables – Maturity matching.
- Module IV** Management of cash – Accelerating cash inflows – Managing collections – Concentration banking –Control of disbursements – models for determining optimum level of cash – inventory model, stochastic – Cash budgeting.
- Module V** Sources of working capital finance – Long term – Short term.

References:

1. I M Pandey, *Working Capital Management*, Vikas Publication, India
2. V K Bhalla ,*Working Capital Management*, Vikas Publication, India
3. Krish Rangarajan, Anil Mishra, *Working Capital Management* –Excel Publication, New Delhi.
4. Satish P Mathur, *Working Capital Management & Control*- New Age Publication, New Delhi.

HUMAN RESOURCE MANAGEMENT ELECTIVES

HRM 01 - COMPENSATION MANAGEMENT

- Module I** Compensation: Concept, factors, Base and Supplementary Compensation, Wage and Salary, Wage Components - minimum wage, Fair wage, living wage, Wage Policy in India, Wage differentials, Wage Theories- Market Theories, Human Capital Theories, Bargaining Theories – Social Theories. Economic and Behavioural theories.
- ModuleII** Job Evaluation-nature and importance- methods, Computer aided job evaluation, Internal and external equity- Pay surveys.
- Module III** Pay structure-Types, Broad Banding, Performance Linked Compensation - Types of Incentives, Bonus, Profit sharing, Gain Sharing, stock options, Benefits and allowances-types, Executive and shop floor level rewards, Compensating Expatriates and knowledge workers.
- Module IV** Legal framework of Wage determination Welfare Legislations, Tax Planning, Down sizing, VRS, gratuity, commutation, pension plans, Machinery for wage fixation – Wage Boards – Pay Commissions – Statutory Wage Fixation.
- Module V** Total Reward System, Components of pay, Pay structure for startup organisations Pay restructuring in Mergers and Acquisitions, alliances and turnarounds, Board room pay, Compensation management in public, private and emerging sectors, Emerging Issues in Compensation management- Future trends.

References:

1. Michael A. Armstrong and Helen Murlis, *Reward Management: A Handbook of Remuneration Strategy and Practice* , London Kogan Page.
2. B D Singh, *Compensation and Reward Management* Excel Books. New Delhi.
3. Henderson, *Compensation Management in a Knowledge Based World* New Pearson Education, New Delhi.
4. Bhattacharya, *Compensation Management*, Oxford Press.
5. Milkowich, Newman, *Compensation*, Tata Mcgraw Hill, New Delhi.

HRM 02 - COUNSELLING SKILLS FOR MANAGERS

Module I Introduction: Meaning, Functions and Type of Counselling, Goals of Counseling Emergence and Growth of Counseling Services; Approaches to counseling; Counseling Skills, Verbal & Non- Verbal communication, Listening Barriers, Counselor Qualities.

Module II Counseling process - Beginning, Developing and terminating a counseling relationship and follow up. Counseling Procedures, The Counseling Environment, Intake, Referral procedures, Guidelines for effective counseling.

Module III Counselor's Attitude and Skills of Counseling; Counselors - Client Relationship, Understanding Client's Behavior. Assessing Clients problems. Counseling Therapies- Insight Oriented Therapy. Behavior Therapy.

Module IV Selecting Counseling Strategies and Interventions – Changing Behaviour through Counseling In the Educational Settings, Special Areas in Counseling, Handling Situations of Strikes, Disputes Through Counseling.

Module V Special problems in counseling: Need of Counseling Cell in the Organization. Application of Counseling to Organizational situations with a focus on Performance counseling. Organizational Application of Counseling Skills in Change management, Downsizing, Mentoring and Team Management / Conflict Resolution.

References

1. S Narayan Rao, *Counseling & guidance*, Tata Mcgraw Hill, New Delhi.
2. Jeffrey A Kotter, *Counseling theories and practices*, Cengage Publishing, New Delhi.
3. Robert C Carson, *Abnormal psychology*, Tata Mcgraw Hill, New Delhi.

HRM 03- HUMAN RESOURCE PLANNING

- Module I** Human Resource Planning ; Concept and Objectives - HRP at Micro and Macro levels ; HRP and Business plans - Different Approaches - Human Resource Planning Process; Demand and Supply Forecasting ; Different tools and techniques ; Labor wastage – Absenteeism and labor turn over .
- Module II** Job Analysis; Job Descriptions, Job Specification - Human Resource Inventory - Career Management; Career Planning, Career Paths, Career Anchors, Career Development.
- Module III** Recruitment: Recruitment Policy, Approaches, Sources of Recruitment, Advertisements, Web Recruitment, The Employment Exchange (Compulsory Notification of Vacancies) Act, 1959. Selection:

Concept and Process of Selection; Application blank, Weighted Application Blank, Resume, Resume Scanning Psychological Tests – definition ,Purpose, Characteristics and Developing Psychological Tests, Different Types of Tests – Attitude, Aptitude, Traits, Interpreting Test Results, Reliability and Validity.
- Module IV** Selection, Interviewing ; Purpose; Types of Interviews ; Interview Techniques; Interviewing skills ; Advantages and Limitations of Interviews; Do's and don'ts of selection Interviewing, Medical Checkups, Reference and back ground check, Choice of selection methods, assessment Centers, Reliability and validity of selection tools.
- Module V** Employment offers; service conditions, contract of employment, Psychological contract - Induction. Importance, Socializing the new employee, Different types of Socialization. Placement, Probation and Confirmation, Promotion and Transfer; Policies and Procedures, Retraining, Out placements, HR out Sourcing.

Reference

1. Gary Desler ,*Human resource management* , PHI.
2. D K Bhattacharya, *Human Resource Planning* –Excel Books.
3. Anne Anastasi,Susan Urbina ,*Psychological testing* , PHI
4. Michael Armstrong ,Ann Cummins ,Sue Hastings, Willie Wood, *Job Evaluation ;A guide to achieving equal pay* , Kogan page, New Delhi.

HRM 04 - INDUSTRIAL RELATIONS

- Module I** Evolution Of Industrial Relations: Introduction-definition-nature-evolution of industrial relations-Evolution of IR in India-origin and development of IR-context and environment of IR.-concept and organization: aspects of IR- Three actors and their roles in IR: Approaches to IR-HR Relations approach-Gandhian approach-Marxian approach and Dunlop's Systems approach. Social security and welfare legislations-concepts of social security-social security measures in India.
- Module II** The state and IR policies-evolution of IR policies-National Commission on Labour & IR policy(1969)-Grievance procedure-discipline- Labour courts- Collective bargaining: concept and development-future of IR in India. Industrial unrest in India-Industrial Disputes Act 1947-objects of the Act-Important definitions: Authorities under the Act-reference of disputes-settlement-strike and lock-outs-Lay off-retrenchment-unfair labour practices-standing orders-service rules-misconduct-principles of natural justice-domestic enquiry-remedial counseling.
- Module III** Trade Unions; concept and objectives-Indian Trade Unions Act 1926-participative management-forms and levels of participation-Process of negotiation-prerequisites of a collective bargaining-employee empowerment. Tripartite and bipartite bodies-Joint management council-Conciliation machinery: -mediation-arbitration-adjudication.
- Module IV** Evolutions of Labour legislation in India- Social security and welfare legislations. Concept of social security: ILO and social security-social security measures in India; Workmen's Compensation Act-1923, Employees State Insurance Act 1948, Employees Provident Fund and (Miscellaneous Provisions) Act 1952 Maternity benefit Act 1961, Payment of Gratuity Act 1972, Payment Bonus Act 1965.
- Module V** Welfare legislations: The Factories Act 1948-Plantation Labour Act 1951-Contract Labour (Regulations and Abolitions Act-1970,Kerala Shops and Commercial Establishment Act 1960, Kerala Labour welfare fund Act 1975. Latest rules regarding Industrial relations in IT and ITeS industries. Functions of Labour department in Kerala officers under the Department and their duties and responsibilities.

References

1. C B Marmoria, *Dynamics of Industrial Relations in India*, Vikas Publishing, New Delhi.
2. P C Tripathi, *Personnel management and Industrial Relations*, S Chand, New Delhi.
3. P Subba Rao, *Human Resources Management & I R*, S Chand, New Delhi.

**HRM 05- MANAGING OF INTERPERSONAL AND GROUP
PROCESS**

Module I	Intrapersonal process- Understanding human behaviour, Self concept, Perception, Attention, Distraction, Attitude, Occupational stress, Spill over and coping, Impression management.
Module II	Memory process and types- Intelligence, Intelligence quotient – Emotions; Emotional intelligence, Emotional quotient.
Module III	Interpersonal process – Transactional analysis & Johari window helping process, Practical applications, Interpersonal Communication and feedback, Interpersonal styles.
Module IV	Group and intergroup process- Group formation and group process, Group Dynamics, Group cohesiveness - Team development and team functioning, Conflict collaboration and competition, Sensitivity training.
Module V	Organizational process-An overview of major concepts on emerging trends-power, politics, authority, Integration and control, Organizational climate and culture, Organizational effectiveness.

Reference

1. VSP Rao, *Organizational Behaviour*: Excel Books.
2. Stephen.P.Robbins, *Organizational Behaviour*: Prentice Hall.
3. P.G. Aquinas, *Organizational Behaviour: Concepts, Realities, Applications and Challenges*, Excel Books.
4. Clifford T Morgan, Richard A King, John R Weiz, John Schopler, *Introduction to Psychology*; Tata McGraw Hill.

HRM 06 - MANAGING ORGANIZATIONAL CHANGE AND DEVELOPMENT

- Module I** Organizational Change: Meaning- Necessity for Change- Classification of change-factors affecting change-Model of Organizational change- Kurt Lewin Three Stage Model and Force Field Analysis- Systems theory, 7 Stage models, Burke-Litwin model, Porras and Robbortson. Change Agent- Role and Skills of a change Agent.HR Role as change agent, Resistance to Change and minimizing the resistance: Impact of change on Human Resources Planning; quality consciousness as an emerging catalyst for change.
- Module II** Organizational development –Concept and evolution-nature and characteristics- First order and second order Change -Foundations of Organizational Development: Conceptual frame work of OD -Action Research Model-Positive Model-John Kotter’s eight-stage process Model, Parralel learning structures- Process of organizational development - Org.Diganosis .
- Module III** Human Process Interventions-T-group, process consultation, third party interventions, team building; organizational confrontation meeting, coaching and mentoring, role focused interventions. HRM Interventions- Performance Management & HRD.
- Module IV** Structural Interventions -Restructuring organization, BPR Vs TQM, employee involvement, work design. Strategic Interventions – Organisation and environment relationships, competitive and collaborative strategies, organization transformational strategies.
- Module V** Contemporary issues and applications – Organizational development in global context, organizational development in service sector, OD Practioners – role, competencies requirement, professional ethics and value and experiences; Trends in OD.

References

1. Cummings, Thomas G. and Christopher G. Worley, *Organisation Development and Change*, Thomson Learning.
2. W Warner Bruke, *Organizational Change: Theory and Practice*, Sage
3. Ramnarayan S., T.V. Rao and Kuldeep Singh, *Organisation Development Interventions and Strategies*, response Books, New Delhi.
4. French, Wendell L. and Lecil H. Bell, *Organisation Development*, PHI, New Delhi

HRM 07 - PERFORMANCE MANAGEMENT

- Module I** Performance Management-objectives, scope and benefits, Job role and competency analysis, Goal setting process, Organizational, functional and individual Key result areas, Key performance indicators.
- Module II** Performance appraisal methods : traditional & modern - MBO,BSC,BOS, assessment centers, Multirater assessment , Potential appraisal, , Documentation and appraisal communication, appraisal interview, feedback , Performance coaching.
- Module III** Measuring performance – objectives, measurement approaches – traits, behaviour, results based, types, measurement issues, Performance communication – formal & informal methods.
- Module IV** Developing, implementing and maintaining PMS, Performance improvement and performance management discipline, PMS in public and private organizations.
- Module V** Competency mapping – concept,competency mapping process & models, competency assessment personal competency framework, Core competencies PCMM – concept, benefits, HR score card.

References

1. G K Suri, C S Venkataraman,N K Gupta, *Performance measurement and management*, Excel Books Pvt Ltd.
2. R K Sahu, *Performance Management System*, Excel Books Pvt Ltd.
3. Udai Perekh & T V Rao, *Designing and managing Human Resource Systems*, oxford publications.
4. T V Rao, *HRD Score card*, Sage Publications.
5. Herman Aguinis, *Performance measurement*, Pearson education .
6. Seema Sanghvi , *Competency mapping* , Response books, New Delhi.

HRM 08 - HUMAN RESOURCE INFORMATION SYSTEMS

- Module I** Introduction: Data & Information needs for HR Manager; Sources of Data; Role of IT in HRM; IT for HR Managers; Concept, Structure, & Mechanics of HRIS; Standard Software and Customized Software; HRIS – An Investment; Survey of software packages for Human Resource Information System including ERP Software such as SAP, Oracles Financials and Ramco’s Marshal (only data input, output & screens).
- Module II** HR Management Process & HRIS: Modules on MPP, Recruitment, Selection, Placement; Module on PA System; T & D Module; Module on Pay & related dimensions; Planning & Control; Information System’s support for Planning & Control.
- Module III** Human Resource Accounting – Concept, Objectives , Converting Human data in to money value- Different methods of HRA, Limitations of Human Resource Accounting – Investment Approach, Investment in human resources , Recruiting Costs, Depreciation, Rates of Return, Measuring return of human assets, Prevention of Human Resource Wastage.
- Module IV** Organization Climate Approach – Improvement and deterioration of organizational climate, Responsibility accounting and Management control Behavioural aspects of Management Control; Human resources as social capital, Mentoring and development of social capital, Social control, HR accounting and bench-marking.
- Module V** Personnel costs, Audit Techniques, HR Audit, HRD Audit, HRD Score Card Accounting and Financial Statements.

References

1. Michael Armstrong, *A Handbook of Human Resource Management Practice*, Kogan Page.
2. Jac Fitz-enz, et al, *How to Measure Human Resource Management*, McGraw Hill.
3. M. Saeed, D.K. Kulshreshtha, *Human Resource Accounting* Anmol Publications.
4. Prabakara Rao, *Human Resource Accounting*, Inter India Publications, New Delhi.

HRM 09 - STRATEGIC HUMAN RESOURCE MANAGEMENT

Module I

Business Strategy and Organizational Capability-SHRM overview-Linking HR strategy with Business Strategy-Steps in SHRM - Role of HR during Organizational Growth, Turn around, Retrenchment -Mergers and Acquisitions.

Module II

Strategic HR Planning and Acquisition-Business Strategy and HRP-Job Analysis and SHRM - HRP Process-HRP and Outsourcing-Strategic Recruitment and Selection-IT enabled acquisition - Alternatives to hiring.

Module III

Strategic Human Resources Development -Corporate Strategy and Career Systems-The Need for Training and Development-HRM approaches to Training and Development-Linkage between Business Strategy and Training -New Developments in Training and development.

Module IV

Strategic Performance Management, Compensation and Employee Relations-Performance Measurement approaches-Effective performance Measurement-Compensation Reward Approaches-Trends in Top level Executive Compensation-Strategic Linkage of Performance Management and Compensation-Managing Employee Relations: Unions and Strategic Collective Bargaining.

Module V

Global Environment of HR-Change & Diversity-Difference between Global HRM and Domestic HRM-Cross Cultural context-Strategic HR Issues in Global Assignments-Competencies of HR Professional in a SHRM Scenario.

References

1. Tanuja Agrawal, Strategic Human Resource Management, Oxford Publishers.
2. Rajib Lochan, Strategic Human Resource Management, Excel Books.
3. Jeffery .A. Mello, Strategic Human Resource Management, Cengage Learning.
4. Richard Greer, Strategic Human Resource Management, Pearson.

HRM 10 - TRAINING AND DEVELOPMENT

- Module 1** Introduction to training: need for Training and Development-importance of Training and development in organization. A Systematic Approach to Training & Development-Assessment phase, Training and Development phase, Evaluation Phase, Training administrations, effective usage of instructions in training.
- Module II** Needs Assessment and Analysis:, Organizational Support for need assessment , operational analysis / Organizational analysis, requirement analysis, individual analysis. Motivational aspects of HRD : Development cycle; Reinforcement for behaviour modification- Learning theories, stages of learning, learning principles, challenges to become learning organization, trainee readiness, trainee motivation to learn, motivational theories.
- Module III** Instructional Approaches: An Overview, Traditional Instructional Approaches, modern Instructional Approaches, Internal Training Vs External Training. Training Methods- On the job- Apprenticeship., working, mentoring .Off the job- Case studies, lectures, vestibule, sensitivity, in-basket, role plays, audiovisual & other contemporary methods. Role of Trainers, Qualities of a Good Trainers, Internal Trainer Vs External Training.
- Module IV** Training Evaluation and Measurement: Introduction to evaluation process, Introduction to criteria development, choosing criteria measures, The Evaluation of Criteria, Evaluation, Experimental Designs, quasi experimental design, Other methods of evaluation External Training Validity, Models of Evaluation., ROI on Training.
- Module V** Human resource development concept - HRD at micro and macro levels - Sub - systems of HRD - role of HRD function - concept of career – career Stages - career planning and development - need - steps in career Planning - methods of career planning and development - career development Actions and programs - career problems and solutions - guidelines for Career management. Concept of management development - need and importance of Management development - management development process- Leader centered techniques of management development.

References

1. Goldstein Irwin L, *Training In Organizations - Needs Assessment, Development & Evaluation*, Wordsworth Publication
2. Lynton & Parekh, *Training for Development*, Sage Publication
3. Robert L. Craig, *ASTD Training and Development*, McGraw Hill Publication
4. Dugan laird- *Approaches to Training and Development*, Perseus Publishing 2003
5. Rao TV , *Readings in HRD*, Oxford & IBH

INFORMATION SYSTEM ELECTIVES

IS 01-SYSTEM ANALYSIS & DESIGN

Module I Overview of System Analysis and Business modeling; System components, Business profile, business process models, Business Systems Concept; Systems Development Life Cycle; Project Selection; feasibility Study. Impact of internet, web based system development, Guidelines for System development, Roles and responsibilities of a Business Analyst.

Module II System analysis: Systems documentation consideration: Principles of Systems Documentation, Types of documentation, Requirement gathering techniques: Interviews, Group, Communication Questionnaires, Presentations & Site Visits, SRS documentation. Tools for Analysis and Design of Business System: modelling, prototyping, CASE tools; Methodologies: Structured analysis, Object oriented analysis, agile methods. System analysis activities, techniques: JAD, RAD, Agile methods. Modelling tools: DFDs, Functional decomposition diagrams, CASE tools, UML; Data and process modelling: DFDs, Data Dictionaries; Process description tools: Decision Analysis; Decision Trees and Tables.

Module III Business Modelling with UML, Components of UML used in Business Modelling, RUP, IDEF, and BPMN 2.0 basics. Object modelling: Object oriented analysis, Object modelling with UML: Class diagram, Object diagram, State chart diagram, Activity diagram, Sequence diagram, Collaboration diagram, Use case diagram, Component diagram, Deployment diagram

Module IV Output and User interface design: Output design, input design, user interface design, File Design , Data design concepts, DBMS components, ER diagrams, Documentation Tools ; Testing Techniques Available ; Systems control and Audit trails ; Systems Administration and Training ; Conversion and Operations Plan.

Module V Systems Control and Quality Assurance: Hardware and Software Selection , Hardware Acquisition ; Bench marking , Vendor Selection , Operating System Selection , Language Processors. Performance and Acceptance Testing Criteria, Preparing User Manual. Maintenance Activities and Issues.

References

1. Elias M. Awad, *System Analysis & Design*, Galgotia Publications. India
2. Senn, *Analysis & Design of Information Systems*, McGraw Hill International.
3. Shelly, Rosenblatt, *System Analysis & Design*, Cengage Learning, Eighth edition.
4. Hoffer, *Modern System Analysis & Design*, Pearson Education.
5. Rambaugh, Jacobson, Booch, *UML- Reference Manual*, Pearson.

IS 02- ELECTRONIC COMMERCE & INTERNET MARKETING

- Module I** Introduction to E-Business: Fundamentals of Information Technology, Emergence of Internet & WWW, Digital economy, Emergence of E-Commerce-commerce vs. E-business ,trends driving E-business , E-business framework, Business models, Revenue models, Value chain, E-business technology, software, Indian Scenario.
- Module II** Launching online business: Business plan, Funding, Web hosting, content creation management, Website design and construction, Strategies for web development, 7 Cs framework, web technologies: website and page development tools, Open source tools.
- Module III** E-Payment system: Traditional vs. Digital payment systems, Digital Payment requirements, Merchant account, Payment gateway, E-payment methods: Credit cards, E-wallet, Digital Token based E-payment systems, E-Cash, Innovative payment methods, E-loyalty and Reward programmes ,E-payment system Design, E-Banking, Main Concerns in Banking.
- Module IV** E-Security: Network and website security, Security Technologies, Internet Security Holes, Cryptography, Codes and Cipher, Data Encryption standard, Authentication, PKI, Digital signature, SSL, Firewalls, VPN, Cryptographic applications .E-Commerce Risk Management, Information Security in India, NASSCOM's Flagship Initiatives, Cyber laws in various countries.
- Module V** E-Business Application Areas (CRM,ERP,SCM and Selling), Mobile Commerce: Introduction to mobile commerce, Wireless applications, Hand Held Devices, Mobile Computing, Wireless Web, Concepts of WAP.E-Marketing: Browsing behavior model, Internet Marketing Trends, E-Advertising, E-branding, Marketing Strategies, SEO, Location based commerce, Emergence of Web 2.0, Social Media Strategies.

References

1. Dave Chaffey, *E-Business and E-Commerce Management*, Pearson Education, 2012.
2. Kalakota Ravi and M.Robinson, *E-Business 2.0: Roadmap for Success*, Pearson Education.
3. Efraim Turban et al., *E-Commerce*, Pearson Education.
4. Joseph P.T., *E-commerce An Indian Perspective*, PHI

IS 03- ENTERPRISE RESOURCE PLANNING

- Module I** ERP: An Overview, Enterprise – An Overview, Benefits of ERP, ERP and Related Technologies, Business Process Reengineering (BPR), Data Warehousing, Data Mining, OLAP, SCM.
- Module II** ERP Implementation-ERP Implementation Lifecycle, Implementation Methodology, Hidden Costs, Organizing the Implementation, Vendors, Consultants and Users, Contracts with Vendors, Consultants and Employees, Project Management and Monitoring.
- Module III** The Business Modules-Business modules in an ERP Package, Finance, Manufacturing, Human Resources, Plant Maintenance, Materials Management, Quality Management, Sales and Distribution.
- Module IV** ERP Market - Market Place, SAP AG, Peoplesoft, Baan, JD Edwards, Oracle, QAD, SSA.
- Module V** ERP – Present and Future - Turbo Charge the ERP System, EIA, ERP and e-Commerce, ERP and Internet, Future Directions.

References

1. Alexis Leon, *ERP Demystified*, Tata McGraw Hill, New Delhi.
2. Joseph A Brady, Ellen F Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, Thompson Course Technology, USA.
3. Vinod Kumar Garg and Venkitakrishnan N K, *Enterprise Resource Planning – Concepts and Practice*, PHI, New Delhi.

IS 04- BUSINESS PROCESS REENGINEERING

- Module I** Conceptual Foundation of Business Process Re-engineering; Role of information Technology in BPR; Nature, significance and rationale of business process reengineering (BPR).
- Module II** Major Issues in process redesign: Business vision and process objectives, Processes to be redesigned, Measuring existing processes; Process Improvement and Process Redesign; BPR Experiences in Indian Industry.
- Module III** Process identification and Mapping; Role/Activity Diagrams; Process Visioning and Benchmarking; Business Process Improvement. Designing and building a prototype of the new process: BPR phases, Relationship between BPR phases.
- Module IV** Typical BPR activities within phases: Change management, Performance management, and programme management.
- Module V** BPR and continuous improvement: Co-ordination and complementary efforts, IT capabilities and their organizational impacts, Implementation of BPR, Stages of implementation and critical aspects, Case studies on BPR. Man Management for BPR Implementation; Re- organizing People and Managing Change.

References

1. R.Radhakrishnan and S.Balasubramanian *Buisness Process Reengineering: Text Case*, PHI.
2. Jayaraman,M.S., *Business Process Re-engineering*, Tata Mcgraw Hill,
3. Michael Hammer, James Champy, *Reengineering the Corporation: A Manifesto For Business Revolution*, Harper Collins Publishers.
4. Carr, D. K. and Johanson, H. J., *Best Practices in Re-engineering*, New York, McGraw Hill.
5. Coulson Thomas, C., *Business Process Re-engineering: Myth & Reality*, London, Kogan Page.

IS 05-SOFTWARE QUALITY MANAGEMENT

Module I Software Quality: Meaning and definition of Software Quality. Quality control v/s Quality Assurance, Quality Assurance in Software at each Phase of SDLC. QMS in an organization. Need for SQA group. Software CMM and other Process improvement Models.

Module II Software Quality Measurement and Metrics: Product Quality Metrics: Defect Density, Customer Problems Metric, Customer Satisfaction Metrics, In-Process Quality Metrics: Defect Arrival Pattern, Phase-Based Defect Removal Pattern, Defect Removal Effectiveness, Metrics for Software Maintenance: Backlog Management Index, Fix Response Time, Fix Quality.

Module III Basic Quality Tools : Ishikawa's Diagram, Pareto Diagram, Histogram, Run Charts, Scatter Diagram, Control Charts, Cause & Effect Diagram, Relations Diagram,

Module IV Six Sigma Methodology: Define Six sigma. Tracking Xs and Ys. Six ingredients of Six Sigma. Three ways to Six Sigma – Process Improvement, Process Design/Redesign, Process Management. Organizing for six sigma – Leadership Group, Project Sponsors & Champions, Implementation leader, Master Black Belt, Black Belt, Team, Process owners. DMAIC Vs DMADV process.

Module V Software Verification, Validation & Testing: Objectives and Limits of Testing, Value Vs Cost of testing, Test Planning, Static Testing, Functional Testing, Structural Testing, Performance Testing, Testing Environment, Automated Testing Tool, Analysing and Interpreting Test Results.

References

1. Nina S Godbole, *Software Quality Assurance*: Narosa Publishing House Pvt. Ltd
2. Stephen H. Kan, Kan, *Metrics and Models in Software Quality Engineering*
3. Gerald D. Everett, Raymond McLeod, *Software Testing- Testing Across the Entire Software Development Life Cycle*, John Wiley & Sons , Inc Publication.
4. Pankaj Jalote, *CMM in Practice. Processes for Executing Software Projects at Infosys*, Pearson Education

IS 06- MULTIMEDIA MANAGEMENT

- Module I** Introduction to multimedia- Stages in multimedia project- Multimedia Team
- Module II** Multimedia hardware- Multimedia software- Basic Tools- Authoring Tools- Multimedia building blocks.
- Module III** Text- Sound- Images- Animation- Video- Multimedia and Internet- Tools for the World Wide Web.
- Module IV** Designing for World Wide Web- Planning and costing –Designing and producing -Assembling and delivering a project.
- Module V** Uses of Multimedia–Multimedia in Business – Multimedia in public places- Multimedia in schools and home.

References

1. Tay Vaughan, *Multimedia: Making it Work*, Tata Mcgraw Hill, New Delhi.
2. Anurag Sethi , *Multimedia Education: Theory and Practice*, Tata Mcgraw Hill, New Delhi.

IS 07- MANAGEMENT SUPPORT SYSTEM

Module 1 Overview of CBIS Applications : Decision Making Concepts – A Need for Computerized Decision Support; Role of Decision Support Systems in Business; A Framework for Decision Support. Modeling in Decision Support; Microsoft Excel DSS Tool – What-if Analysis, Scenario Manager, Goal Seek, Sensitivity Analysis.

Module II Group Decision Support Systems; Multi participant decision maker structures (MDM).MDM Support technologies. Enterprise Decision Support System: Concepts and definitions. Evolution and future of Executive and Enterprise Information System.

Module III Use of DSS Technology for Marketing, Finance, Production and HRM. Modeling of Multi-Objective and Analytic Hierarchy Process. Artificial Intelligence, Need and Application. AI based systems

Module IV Expert system: concepts & structure. Human element of expert system. Expert system consultation- illustration. Problems, benefits, limitations of Expert system Development of a Expert system; Expert System Shells; Working on an expert system Shell;

Module V Executive Information Systems definition; their Applications. EIS components. Making EIS work. Future of EIS

References:

1. Turban, McLean, Wetherber, *Information Technology for Management*, Tata Mcgraw Hill, New Delhi
2. Gerald V Post, David L Anderson, *Management Information System*, PHI
3. George M Marakas, *Decision Support System in 21st century* , Tata Mcgraw Hill, New Delhi,
4. Gordon B Davis, *Management Information System*, Tata McGraw Hill, New Delhi

IS 08- SOFTWARE PROJECT MANAGEMENT

- Module I** Software engineering and management: Functions of management, Need for software management, Conventional software management, Evolution of software Economics . Improving software Economics, conventional and modern software engineering.
- Module II** Software development as a process: Building the software development team - Team building as a process, The Apollo syndrome, Management Styles, A maturity model for software project management, Process of team building ,Developing and maintaining project plan – Software development plan, using the work break down structure, optimizing the project plan using the design structure matrix, risk management.
- Module III** Management Methods and Technology: Selecting a software development life cycle model – the software quality life cycle, modeling process, life cycle models, selecting a software development life cycle , Modeling the target system – requirements modeling methods, requirements analysis using self interaction matrices, real-time systems. Estimating project size, cost and schedule – costing and sizing software projects, software lifecycle management, 3D function point method, cost variance method ,Tracking the software project plan – tracking schemes, Earned Value Management (EVM), precedence diagramming for cost and schedule control, tracking remedial action.
- Module IV** Managing software professionals: Improving team performance – basics, relative importance of workplace, models of motivation, managing high performance teams-Evaluating software development team – classic techniques for valuating individuals, Strategy Based Evaluation methods (SEM), the SEM process, traditional performance evaluation methods, evaluating the software development team.
- Module V** Future of software management: Modern project profiles, Next generation software economics, Modern process transitions Agile, SCRUM approaches of project management.

References:

1. Lawrence J Peters . *Getting results from software development teams*, Microsoft Press
2. Walker Royce *Software project Management*, Addison-Wesley

IS 09- DATABASE MANAGEMENT SYSTEM

Module I Overview of DBMS : Database Management in organisations ; Objectives of DBMS ; Evolution ; data structures ; DBMS Architecture ; User interface, data languages, DBMS modes of operation.**Module II** DBMS functions: Design ; retrieval ; creation and updating; backup and recovery.

Module III Study of Relational Data Base Management System for successful implementation of Distributed systems; RDBMS concepts, structure and ER models ; Normalisation and Logical design Query Language for RDBMS.

Module IV Structured Query Language – basic structure of SQL queries, DML, DDL, DCL statements ; Distributed database systems - data fragmentation, replication and allocation techniques ; object oriented databases ; online database ; database administration ; trends to the future in database management.

Module V Applications ; Advanced transaction processing – transaction processing monitors, transactional workflows, Real- time transaction systems, Long duration transactions, transaction management in multi-databases; Evaluation of commercially available software systems

References:

1. C.J Date, A. Kannan, S.Swamynathan, *Introduction to Database system*, Pearson education.
2. Gorden.C. everest, *Database management*, Tata McGraw Hill.
3. Abraham silbershatz, Henry F. Korth, S. sudarshan, *Database system concepts*, McGraw Hill International Edition.
4. Elmasti, Navathi, Somayajulu, Gupta, *Fundamentals of database systems*, Pearson education.

IS 10 -PLANNING AND IMPLEMENTING IT STRATEGIES

- Module I** Technology Transforms IT Organizations – Why IT Strategy is required? What are the various dimensions of IT Strategy - Value propositions – Managerial decisions – Transforming organization - Aligning Business Objectives with IT Strategy – Six important trends – Value chains – Five forces model – Dynamic model – New business models – analyzing business models – Transformation with IT – IT variables for designing organizations – T-Form organization – New management challenges.
- Module II** Globalization and international business – International business strategies – Key issues – Virtual firms and IT – Business models and IT management – IT investment opportunities matrix – IT and investment equation – Investment decision – guidelines for IT investment – Choosing technology – Outsourcing – Pros and Cons, Objectives.
- Module III** Implementing IT – Research implementation – Implementation strategy – Implementing IT based transformations – Disaster recovery and Business continuity – managing IT function – Management control of IT – Control theory – Failure control – information control – Technology, Process and People dimension of IT Strategy - group decision making.
- Module IV** Impact of the components – First component Computer systems – Second component Database – Third component Powerful networks – Neural networks – Cloud – grid computing - Future technology – IT Strategy focus points for 2011 and 2012 and beyond.
- Module V** Decision and intelligent systems – Expert systems and AI – (SCM) Supply Chain Management – (CRM) Customer Relationship Management – Knowledge Management – Ethical issues in corporate governance and IT – virtual organization – monitoring SLAs’ (Service Level Agreements).

References:

1. Henry C. Lucas, *Information Technology – Strategic Decision Making for Managers*, Wiley - India Edition.
2. Rich Schiesser, *IT Systems Management*, PHI.

PRODUCTION AND OPERATIONS MANAGEMENT ELECTIVES

POM 01- SUPPLY CHAIN AND LOGISTICS MANAGEMENT

Module I

Introduction to Supply Chain Management (SCM): Concept of SCM – Components – Features – Strategic issues in SCM, The Supply Chain Revolution -Customer focus in SCM , Demand planning, Purchase Planning – Make or Buy decision – indigenous and global sourcing, Development and Management of suppliers – Legal aspect of Buying – Cost management- Negotiating for purchasing and sub contracting – Purchase insurance – Evaluation of Purchase performance.

Module II

Manufacturing Scheduling: Manufacturing flow system – Work flow automation – Flexibility in manufacturing to achieve dynamic optimization, Material handling system design and decision, Strategic Warehousing – Warehousing Operations – Warehousing Ownership Arrangements – Warehouse Decisions.

Module III

Logistics: The Logistics of Business – The Logistical Value Proposition – The Work of Logistics – Logistical Operating Arrangements – Flexible Structure – Supply Chain Synchronisation, Transport Functionality, Principles and Participants – Transportation Service – Transportation Economics and Pricing – Transport Administration - Documentation.

Module IV

Information Technology and SCM: Information System Functionality – Comprehensive Information System Integration – Communication Technology – Rationale for ERP Implementation – ERP System Design – Supply Chain Information System Design – Enterprise Facility Network – Warehouse requirements – Total Cost Integration – Formulating Logistical Strategy

Module V

International Logistics and Supply Chain Management: Meaning and objectives, importance in global economy, Characteristics of global supply chains,: Global Supply Chain Integration – Supply Chain Security – International Sourcing - Role of Government in controlling international trade and its impact on Logistics and Supply Chain.

References:

1. Bowersox, Closs, Cooper, *Supply Chain Logistics Management*, McGraw Hill.
2. Donald J Bowersox, David J Closs, *Logistical Management (The integrated Supply Chain Process)*, TMH
3. Sunil Chopra, Peter Meindl, *Supply Chain Management (Strategy, Planning and Operation)*, Pearson Education, India.
4. Burt, Dobbler, Starling, *World Class Supply Management*, TMH.

POM02- TOTAL QUALITY MANAGEMENT

Module I

Quality Management – Definition, Concept, Features, Dimensions of Quality, Quality Planning, Quality Costs, Evolution of Quality Management ,Quality revolutions in US, Japan and India. Quality Gurus – Deming’s principles on Total Quality Management, Juran’s Triology, Crosby’s principles on Quality Management.

Module II

Statistical Quality Control (SQC) Concepts, Acceptance Sampling by variables and attributes Control Charts for variables, fraction defectives and defects. Seven Tools of Analysis –Control Chart, Pareto Diagram, Ishikawa Diagram, Histogram, Flow Charts, Scatter Diagram, and Stratification – New Seven Analysis tools. Six Sigma concepts of process quality.

Module III

Benchmarking – Types, Reasons, Process. Quality Function Deployment (QFD) – Benefits, QFD Process, House of Quality. Failure Mode and Effect Analysis (FMEA). Taguchi Quality Loss Functions. Total Productive Maintenance (TPM) – Concepts, Objectives, Fundamental Elements, Total Preventive Maintenance, Components.

Module IV

Quality education and training quality process, Quality system – Quality measurement system – Cost of Quality – Quality planning – Quality information feedback – Internal customer concept – - Auditing for TQM. TQM in India. Pitfalls in operationalising Total Quality Management.

Module V

Quality awards – Rajiv Gandhi National Quality Award, Deming Application Prize, European Quality Award, and Malcolm Baldrige National Quality Award.

References:

1. Dale H Besterfield, *Total Quality Management* Pearson Education, New Delhi
2. Juran Joseph M, *Total Quality Management*, Mc Graw Hill.
3. Jain, *Quality Control and Total Quality Management*, Tata McGraw Hill.
4. R.P. Mohanty and R.R. Lakhe, *TQM in service sector*, Tata McGraw Hill.

POM 03- ADVANCED MAINTENANCE MANAGEMENT

Module I

Maintenance Concepts: Objectives & functions of Maintenance, Maintenance strategies, Organization for Maintenance, Types of Maintenance – maintenance systems – planned and unplanned maintenance – breakdown maintenance – corrective maintenance – opportunistic maintenance – routine maintenance – preventive maintenance – predictive maintenance – condition based maintenance systems – design-out maintenance – selection of maintenance systems.

Module II

Maintenance Planning and Equipment Efficiency Management: Overhaul and repair meaning and difference, Optimum Maintenance policy for equipments subject to breakdown, Replacement decisions: Optimum interval between preventive replacement of equipment subject to breakdown, group replacement, Physical Asset Management, Overall Equipment Effectiveness Measuring Equipment Effectiveness

Module III

Failure Data Analysis, MTBF,MTTF, Useful life-Survival curves, Repair time, Breakdown time distributions- Poisson's, Normal, Exponential, Failure Mode Effects and Criticality Analysis

Module IV

Availability, Reliability, Maintainability: Availability of repairable systems, Concept of Reliability, System reliability- Series, Parallel and mixed configuration, Reliability improvement, Concept of Maintainability, Maintainability prediction, Design for Maintainability, Maintainability Improvement, Availability- Maintainability-Reliability trade off.

Module V

Advanced Techniques: Reliability centered Maintenance, Total Productive Maintenance(TPM)- Philosophy & Implementation, Signature Analysis-MMIS- Expert systems, Concept of Tero-Technology, Reengineering Maintenance process,

References

1. Kelly and M.J. Harris, *Management of Industrial Maintenance*, Butterworth and Company Limited.
2. AKS Jardine, *Maintenance, Replacement and Reliability*, Pitman Publishing.
3. R.C.Mishra & K.Pathak, *Maintenance Engineering & Management*, PHI.
4. Sushil Kumar Srivatsava, *Industrial Maintenance Management*, S.Chand & Company.

POM 04 - LEAN MANUFACTURING

Module I

Lean manufacturing and six sigma – overview : Evolution of Lean; Traditional versus Lean Manufacturing; Business of Survival and Growth; Business Model Transformation; Ford Production System; Job Shop Concepts Concept of Lean; Toyota's foray in Lean.

Module II

Design - Value Stream Management: Definition; VSM Types; Product Family Selection; Value Stream Manager; Current State Map; Process Box; Value Stream Icons; 3 Ms - Muda, Mura, Muri - 7 Types of Muda; Future State Map; Value Stream Plan; Process Stability - Loss Reduction 7 Major Losses Reduction. Demand Stage :Market Dynamics; Customer Demand; PQ Analysis; PR Analysis; TAKT Time; Pitch; Finished Goods Stock; Cycle Stock; Buffer Stock; Safety Stock.

Module III

System implementation : Flow Stage : Continuous Flow; Cell Layout; Line Balancing; Macro and Micro Motion Analysis; Standardised Work; Concept of Kaizen; Steps involved in Kaizen Deployment; Industrial Engineering - Concepts and Fundamentals; KANBAN Concepts ; Types of Kanbans ; and Practical Application ; Concept of Pull; Changeover Time Reduction - External & Internal Single Minute Exchange of Die; Quick Die Change; Quality-Vendor, In Process and Customer Line ; Concept of PPM; Pokayoke; Prevention & Detection Types; Maintenance - Preventive, Time Based and Condition Based; Human Development for Lean, Leveling Stage of Lean Implementation : Production Leveling ; Leveling Box; Concept of Water Spider.

Module IV

Lean metrics and lean sustenance: Identify Lean Metrics; Steps involved in Goal Setting; Corporate Goals; Kaizen Cloud identification in VSM ; Lean Assessment. Cultural Change; Reviews; Recognition; Improving Targets and Benchmarks.

Module V

Six sigma and DMAIC tools: Project charter, stakeholder analysis, SIPOC, Voice of the customer, Rolled throughput yield, KANO Models, CTQ Tree, Process Mapping Data collection, measurement system analysis, sampling plans, process capability, cost of poor quality (COPQ), FMEA Regression Analysis, cause & effect diagram, Hypothesis testing, Design of experiments, Response Surface methodology, Poka-yoke, Quality Control, Control charts.

References

1. Jeffrey Liker and David Meier, *“The Toyota Way Fieldbook”*, McGraw-Hill.
2. Pascal Dennis, *“Lean Production Simplified”*, Productivity Press.
3. James Womack and Daniel Jones, *“Lean Thinking”*, Free Press.
4. Don Tapping, Tom Luyster and Tom Shuker, *“Value Stream Management”*
Productivity Press.
5. Tom Luyster and Don Tapping, *“Creating Your Lean Future State: How to Move from Seeing to Doing”*, Productivity Press.

POM 05 - INTEGRATED MATERIALS MANAGEMENT

Module – I

Introduction to Materials Management, Concept significance and strategic role of Integrated Materials Management, Materials codification and computerization, Universal product Code, RF Id System.

Module – II

Materials planning and forecasting, Inventory Planning and Control Models – EOQ Model, Quantity Discounts – Reorder point – Lead Time Analysis – Safety, Stocks – Q System – P System – S System. Materials Requirement Planning (MRP), Materials Problems in Indian Conditions, Inventory Audit and Information Systems.

Module – III

Purchasing Fundamentals – Make or Buy – Source Selection – Vendor Rating and Vendor Development - Value Analysis. Purchase Negotiations – Purchase Timing – Purchase Contracts – Purchase Insurance - Purchasing Capital Goods, Seasonal Goods, Imported Goods, Deferred Payment Schemes – Lending Institutions – Leasing Trends. Governmental buying – D.G.S.&D Procedures, International Buying

Module – IV

Stores Management Concepts, Location and layout of Warehouses – Different typical models, Stores Procedures and Records for Receipt, Inspection, Issue, Reorder checking – Kardex Stores Accounting.

Module – V

Practical problems in Management of dead stocks, surplus stocks and scraps – Systems & Procedures for disposal and Control, Materials Handling and Transportation Management Case Studies, Evaluation of Materials Management Performance.

Reference:

1. Gopalakrishnan P & Sundarasan M, *Materials Management: An Integrated Approach*, Prentice Hall of India
2. Datta A.K, *Materials Management Text and Cases*, Prentice Hall.
3. J.R.Tony Arnold & Stephen N. Chapman, *Introduction to Materials Management*, Pearson Education
4. Gopalakrishnan P, *Handbook of Materials Management*, Prentice Hall.
5. Panneerselvam.R, *Production and Operations Management*, Prentice hall.

POM 06 - PRODUCTIVITY MANAGEMENT

Module I

Productivity concepts – Macro and Micro factors of productivity, productivity benefit model, productivity cycles. Internal and external factors affecting enterprise productivity.

Module II

Productivity Measurement at International, National and organization level, total productivity models. Productivity Management in manufacturing and service sector. Productivity evaluation models, productivity improvement model and techniques.

Module III

Value Analysis and Value Engineering: Concept – Procedure – Application and role in Productivity, Case examples of successful applications, Pareto Analysis, Zero-based-budgeting, Waste reduction and energy conservation.

Module IV

Work Study: Importance, Method Study and Work Measurement –Pioneers of Performance Measurement. Method Study: Method, Need and Procedure, Work simplification, Principles of Motion Economy.

Module V

Work Measurement: Techniques -Estimating, Stopwatch Time Study, Predetermined Time Standards, Synthetic Estimates of Work Times, Activity Sampling. Computation of Standard Time, Types of Elements, Performance Rating, Allowances – Need and Types.TPM: Meaning and objectives of TPM; Methodology of TPM, gains of TPM

References:

1. Sumanth, D.J., “*Productivity engineering and management*”, Tata McGraw-Hill, New Delhi.
2. H. James Harrington, “*Business Process Improvement: The Breakthrough Strategy for Total Quality, Productivity and Competitiveness*”, McGraw-Hill Press.
3. Rastogi, P.N., “*Re-engineering and re-inventing the enterprise*”, Wheeler publications, New Delhi.

POM 07 - OPERATIONS STRATEGY

Module 1

Strategic Management : organizations and managers, contents of strategy, levels of strategic decision, designing a strategy, approaches to design - top-down and bottom-up approaches, steps, defining the purpose of operations, business environment, components of environment, economic environment, industries, industry life cycle, markets

Module II

Operations Strategy concept: aims of an operations strategy, contents of an operations strategy, and approaches to designing an operations strategy, market view, resources view Designing an operations strategy –focuses of operations strategies: product differentiation, materials management– environmental scans, analysis of the environment, PEST analysis, operational audit, SWOT analysis- implementing the strategy - meaning of implementation, stages of implementation, designing infrastructure, controlling the strategy, action plan for implementation

Module III

Products and innovation: product planning, entry and exit strategies, new product development, market demands, operations' requirements, production possibility curve quality management – strategic importance of quality, quality management, quality revolution, Total Quality Management – zero defects, implementing TQM, ISO 9000, quality control

Module IV

Capacity Management: measures of capacity, capacity planning, approaches to planning, forecasting demand, timing and size of change, size of expansion, changing capacity over time, different levels of capacity plan

Module V

Structure of the supply chain: role of logistics and supply chain management, integration of activities along the supply chain, location of facilities, strategic sourcing and supply management, risk management, operational hedging, mass customization and technology movement of materials, flow of materials, importance of procurement, inventory management, models of independent demand

References:

1. Donald Waters, *Operations Strategy*, Thomson Learning India.
2. Premvrat, Sardana G.D., and Sahay, B.S., "*Productivity Management – Systems approach*", Narosa Publications, New Delhi.
3. Joseph Prokopenko, "*Productivity Management : A Practical Handbook*", International Labour Office.

POM 08 - TECHNOLOGY MANAGEMENT

Module 1

Evolution of Technology: Effects of New Technology- Technology Innovation-Invention-Innovation-Diffusion- Revolutionary and Evolutionary Innovation-Product and Process Innovation. Technology environment – Science and Technology in India.

Module II

Strategic Implications of Technology: Technology - Strategy Alliance-Convergent and Divergent Cycle- The Balanced Approach- Technology Assessment-Technology Choice- Technological Leadership and Followership-Technology Acquisition

Module III

Technology Absorption and Diffusion – absorption, adaptation and improvement, Diffusion of Technology: Rate of Diffusion- Innovation Time and Innovation Cost-Speed of Diffusion- Technology Indicators- Various Indicators.

Module IV

Technology policies, incentives and support mechanisms Organizational Implications of Technology: Relationship between Technical Structure and Organizational Infrastructure-Flexible Manufacturing Management System (FMMS).

Module V

Functional aspects: Financial Aspects in Technology Management-Improving Traditional Cost Management System- Barriers to the Evaluation of New Technology- Social Issues in Technology Management-Technological Change and Industrial Relations- Technology Assessment and Environmental Impact Analysis-Human Aspects in Technology Management-Integration of People and Technology

References:

1. Gerard H Gaynor, *Hand Book of Technology Management*, McGraw Hill
2. David L. Bodde, *The International Entrepreneur*, Prentice Hall of India, New Delhi
3. Frederic Betz, *Strategic Technology Management*, McGraw Hill

POM 09 - SERVICE OPERATIONS MANAGEMENT

Module I

Introduction to services – Nature and Characteristics of Services and Service Encounters, Service Organization as a system, Service Strategy formulation , Basic and Integrative elements of Strategic service.

Module II

Building Service System – Technology: Its impact on services and their management- Design and development of Services and Service delivery system, Work Measurement in Services, Time studies, Predetermined Time Standards, Work sampling, Locating and Designing Service- Factor weighting method, Center of Gravity method, Service facility Layout, Service layout strategies for Product Layout, Process Layout, Office layout, Retail store Layout, Warehousing and Storage Layout.

Module III

Operating the Service System- Managing Demand, Nature and pattern of Service demand, Strategies for influencing Demand, Yield management, Queuing theory and Simulation, Managing Supply, Capacity, Components of Capacity, Strategies for Management of Supply, Overbooking, Allocating capacity- Static, Nested and Dynamic Methods, Inventory Management in Services, Methods to reduce stock-outs, shrinkages and inventory inaccuracy

Module IV

Managing Service Operations- Service Quality, Dimensions of Service Quality, Achieving Quality, Reinforcing Service Quality through Service Recovery and Service Guarantee, Service Productivity, Measurement and Methods to increase Service Productivity,. Basic understanding of Data Envelopment Analysis and Scoring System.

Module V

Case studies in service operations management-

Travel and tourism sector – Hotel, Airline

IT and communication sector – Information technology, Telecom services, Computer networking service

Healthcare sector – Hospital, Medical Transcription

Financial Services sector – Insurance, Banking, Portfolio services

Educational services – Education, Training.

References

1. Richard Metters, Kathryn King-Metters, Madeliene Pullman, Steve Walton, “*Service Operations Management*” Cengage Learning India Private Ltd.
2. Cengiz Haksever, Barry Render, Roberta S Russell, Roberta G. Murdick, “ *Service Operations Management*”, Second Edition, Pearson Education Pvt Ltd.
3. Robert Johnson, Graham Clark, “*Service operations management : improving service delivery*”,, Pearson Education, Third Edition.

POM 10 - OCCUPATIONAL HAZARDS AND INDUSTRIAL SAFETY

Module I

Understanding the importance of safety at work: Concept of Safety-Applicable areas- Recognition, evaluation and control of physical hazards- Hazard Analysis, Human Error and Fault Tree Analysis- Emergency Response-Hazards and their control in different manufacturing and processing industries.

Module II

Industrial Accidents: Causes and effects of Industrial accidents-Impact of accidents on employees, union, management and society- Organisation's Role and Responsibility in the Prevention of Accidents- Different models.

Module III

Standard of Safety Norms:Indian scenario Safety Protection- Safety Policy – Personal safety – Responsibilities of management in health and safety-. Occupational Health and Safety considerations in Wastewater Treatment Plants. - Functions of National Safety Council

Module IV

Legal provisions regarding safety:

Factories Act-1948 1st Amendment 1987- Sections 11 -16, 18-20 Sections 17, 21 – 24, 28, 32,, 34-36, 38,45 The Mines Act Section 25 ESI Act – Section 39 Public Liabilities Insurance Act- Section 13 Workmen Compensation Act and Fatal Accident Act

Module V

Accidents in work place-Types, Investigation methods, Analysis ,Reporting and Recording Injuries -First aids- Health problems in different types of industries – construction, textile, steel,food processing and pharmaceutical. Fire- Causes, Types of fire, Extinction of fire, Prevention of fire.

References

1. Dr.Naseer Elahi, *Industrial Safety Management*, Gyan Publication, New Delhi.
2. L.M. Deshmukh, *Industrial Safety Management*, Tata Mc Graw Hill.
3. R.K.Trivedi, *Pollution Management in Industies*, S Chand Publishing, New Delhi.
4. O.P.Khanna, *Industrial Engineering*, S Chand Publishing, New Delhi.