MBA
(OPERATIONS AND PROJECT MANAGEMENT)
Semester
(With Effect from the Academic Year 2013-14)

ELIGIBILITY FOR ADMISSION

Candidates who apply for the degree of MBA shall possess the following qualifications.

(a) AGE LIMIT:

There is no upper Age Limit.

(b) QUALIFICATION:

Any Degree

3. DURATION OF THE COURSE

The course will be conducted for Two years under Semester pattern.

On completion of two years, the students will be awarded MBA with Respective Specialisation.

3.1. EXAM : There will be an examination conducted by the University at the end of each Semester.

3.2. PASSING MINIMUM : 50 marks

3.3. MEDIUM OF INSTRUCTION: The Medium of instruction will be English.
### LIST OF SUBJECTS AND DETAILED SYLLABUS

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### 21. PROJECT REPORT

Students are required to undertake a Research for in a relevant specialization. They must submit a research report on the relevant specialization guided by the Qualified External Examiner before the end of IV semester. The maximum mark for the research report is 100. The Minimum mark required to pass the Research Report is 50 Percent.
PAPER I MANAGEMENT: THEORY AND PRACTICE

Objectives: To help students understand Evolution of Management Thought, Concepts, basic functions and recent trends managerial concepts and practices for better business decisions.


UNIT II: Importance of planning – Types of planning – decision making process – Approaches to decision making – Decision models – Pay off Matrices – Decision trees – Break Even Analysis.


UNIT V: Managements control systems – techniques – Types of control.

REFERENCES


PAPER II ORGANISATIONAL BEHAVIOUR
**Objectives:** To introduce students to framework that are useful for diagnosing problems involving human behaviour, to increase students understanding of psychological and sociological phenomenon that regularly occur in organizations. To understand the dynamics of human organizations and concepts of individual as well as the group level.

**UNIT I:** Definition, need and importance of organizational behaviour – nature and scope – frame work – organizational behaviour models.


**UNIT III:** Organization structure – formation – groups in organizations – influence – group dynamics – emergence of informal leaders and working norms – group decision making techniques – interpersonal relations – communication – control.

**UNIT IV:** Meaning – importance – leadership styles – theories – leaders Vs managers – sources of power – power centers – power and politics.


**REFERENCES**


**PAPER III ACCOUNTANCY FOR MANAGERS**
Objectives: To familiarize the students with basic Accounting concepts and Conventions, to make the students understand Financial Statements, to familiarize with the intricacies of accounting, planning and Management and to make them aware about the tools for decision making.


UNIT II: Financial statement analysis – Ratio analysis-Preparation of Cash Flow Statement-cash flow and funds flow statement analysis


UNIT IV: Basics of Cost Volume Profit (CVP) analysis – BEP analysis- Application of marginal costing in decisionmaking - Basic framework of budgeting-Preparation of Master, flexible and cash budgets- Zero based budgeting

UNIT V: Standard costing-Setting standard costs - Analysis of variance - Significance of Computerized Accounting System

REFERENCES

1. Bhattacharyya, Management Accounting, Pearson, 2010
2. Khan, Jain, Management Accounting: Text, Problems and Cases Tata McGraw Hill

PAPER IV MANAGERIAL ECONOMICS

Objectives: To impart knowledge and understanding to students on managerial economics and their application to business decision making.


UNIT IV: Analysis of inflation and unemployment – the role of economic policies – Indian experiences.


REFERENCES

PAPER V: STATISTICS FOR MANAGERS

Objectives: To help students understand application of statistics, probability Concepts, basic functions and practical usage for better business decisions.

UNIT I: Basic definitions and rules for probability, conditional probability, independent of events, Baye’s theorem, random variables, Probability distributions: Binomial, Poisson, Uniform and Normal distributions.
UNIT II Introduction to sampling distributions, sampling techniques, sampling distribution of mean and proportion, application of central limit theorem. Estimation: Point and Interval estimates for population parameters of large sample and small samples, determining the sample size.

UNIT III TESTING OF HYPOTHESIS - Hypothesis testing: one sample and two samples tests for means and proportions of large samples (z-test), one sample and two sample tests for means of small samples (t-test), F-test for two sample standard deviations, Chisquare test for single samples standard deviation. Chi-square tests for independence of attributes and goodness of fit.


UNIT V CORRELATION, REGRESSION AND TIME SERIES ANALYSIS - Correlation analysis, estimation of regression line. Time series analysis: Variations in time series, trend analysis, cyclical variations, seasonal variations and irregular variations.

REFERENCES

SEMESTER II

PAPER I MARKETING MANAGEMENT

Objectives: It helps students to understand the basic concepts of Marketing Management, understand various marketing tools/models for solving marketing problems and to comprehend various situations and marketing terminologies.

UNIT I: Marketing conceptual frame work – marketing environment – customer oriented organization – marketing interface with other functional areas, marketing in a globalized environment.
UNIT II: Understanding Industrial and individual buyer behavior – influencing factors– responding to buyer behaviour – building customer satisfaction – marketing to organizations and marketing of services Market segmentation – targeting and positioning, developing marketing mix,


UNIT IV: Marketing Research- Types, process – tools and techniques – application of marketing research – product launching, demand estimation, advertising, brand preferences, customer satisfaction, retail stores image, customer perception, distribution, customer relationship, competitor analysis and related aspects

UNIT V: Online marketing – web based marketing programmes – emerging now trends and challenges to marketers.

REFERENCES

1. Aakar Day, Kumar, Essential of Marketing Research.

PAPER II FINANCIAL MANAGEMENT

Objectives: Imbibing knowledge about the decisions and decision variables involved in building the asset side of balance sheet of the firm and developing the analytical skills by associating the tools and techniques with the situation and to develop skills for interpretation business information and application of financial theory in corporate investment decisions.

UNIT I: Financial management – An overview, time value of money. Introduction to the concept of risk and return of a single asset and of a portfolio, valuation of bonds and shares option valuation.

UNIT II: Capital Budgeting: Principles and techniques, Nature of capital budgeting, Identifying relevant cash flows, Evaluation Techniques, Payback, Accounting Rate of Return, Net Present Value, Internal Rate of Return, Profitability Index, Comparison of DCF techniques, Project
selection under capital rationing, Inflation and capital budgeting. Concept and measurement of cost of capital, Specific costs and overall cost of capital.

UNIT III: Financial and operating leverage, capital structure, Cost of capital and revaluation, designing capital structure. Dividend policy, Aspects of dividend policy, practical consideration, forms of dividend policy, practical considerations, forms of dividends, share splits.


UNIT V: Indian capital and stock market, New issues market. Long term finance: Shares debentures and term loans, lease, hire purchase, project financing, venture capital financing.

REFERENCES

PAPER III HUMAN RESOURCE MANAGEMENT

Objectives: To provide the future manager with inputs with a view to Enhancing the appreciation of the Human Resources function as a potential career option, Understanding the interface of the Human Resources function with Operations, Marketing, and Finance functions


UNIT II: Employment planning and forecasting – Recruitment, selection process- Building employee commitment : Promotion from within – Sources- Induction.


910
Statutory benefits - non-statutory (voluntary) benefits - Insurance benefits - retirement benefits and other welfare measures to build employee commitment.


REFERENCES

3. VSP Roa, Human Resource Management: Text and cases, First edition, Excel Books,

PAPER IV OPERATIONS MANAGEMENT

Objectives: To understand the concepts of Operation Management and its applications in industrial situations and to familiarize the students with various concepts of Operation Planning and Management.


UNIT II: Facility Location Decisions (FLcD) – Selections of country, region and site. Facility Layout Decision (FlyD) – Types (Fixed Position, and Production, Process, Flexible), Methodologies (Distance Minimising, Computer software systems (CRAFT, CORELAP, ALDEP),

UNIT III: Forecasting – Types, Methods (Qualitative and Quantitative), Types of variation in data, Minimising forecasting errors and selection of forecasting methods. Capacity Planning-MRP and MRP II systems Introduction to ERP Line Balancing and performance ratios,

UNIT IV: Material Management (MM) – Handling Technology (Robots, Automated storage and retrieval systems (ASRS) and methods (JIT, / Kanban, ABC Systems). Independent Demand Inventory Models – Fixed order system, Basic EOQ, EBQ Models, Quantity discount models. Dependent Demand Inventory models
UNIT V: Johnson’s Algorithm for job sequencing -Use of Gantt charts, Queuing analysis and Critical Ratios as methods for job scheduling. work measurement methods (WM) - Time study, methods-time measurement, Work Sampling, White color measurement and learning curves, Using WM to increase productivity- PERT / CPM – Drawing the network, computation of processing time, floats and critical path. Resource leveling techniques.

REFERENCES

2. Sang M Lee and Marc J Schniederjans, Operation Management, All India Publishers

PAPER V RESEARCH METHODS FOR BUSINESS

Objectives: To impart knowledge to evaluate and conduct research on management problems/issues, to provide skills necessary for the conduct of student research projects as a part of the programme requirement and to highlight importance of research in management


REFERENCES

1. Alan Bryman and Emma Bell, Business Research methods, OUP.
SEMESTER III

PAPER I OPERATIONS RESEARCH

Objectives: To provide a formal quantitative approach to problem solving and an intuition about situations where such an approach is appropriate, to introduce some widely-used mathematical models. The understanding of these models will allow the students to communicate with persons who run them and to evaluate the results they present and to provide a tool that the students can use to solve management problems.

UNIT I: Introduction to applications of operations research in functional areas of management. Linear programming- Formulation, Solution by graphical and simplex methods, Special cases, Dual simplex method, Principles of duality, Sensitivity analysis.

UNIT II: Transportation models (minimizing and maximizing cases) –Balanced and unbalanced cases –Initial basic feasible solution by N-W corner rule, least cost and Vogel’s approximation methods. Check for optimality. Solution by MODI /Stepping stone method. Cases of degeneracy. Transshipment models.

UNIT III: Solution to pure and mixed integer programming problem by Branch and bound and cutting plane algorithms. Game theory-Two person zero sum games-saddle point, Dominance Rule, Convex Linear combination (averages), methods of matrices, graphical and LP solutions.


UNIT V QUEUING THEORY AND REPLACEMENT MODELS -Queuing theory – single and multi-channel models – Infinite number of customers and infinite calling source. Replacement models –Individual replacement models (with and without time value of money) – Group replacement models.

REFERENCES
1. Paneerselvam R., Operations Research, Prentice Hall of India,
PAPER II STRATEGIC MANAGEMENT

Objectives: The Objective of the course is to enable students have a grasp of various business strategies in general and functional management areas. It will provide a strategic orientation in conduct of the business.

UNIT I: Conceptual framework for strategic management, the Concept of Strategy and the Strategy Formation Process – Stakeholders in business – Vision, Mission and Purpose – Business definition, Objectives and Goals - Corporate Governance and Social responsibility

UNIT II External Environment - Environmental Threat and Opportunity Profile (ETOP) – SWOT- Porter’s Five Forces Model-Strategic Groups Competitive Changes during Industry Evolution- Globalisation and Industry Structure - National Context and Competitive advantage Resources- Avoiding failures and sustaining competitive advantage-


UNIT IV : The implementation process, Resource allocation, Designing organisational structure-Designing Strategic Control Systems- Matching structure and control to strategy-Implementing Strategic change-Politics-Power and Conflict-Techniques of strategic evaluation & control

UNIT V: Managing Technology and Innovation- Strategic issues for Non Profit organizations-New Business Models and strategies for Internet Economy

REFERENCES


PAPER III COMPUTER INTEGRATED MANUFACTURING

Course Objective

The objective of this course is to expose the students to the role of computer in the manufacturing process. It also aims to improve the understanding of students about the technological aspects and the implementation issues computer integrated manufacturing.
UNIT I

UNIT II

UNIT III
Fundamentals of Design for Manufacturing (DFM) - Computer Aided Design (CAD) - 3D Modeling packages - Finite Element Analysis packages and Transportability - NC, CNC and DNC machines - Introduction to part-programming - Tool Management - Data Logging and acquisition - Automated data collection.

UNIT IV

UNIT V

REFERENCES

PAPER IV: MANAGEMENT INFORMATION SYSTEM

Objectives: Make the students to understand the interface of the Human Resources function with Operations, Marketing, and Finance functions and to impart knowledge on information systems and its relevance to business decisions.


UNIT V: DSS: DSS models and software: The decision making process - Structured, Semi Structured and Unstructured problems; Managing Information Technology: Managing Information Resources and technologies - Security and Ethical Challenges: IS controls - facility control and procedural control

References

4. Waman S Jawadekar , "Management Information System Text and cases", TMH

PAPER V:ADVANCED OPERATIONS MANAGEMENT

Course Objective

The objective of this course is to enable the students to understand the advanced techniques of operations management. It also helps the students to gain an insight into the trends in operations management.
UNIT I
Current challenges in Operations management - Product development considerations - Value engineering, concurrent engineering, Robust design - Modular design - Selection and Justification of Advanced Manufacturing Technology.

UNIT II
Strategic capacity planning for products and services - Scheduling for batch processing – The design and scheduling of flow processing system – Production planning and control - Routing, sequencing, loading, scheduling – master scheduling.

UNIT III
Operating value chains – Information technology - value chain – Material management - supply chain – Special inventory models, Selective inventory control, Operations decision making tools – Acceptance sampling.

UNIT IV
Recent Trends in operations management – Lean manufacturing - Resource requirement planning, Synchronous manufacturing - theory of constraints – Agile Manufacturing

UNIT V
Cases in operations management

REFERENCES:

SEMESTER IV

PAPER I : ENTREPRENEURSHIP

Objectives: To enable the students have entrepreneurial motivation by providing the basic idea of entrepreneurship, business ideas, project writing and new venture creation


UNIT V: Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units- Effective Management of small Business.

REFERENCES
2. Khanka S.S., Entrepreneurial Development, S.Chand and Company Limited

PAPER II: FACILITIES LOCATION AND PROCESS DESIGN Course Objective

This course has the objective of enhancing the understanding of the students of location and layout decisions. It also helps the students to gain an insight into the organisational nuances and implementation issues.
UNIT I
Facilities requirements, need for layout study – types of layout, Model Classification, Criterion Selection, Model Validation, Design Process.

UNIT II
Layout problems - Plant layout procedures- various approaches - Flow and activity analysis - Designing the layout

UNIT III
Plant location analysis – factors, costs, location decisions – simple problems in single facility location problems - multi-facility location problems - network location problems.

UNIT IV

UNIT V

REFERENCES

PAPER III :PRODUCT DESIGN AND PROJECT MANAGEMENT

Course Objective
This course has the objective of enhancing the understanding of the students of product design and project management. It also helps the students to gain an insight into the process of product design and the functions and implementation issues of project management.

UNIT – I
UNIT – II

UNIT – III
Concept Selection – Concept Screening - Concept Scoring - Concept Testing- Product Architecture - Platform Planning - Robust Design- Collaborative Product development

UNIT – IV
Project - Definition –Scope – Significance – Project Proposal - Project management – Functions - organization - planning - human aspects and pre-requisites.

UNIT – V

REFERENCES


PAPER IV : SUPPLY CHAIN AND LOGISTICS MANAGEMENT
Course Objective
The objective of this course is to enable the students to understand the scope and significance of supply chain and logistics management. It also expose the students to the structural framework and the functional implications of logistics.

UNIT I
Supply Chain management and logistics management – Definition - Evolution. Supply Chain – Fundamentals - and Importance. Supply chain strategy - Drivers of Supply Chain Performance - Supply Chain relationships

UNIT II
Logistics – functions, objectives - solution- Customer Service - Warehousing and Material Storage - Material Handling, Transportation and Packaging – 3PL and 4PL.
UNIT III

UNIT IV
Sourcing – Make or buy decision, Creating World Class Supply base, World Wide Sourcing Inventory Management – managing cycle inventory, safety inventory. Value of information, Bullwhip effect, Coordination in supply chain, Analysing impact of supply chain redesign on the inventory

UNIT V

REFERENCES

PAPER V :ADVANCED MAINTENANCE MANAGEMENT

Course Objective
This course has the objective of imparting in-depth knowledge to the students with respect to maintenance management. It also helps the students to gain an insight into the advanced techniques and trends in maintenance management

UNIT I
Objectives and functions of Maintenance, Types, Maintenance Strategies - Organization for Maintenance. Five Zero Concept
UNIT II
MTBF, MTTF, Useful Life – Survival Curves – Repair Time Distribution - Breakdown time distributions, Poisson, Exponential and Normal distribution - Availability of repairable Systems
– Maintainability Prediction – Design for Maintainability.

UNIT III
Overhaul and Repair - Meaning and Difference – Optimal overhaul/Repair/Replace maintenance policy for equipment subject to breakdown - Optimal interval between preventive replacement of equipment subject to breakdown - group replacement

UNIT IV
Fixed Time Maintenance - Condition based Maintenance- Operate to Failure - opportunity maintenance - Design out maintenance - Total Preventive maintenance.

UNIT V

References
2. Sushil Kumar Srivatsava, Industrial Maintenance Management, S.Chand & Company, 2005