

SEMESTER IV – OPERATIONS MANAGEMENT (OM) SPECIALIZATION

Paper No.	Title of Paper
MBA/401	Strategic Management
MBA/4401/OM	Service Operations Management
MBA/4402/OM	Applied Operations Research
MBA/4403/OM	Transportation Management
MBA/4404/OM	Total Quality Management
MBA/4405/OM	Industrial Health And Disaster Management
MBA/4406/OM	Project Management
MBA/407	Dissertation

Objective: The objective of this course is to develop understanding about strategic processes and their impact on a firm.

Unit – I Corporate Strategy and Planning – Concept of strategy. Strategic Management and strategic management Process, Evolution of Corporate Policy in India, Models and Phases of Strategic Management Process, 7-S Framework

Unit – II SWOT Analysis, Environmental Analysis, Competitive Analysis, Internal corporate Analysis

Unit – III Strategic Analysis, Cost Analysis, Portfolio Analysis and Display Matrices, Operating and Financial Analysis

Unit – IV Strategic Alternatives, Diversification, Mergers and Acquisition, Turn-Around Management

Unit – V Strategic Choice, Implementation of Strategy, Evaluation and Control of Strategy

Suggested Readings:

1. Johnson & Scholes, *Exploring Corporate Strategies*, PHI, 6th ed., 2003.
 2. Bowman Cliff, *Essence of Strategic Management*, PHI, 2003.
 3. John Pearce, *Strategic Management*, TMH.
 4. Byars, *Strategic Management*, TMH.
 5. Rastogi, *Managing Constant Change*, McMillan India.
 6. Ulrich, *Managing Corporate Culture*, McMillan India.
 7. Prasad, *Organisational Development For Excellence*.
 8. Acharya and Govekar, *Business Policy and Strategic Management*, 2nd ed., 1999, Himalaya Publishing House.
 9. Cherunilam, Francis, *Strategic Management*, 7th ed., 2003, Himalaya Publishing House.
 10. Azhar Kazmi, *Corporate Strategy and Business Policy*, TMH Publications
- Serial no. 5, 6 and 7 to be deleted
Other references remain as such.

- Unit-I** Service Management: Matrix of Service Characteristics, Challenges in Operations Management of Services, Aggregate Capacity Planning for Services, Facility Location and Layout for Services.
- Unit-II** Service Operations: Job Design - Safety and Physical Environment, Effect of Automation, Operations Standard and Work Measurement, Measurement and Control of Quality of Services.
- Unit-III** Service Delivery: Dynamics of Service Delivery System, Scheduling for Services Personnel and Vehicles.
- Unit-IV** Service Distribution: Waiting - Line Analysis, Distribution of Services, Product-Support Services.
- Unit-V** Service Maintenance: Maintenance of Services, Inventory Control for Services.

SUGGESTED READINGS:

1. Bowman David E. etc. Service Management Effectiveness: Balancing Strategy, Organization and Human Resources, Operations and Marketing. San Francisco, Jossey Bass, 1990.
2. Collier David A. Service Management: Operating Decisions. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1987.
3. Fitzsimmons, James A and Sullivan, Robert S. Service Operations Management. New York, McGraw Hills, 1982.
4. Heskett, James L. etc. Service Breakthroughs-Changing the Rules of the Game. New York, Free Press, 1990.
5. Murdiek, R G. etc. Service Operations Management. Boston, Allyn and Bacon, 1990.
6. Sharma, J.K. Service Operations Management, Delhi, Anmol, 2001.
7. Voss, C. etc. Operations Management in Service Industries and the Public Sector. Chichester, Wiley, 1985.

- Unit I: Goal Programming: Basic Concepts, Model Formulation
- Unit II: Inventory Model: Inventory Control Models Variation in Demand, Production Rate, Quantity Discounts, Stock Outs
- Unit III: Concept, System, Components classified in Queuing Model M/M/1 Model, Simulation: Theory, Applications, Monte Carlo
- Unit-IV: Portfolio Management Problem, Replacement Models and Policies, Types of Replacement policies, Group Replacement and Individual Replacement Policies
- Unit-V: Network Analysis: CPM/PRT, Network Crashing, And Resource Allocation

SUGGESTED READINGS:

1. Ahuja A K. etc. Network Flows. Englewood Cliffs New Jersey, Prentice Hall Inc., 1993.
2. Gould, F J. etc. Introduction to Management Science. Englewood Cliffs New Jersey, Prentice Hall Inc., 1993.
3. Gupta, M P and Sharma J K. Operations Research for Management. New Delhi, National, 1997.
4. Taha Harndy A. Operations Research : An Introductions. Macmillan, New York, 1992.
5. Mathur, K and Solow D. Management Science. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1994.
6. Sharma, S. J K. Operations Research : Theory and Applications. New Delhi, Macmillan India, 2001.
7. Srinath, L S. Operations Research for Executive. New Delhi, Affiliated East West Press, 1994.

- Unit-I** Growth and Challenges: Growth of Urbanization and Problems of Transportation, Transportation Challenges and Limitations, Government Activities in Transportation.
- Unit-II** Transportation Systems: Transportation Systems - Planning, Operation and Management of goods transport, Trip Generation and Distribution.
- Unit-III** Transportation Modes: Load Planning, Transportation Modes and Their Selection.
- Unit-IV** Transportation Models: Sequential Travel Demand Forecasting Models, Growth Factor Model, Regression Model, Gravity Model, Future Developments in Transportation.
- UNIT-V:** Motor Vehicle Act 1988 and its Impact on Urban Transport System, Vehicular Pollution, Emission Norms.

SUGGESTED READINGS:

1. Baerwald, J E. Transportation and Traffic Engineering Handbook. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1976.
2. Bell, G. etc. The Business of Transport. Plymouth, McDonald and Evans, 1984.
3. Dickey, J W. Metropolitan Transportation Planning. New Delhi, Tata McGraw Hill, 1980.
4. Grey, G E. and Hole, L A. Public Transportation Planning: Operations and Management. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1979.
5. Gupta, M P. Metropolitan Transportation System. New Delhi, National, 1983.
6. Papacostas, C S. Fundamentals of Transportation Engineering. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1987.

- Unit-I** Concept and Evolution of TQM: Basic Concept of Total Quality, Evolution of Total Quality Management, Components of TQ Loop.
- Unit-II** Quality Control: Conceptual Approach to SQC, Acceptance Sampling and Inspection Plans, Statistical Process Quality Control, Process Capability Studies.
- Unit-III:** Quality and Human Resource: Humanistic Aspects of TQM, Management of Quality Circles and Management Zero Defects Programmes, Q-7 Tools, Quality Costs.
- Unit-IV** Functional Linkage: Taguchi Loss Function, Functional Linkage of Quality with Reliability and Maintainability, Failure Analysis, (FTA/FMEA) and Optimum Maintenance Decisions
- Unit-V Quality Audit: Quality Audits, Lead Assessment and ISO 9000 Standards, Total Quality of Services, Total Quality and Safety.

SUGGESTED READINGS:

1. Carruba, Eugene R and Gordon, Ronald D. Product Assurance Principles: Integrating Design Assurance & Quality Assurance. New York, McGraw Hill, 1991.
2. Grant, Eugene L and Leavenworth, Richards. Statistical Quality Control, McGraw Hill, New York, 1991.
3. Ireson, W G. and Coombas, C P. Handbook of Reliability Engineering & Management, New York, McGraw Hill, 1988.
4. Lochner, Robert H. and Matar, Joseph E. Designing for Quality. London, Chapman & Hill, 1990.
5. Pike, John and Barnes, Richard. TQM in Action. London, Chapman & Hill, 1994.
6. Schmidt, Warren H. and Finnigan, Jerome P. TQ Manager. San Francisco, Jossey Bass, 1993.
7. Spenley, Paul. World Class Performance Through TQ, London, Chapman & Hall, 1992.
8. Bowersox, "Total Quality Management"

MBA/4405/OM Industrial Health And Disaster Management

UNIT I

FACTORIES ACT – 1948- Regulations statutory authorities – inspecting staff, health, safety, provisions relating to hazardous processes, welfare, working hours, employment of young persons – special provisions – penalties and procedures.

UNIT II

MANUFACTURE, STORAGE AND IMPORT OF HAZARDOUS CHEMICAL RULES 1989: Definitions – duties of authorities – responsibilities of occupier – notification of major accidents – information to be furnished – preparation of offsite and onsite plans – list of hazardous and toxic chemicals – safety reports – safety data sheets.

UNIT III

WORKING CONDITIONS- Principles of good ventilation: purpose – physiological and comfort level types – hood and duct design – air conditioning – ventilation standards. Purpose of lighting – types, advantages of good illumination – lighting requirements for various work –standards. House keeping –principles, industrial noise and vibration-thermal stress.

UNIT IV

MISCELLANEOUS ACT AND RULES - Indian Boiler Act 1923, static and mobile pressure vessel rules (SMPV), motor vehicle rules, mines act 1952, workman compensation act, rules – electricity act and rules – hazardous wastes (management and handling) rules, 1989, with amendments in 2000- the building and other construction workers act 1996., Petroleum rules, Gas cylinder rules.

UNIT V

RISK ASSESSMENT AND DISASTER MANAGEMENT Risk assessment process, assessment for different disaster types – assessment data use, destructive capacity - disaster due to hydrological and meteorological phenomena – earthquake disasters – the nature – extreme event analysis – the immune system – Proof and limits – future diseases – risk adjustment – choice – loss acceptance – disaster aid – insurance – risk management – mega doses – spectacular deaths – carcinogens. Stock taking and vulnerability analysis –national policies – objectives and standards, Disaster response – emergency and post disaster assistance – physical event modification, hazard – resistance – preparedness, forecasting and warning, land use planning, the importance of coordination and information.

Suggested Readings:

1. The Factories Act 1948, Madras Book Agency, Chennai, 2000
2. The Indian boilers act 1923, Commercial Law Publishers (India) Pvt.Ltd., Allahabad.
3. The Mines Act 1952, Commercial Law Publishers (India) Pvt.Ltd., Allahabad.
4. The manufacture, storage and import of hazardous chemical rules 1989, Madras Book Agency, Chennai.
5. National seminar on hazardous waste management organized by National Safety Council, Ministry of environment and forests, Government of India, United States – Asia environmental partnership, Tamilnadu pollution control board and Indian chemical manufacturers association, April 2001.

MBA/4406/OM

Project Management

- Unit-I** Project: concept, types. Generation of project ideas. Project Life Cycle.
- Unit-II** Project Feasibility Study: Technical analysis. Financial Analysis. Means of Financing.
- Unit-III** Project Appraisal : Appraisal criteria. Analysis of risk. Social appraisal of project.
- Unit-IV** Project Management & Control: Organization. Planning & Control. Networking: CPM, PERT,
- Unit-V** Recent Issues : New product development. Environment appraisal. International standards : ISO 9000. ISO 14000. OSGHS.

SUGGESTED READINGS:

1. Project Management by P. Chandra.
2. Project Management by Chaudhari S.
3. Oberoi M.K., Environmental Management, Excel Books, New Delhi.
4. Project Management by Kumar and Ghosh.