

## III B.Tech II Semester

## 15AHS07 - MANAGEMENT SCIENCE

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**COURSE OBJECTIVES:**

- To analyze the characteristics and contributions of enterprising people
- To assess their own entrepreneurial and enterprising potential To develop an understanding of the general role of Small Business Enterprises
- To develop skills to start, run and manage SMEs
- Understand the role of entrepreneurship in economic development.
- Identify the general characteristics of entrepreneurs.
- Know the differences between entrepreneurial and managerial type jobs.
- Understand the significance and sources of capital. Participate in the preparation of a complete business plan.
- Have an understanding of individual personalities and interpersonal skills needed for effective communications in a diverse business environment.

**UNIT I****INTRODUCTION TO MANAGEMENT:**

Concepts of Management Nature - importance and Functions of Management, Taylor's Scientific Management Theory, Fayol's Principles of Management, Maslow's Theory of Human Needs, Douglas McGregor's Theory X and Theory Y, Leadership Styles, Social responsibilities of Management.

**DESIGNING ORGANIZATIONAL STRUCTURES:**

Basic concepts related to Organisation - Departmentation and Decentralization, Types of mechanistic and organic structures of organization (Line organization, Line and staff organization, functional organization, Committee organization, matrix organization, team structure) their merits, demerits and suitability.

**UNIT II****OPERATIONS MANAGEMENT:**

Principles and Types of Plant Layout-Methods of production (Job, batch and Mass Production), Work Study. Statistical Quality Control: cchart, p chart, (simple Problems) Deming's contribution to quality.

**MATERIALS MANAGEMENT:** EOQ, ABC Analysis, Purchase Procedure and Stores Management. Inventory — functions. Types, inventory classification techniques.

**Marketing:** Functions of Marketing, Marketing Mix, and Marketing Strategies based on Product Life Cycle, Channels of distribution.

**UNIT III****HUMAN RESOURCES MANAGEMENT (HRM):**

Concepts of HRM ,Personnel Management and Industrial Relations (PMIR), Basic functions of HR Manager: Manpower planning, Recruitment, Selection, Training and Development,

Placement, Wage and Salary Administration, Promotion, Transfer, Separation, Performance Appraisal, Grievance Handling and Welfare Administration, Job Evaluation, Merit Rating and methods.

#### UNIT IV

##### **STRATEGIC MANAGEMENT:**

Vision, Mission, Goals, Objectives, Policy, Strategy, Programmes, Elements of Corporate Planning Process, Environmental Scanning, Value Chain Analysis, SWOT Analysis, Steps in Strategy Formulation and Implementation, Generic Strategy alternatives.

##### **PROJECT MANAGEMENT (PERT/CPM):**

Network Analysis, Programme Evaluation and Review Technique (PERT), Critical Path Method (CPM), Identifying critical path, Probability of Completing the project within given time, Project Cost Analysis, Project Crashing. (Simple problems).

#### UNIT V

##### **CONTEMPORARY MANAGEMENT PRACTICES:**

Basic concepts of MIS, Materials Requirement Planning (MRP), Just-In-Time (JIT) System, Total Quality Management (TQM), Six sigma concept, Supply Chain Management, Enterprise Resource Planning (ERP), Performance Management, Business Process outsourcing (BPO), Business Process Re-engineering and Bench Marking, Balanced Score Card.

**Assignments, case studies and mini project.**

##### **LEARNING OUTCOMES**

- *Equipping engineers for a lifelong career addressing the critical technical and managerial needs of private and public organizations.*
- *Exploring and developing analytic abilities, making better decisions, developing and executing strategies while also leading people who innovate.*
- *Cultivating the technical skills as well as the behavioral challenges of running organizations and complex systems.*
- *Emphasizing quantitative analytic skills and an entrepreneurial spirit*
- *Have an introductory understanding of global entrepreneurship concepts.*
- *Understand the concept & process of entrepreneurship- its contribution & role in the growth & development of individual & the nation.*

##### **TEXT BOOKS:**

1. Management Science, Aryasri: TMH, 2004.
2. Management, Stoner, Freeman, Gilbert, , 6th Ed, Pearson Education, New Delhi, 2004.

##### **REFERENCES:**

1. Marketing Management, Kotler Philip & Keller Kevin Lane: 12/e, PHI, 2005.
2. Essentials of Management, Koontz & Weihrich, 6/e, TMH, 2005.
3. Management—Principles and Guidelines, Thomas N. Duening & John M. Biztantra, 2003.
4. Production and Operations Management, Kanishka Bedi, Oxford University Press, 2004.
5. Personnel Management, Memoria & S.V. Gauker, , Himalaya, 25/e, 2005
6. Modern Management, Samuel C. Certo, 9/e, PHI, 2005
7. Business Policy and Strategic Management, Lawrence R Jauch, R. Gupta & William F. Frank Bros., 2005.

