## **SYLLABUS**

SM3201MS: Fundamentals of Management for Engineers

L T P C 3 0 0 3

# **Course Objectives:**

■ To understand the Management Concepts, applications of Concepts in Practical aspects of business and development of Managerial Skills for Engineers.

#### Course Outcomes: Students will be able to

The students understand the significance of Management in their Profession. The various Management Functions like Planning, Organizing, Staffing, Leading, Motivation and Control aspects are learnt in this course. The students can explore the Management Practices in their domain area.

#### UNIT- I:

Introduction to Management: Definition, Nature and Scope, Functions, Managerial Roles, Levels of Management, Managerial Skills, Challenges of Management; Evolution of Management- Classical Approach- Scientific and Administrative Management; The Behavioral approach; The

## UNIT – II:

Planning and Decision Making: General Framework for Planning - Planning Process, Typesof Plans, Management by Objectives; Production Planning and Control. Decision making and Problem Solving - Programmed and Non Programmed Decisions, Steps in Problem Solving and Decision Making; Bounded Rationality and Influences on Decision Making; Group Problem Solving and Decision Making, Creativity and Innovation in Managerial Work.

## UNIT- III:

Organization and HRM: Principles of Organization: Organizational Design & Organizational Structures; Departmentalization, Delegation; Empowerment, Centralization, Decentralization, Recentralization; Organizational Culture; Organizational Climate and Organizational Change. Human Resource Management & Business Strategy: Job Satisfaction, Job Enrichment, Job Enlargement, Talent Management, Strategic Human Resource Planning; Recruitment and Selection; Training and Development; Performance Appraisal.

Introduction, elementary chopper with an active switch and diode, concepts of duty ratio, average inductor voltage, average capacitor current. Buck converter -Power circuit, analysis and waveform at steady state, duty ratio control of output voltage. Boost converter - Power circuit, analysis and waveforms at steady state, relation between duty ratio and average output voltage. Buck-Boost converter-Power circuit, analysis and waveforms at steady state, relation between duty ratio and average output voltage

## UNIT- IV:

Leading and Motivation: Leadership, Power and Authority, Leadership Styles; Behavioral Leadership, Situationa Leadership, Leadership Skills, Leader as Mentor and Coach, Leadership during adversity and Crisis; Handling Employee and Customer Complaints, Team Leadership. Motivation - Types of Motivation; Relationship between Motivation, Performance and Engagement, Content Motivational Theories – Needs Hierarchy Theory, Two Factor Theory, Theory X and Theory Y

UNIT- V:

Controlling: Control, Types and Strategies for Control, Steps in Control Process, Budgetaryand Non-Budgetary Controls. Characteristics of Effective Controls, Establishing controlsystems, Control frequency and Methods.

#### **TEXT BOOKS:**

- 1. Management Essentials, Andrew DuBrin, 9e, Cengage Learning, 2012.
- 2. Fundamentals of Management, Stephen P. Robbins, Pearson Education, 2009.

# **REFERENCE BOOKS:**

- 1. Essentials of Management, Koontz Kleihrich, Tata Mc Graw Hill.
- 2. Management Fundamentals, Robert N Lussier, 5e, Cengage Learning, 2013.
- 3. Industrial Engineering and Management: Including Production Management, T.R.Banga, S.C.Sharma, Khanna Publishers