

UNIT I

Chapter 1 : Introduction to Project Management
1-1 to 1-32

Importance, Objectives and Functions of Management, Principles of Management, Categories of Project, Project Failure, Project - Life Cycle Concept and Cost Components, Project Management Book of Knowledge (PMBOK) – Different Domain Areas, Project management Institute and Certified Project Management Professionals (PMP). Importance of Organizational Structure in Management - Authority / Responsibility Relation, Management By Objectives (MBO).

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UNIT II

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WBS – Work Breakdown Structure, Gantt / Bar chart and its Limitations, Network Planning, Network analysis, C. P. M.- . Activity on Arrow (A.O.A.), Critical Path and Type of Floats, Precedence Network Analysis (A.O.N), Types of Precedence Relationship, P.E.R.T. Analysis

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UNIT III

**Chapter 3 : Project Resources and Site Planning
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Objectives of Materials Management - Primary and Secondary Material Procurement Procedures – Material Requirement - Raising of Indents, Receipts, Inspection, Storage, Delivery, Record Keeping - Use of Excel Sheets, ERP Software, Inventory Control - ABC Analysis, EOQ, Introduction to Equipment Management - Fleet Management, Productivity Studies, Site Layout and Planning, Safety Norms - Measures and Precautions on Site, Implementation of Safety Programs.

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Resource Allocation – Resource Smoothing and Leveling, Network Crashing - Time - Cost - Resource Optimization, Project Monitoring - Methods, Updating and Earned Value Analysis, Introduction to Use of Project Management Software’s – MS Project / Primavera, Case study on Housing Project Scheduling for a Small Project with Minimum 25 Activities.

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Chapter 5 : Project Economics 5-1 to 5-28

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