

PROJECT MANAGEMENT

(PROFESSIONAL ELECTIVE-V)

Course Code: 15ME1147

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Course outcomes:

At the end of the course, the student will be able to

CO1: Discuss complete structure of project management and analyze the scope of project planning.

CO2: Identify different project selection methods.

CO3: Explain the importance of procurement and its techniques.

CO4: Define the guidelines required for project control and its controlling techniques.

CO5: Outline the basic idea of projects and its initial management.

UNIT-I **(10 Lectures)**

INTRODUCTION: Characteristics of a project types of projects, Project Management Body of Knowledge (PMBOK), role of project manager and his qualities, project organization and benefits, idea generation, needs of society, import substitution, project lifecycle, project charter, project sponsor.

PROJECT PLANNING: Customer needs, stake holder concept, project scope, feasibility study and report, baseline plan, SWOT analysis, project organization structure and hierarchy, project teams, formation, attitude and aptitude.

UNIT-II **(10 Lectures)**

STRUCTURE: Project selection methods, breakeven analysis, DCF methods, project implementation, estimation, cost, price, value, scheduling, bar charts, network diagrams, PERT and CPM, schedule crashing, simple introduction to risk management, probability in project management, decision trees.

UNIT-III **(10 Lectures)**

PROCUREMENT: Vendor selection methods, JIT, supply chains, quality ,quality circles, quality control and quality assurance, cause and effect analysis, ISO and concepts of total quality management and six sigma, resource planning and allocation, availability and constraints of resources, resource leveling and crashing.

UNIT-IV **(10 Lectures)**

PROJECT CONTROL: Project scope, project change request, and control of schedule, resources, cost and quality, project communications, channels, means, meetings, project reports, project audits Project evaluation, project close-out reports, guidelines, audit reports, maintenance and shutdown projects, plant turn- around and brief introduction to replacement analysis

UNIT-V **(10 Lectures)**

PROJECTS: Contour maps, sitemaps, plant layout, suitability of project site, preparation of site, selection and leasing of construction equipment special considerations in selection and location of projects, safety, health, human and environment al factors, project finance, international projects, joint ventures, collaborations, impact of culture, implementation, and handing over of projects.

TEXT BOOK:

Kamaraju Ramakrishna, “*Essentials of Project Management*”, PHI Learning, New Delhi, 2010.

REFERENCES:

1. Prasanna Chandra, “*Projects – Planning, analysis, selection, implementation and review*”, Tata McGraw-Hill, New Delhi, 2010.
2. Chitkara, “*Construction Project Management*”, Tata McGraw- Hill, New Delhi.
3. Harold Kerzner, “*Project Management*”, Wiley, New York.