

SYLLABUS :-

Prerequisite: none Overview: Project Engineering and Management; Stages of Project Implementation; Project Milestone: Planning, Analysis, Selection, Implementation; Generation and Screening of project ideas. Feasibility studies. Technical Analysis and introduction to various component of Project cost and their estimation; Elements of Cost of Production; Financing of projects: Debt-Equity ratio etc. Introduction to concepts of inflation, location index and their use in estimating plant and machinery cost. Depreciation concept, Indian norms and their utility in estimation, Capital cost estimation, Working capital estimation, Project Evaluation, break-even analysis, ROI, IRR., Discounted cash flow analysis. Project Management and Scheduling, Network Technique for project management: CPM and PERT, Text Book: 1. Projects: Planning, Analysis, Selection, Financing, Implementation, and Review by P. Chandra 2. Plant Design and Economics for Chemical Engineers by M. S. Peters and K. D. Timmerhaus 3. Project Engineering of Process Plants by H.F. Rase 4. Pilot Plants and models and scale up methods in Chemical Engineering by R. E. Johnston