

GUJARAT TECHNOLOGICAL UNIVERSITY
B.E. SEMESTER : VIII
CHEMICAL TECHNOLOGY

Subject Name: Management of Chemical Industries

Subject Code: 183501

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	University Exam(E)	University Exam(P)	Mid Sem Exam(Theory) (M)	Practical (Internal)
3	0	0	3	70	0	30	50

Sr. No	Course contents
	ORGANISATIONAL BEHAVIOUR
1.	Individual Behaviour: Personality; Ability & Emotion; Perception; Learning; Attitudes & values; Motives; Frustrations.
2.	Groups Behavior in the Organizational Environment Formal & informal groups; Team development; Leadership styles & effectiveness; Communication in groups; Conflict Power.
3.	Organizations Structure & Human Behavior; Organizational culture; Organizational Change & Organizational development; organization designs & in changing corporate environment; ethics in business.
	PRODUCTION MANAGEMENT
4.	Production Function; Nature & scope , interface with others functional areas , types of production system.
5.	Plant location & plant layout; objectives, considerations & how to do it using various qualitative & quantitative methods , material handling equipment
6.	Inventory Management; Objectives, considerations, various control techniques, economic order quantity calculations in various situations, inventory-pricing methods. Scheduling & networking; Scheduling consideration, facility loading & optimum sequencing. Activity analysis & making network, establish critical path , Project duration with probability , slacks objectives & floats , cost crashing.
7.	Reliability Maintenance & plant services: establishing system reliability , total productive maintenance technical & utilities services.
	CHEMICAL PROJECT ECONOMICS
8.	Introduction, Project cost Estimation, Estimation of product cost, Financing options / funding, Interest burden / Depreciation, Project Profitability
9.	Modern concepts of feasibility evaluation 'eva', Economy of scale & product pricing, Process & site selection, Preparations of project report, Project management & control, Annual report

Reference Books:

1. Organisational Behaviour. Stephen Robbins, Pearson Education, 2009
2. Organisational Behaviour, Fred Luthans.,Mc Graw Hill, 2006
3. Organisational Behaviour & Managment ., S K Srivastava, Sarup & Sons, 2005
4. Organisational Behaviour, George Hines, Hicks, Smith and Sons Ltd., 1972
5. Business World, Business India , Economic Times, Financial Express, Harvard Business Review.
6. Production & operations Management B. S. Goel, Pragati Prakashan,1996
7. Management of Working Capital , S D Talekar, Discovery Publishing House, 2005
8. Quality Planning & Analysis, Juran & Gryna, Tata Mc Graw Hill, 5th Ed.,2008
9. Chemical Industry Digest Qtly C. I. magazine, A Blockdale publication
10. Plant Design Economics for Chemical Engineers Peters M. S. & Timmerhaus, K. D. Boston McGraw – Hill. 5th Ed. . 2003