

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

Subject Name: Environmental Aspects of Dyes & Pigment Industry

Subject Code: 173605

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	University Exam(E)	University Exam(P)	Mid Sem Exam(Theory) (M)	Practical (Internal)
4	0	3	7	70	30	30	20

Sr. No	Course contents
1.	Unit operations in dyes & pigment industry. Nature of wastes from dyestuff & pigments industry.
2.	Elements of waste disposal, waste management, gaseous, liquid & solid wastes, & treatment methods pertaining to dyestuff & pigment industry
3.	Environmental, Safety & Health issues associated with industry.

Reference Books:

1. Advances in Color Chemistry Vol IV, Peters A.T, Blackie, 1995
2. High Performance Pigments ,Smith, Wiley CH, 2002
3. Perry Chemical Engineer's Handbook, Mc Graw Hill, 1973
4. Industrial Inorganic Pigments,G Buxbaum and G Pfaff, John Wiley & Sons, 2006
5. Industrial Organic Pigments : Production, Properties & Applications, W Herbst, K Hunger and G Wilker, Wiley-VCH, 2004
6. High Performance Pigments, E B Faulkner and R J Schwartz, Wiley-VCH, 2009
7. Color Chemistry: Synthesis, Properties and Applications of Organic Dyes and Pigments ,Heinrich Zollinger, Wiley-VCH,2nd Ed, 1991
8. Colour Chemistry, R M Christie, RSC, 2001
9. Fundamental Processes of Dye Chemistry ,Fierz, David, Blangey,Interscience Publishers, 1955
10. Industrial Organic Chemistry, Arpe H.J.VCH, Weinheim, Weissermal K.1993
11. Organic Synthesis, Smith M.B., Tata McGraw Hill, New York, 2nd Ed., 2004
12. Chemistry of Synthetic Dyes – Vol I, Venkatraman K., Academic Press, New York, 2009
13. Chemistry of Synthetic Dyes – Vol II, Venkatraman K., Academic Press, New York, 2009
14. Chemistry of Synthetic Dyes – Vol III, Venkatraman K., Academic Press, New York, 2009
15. Chemistry of Synthetic Dyes – Vol IV, Venkatraman K., Academic Press, New York, 2009
16. Chemistry of Synthetic Dyes – Vol V, Venkatraman K., Academic Press, New York, 2009
17. Chemistry of Synthetic Dyes – Vol VI, Venkatraman K., Academic Press, New York, 2009