

GUJARAT TECHNOLOGICAL UNIVERSITY
B.E. SEMESTER : VII
ENVIRONMENTAL SCIENCE & TECHNOLOGY

Subject Name: Liquid Effluent Control - II

Subject Code: 173504

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	Treatment of liquid effluent from some specific chemical industries such as: (i) Pharmaceutical industry (ii) dyes and pigment industry (iii) Pesticides, agrochemicals and fertilizer industry
2	Treatment of liquid effluent from some specific chemical industries such as: (i) Food and dairy industry (ii) Cosmetic industry (iii) Textile industry
3	Treatment of liquid effluent from some specific chemical industries such as: (i) Polymeric resin industry (ii) Inorganic chemical industry etc.
4	Concepts and scope of Common effluent treatment methods, Design and concept of clarifier, equalization ponds, flocculator., design of primary, secondary and tertiary treatment plants.

Reference Books:

1. Industrial Water Pollution Control, Eckenfelder W.W.; McGraw Hill Book Company , 3rd Ed, 2000
2. Environmental Engineering, Kiely G.; McGraw Hill Book Company, 1998
3. Elements of Water Resources Engineering ,Duggal K.N and J P Soni, New Age International Publishers, 2005
4. Water Treatment Plants: Planning, Design & Control, S R Qasim, Technomic Pub. Co., 1999
5. Water Supply and Sanitary Engineering ,Birdie and Birdie, Dhanpatrai and Sons, 1996
6. Environmental pollution and control engineering, Rao C. S. - Wiley Eastern Limited, India, 1993.
7. Pollution control in process industries, S.P. Mahajan TMH., 1985.
8. Waste water treatment, M.Narayana Rao and A.K.Datta, Oxford and IHB publ. New Delhi.
9. Industrial Pollution Control and Engineering. Swamy AVN, Galgotia publications, 2005.
10. Environmental engineering and sanitation: Joseph A. Salvato , John Wiley & Sons, 4th Ed. , 2003