

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

Subject Name: Industrial Effluents - Characterization & Treatment

Subject Code: 153505

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	University Exam(E)	University Exam(P)	Mid Sem Exam(Theory) (M)	Practical (Internal)
4	0	2	6	70	0	30	50

Sr No	Course Contents
1	Types of emissions (Gaseous, Liquid & Solid) from chemical industries , Other types of pollution such as noise pollution, radiation pollution and their effects on environment and human life
2	Characterization of effluent streams, oxygen demands and their determination (BOD, COD & TOC), Air Pollution sampling & measurement
3	Introduction to waste water treatment : Screening, sedimentation, floatation, neutralization and methods of tertiary treatment
4	Cleaning of gaseous equipments, particulate emission control, control equipments like gravitational settlers, Cyclone separators, fabric filters etc
5	Hazardous waste management : Nuclear wastes, chemical wastes and their treatment and disposal

REFERENCE BOOKS:

1. Environmental pollution and control engineering, Rao C. S. - Wiley Eastern Limited, India, 1993.
2. Pollution control in process industries, S.P. Mahajan TMH., 1985.
3. Waste water treatment, M.Narayana Rao and A.K.Datta, Oxford and IHB publ. New Delhi.
4. Air pollution control, P.Prathap Mouli and N.Venkata Subbayya. Divya Jyothi Prakashan, 2001
5. Industrial Pollution Control and Engineering. Swamy AVN, Galgotia publications, 2005.