Seat No.:	Enrolment No.
Jeac 1 (0):	Emoniem 1101

Subject Code:133505

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- III • EXAMINATION - SUMMER 2015

	Time	ect Name: Chemistry for Environmental Science & Technology e:02:30 pm - 05:00 pm Total Marks: 70 ections: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.	
Q.1	(a)	Define Distilled and Demineralized water. Discuss the various methods of preparing distilled water.	07
	(b)	Discuss the physical, chemical and biological characteristics of waste water in brief.	07
Q.2	(a)	What is the environmental significance of pH? Explain the method for estimation of pH with neat sketch.	07
	(b)	Define turbidity. Explain procedure for the estimation of turbidity in detail.	07
	(b)	OR Define conductivity? Briefly explain the working principle of conductivity meter.	07
Q.3	(a)	Discuss the Wrinkler test for measurement of dissolved oxygen in a sample of water.	07
	(b)	Write a short note on "Green House Effect" & "Global Warming"	07
0.3	(a)	OR Explain different test used for the estimation of residual chloring in victor comple	07
Q.3	(a) (b)	Explain different test used for the estimation of residual chlorine in water sample. Define Environment? Describe the four major layers of the atmosphere with suitable diagram.	07
Q.4	(a)	Define temporary hardness and permanent hardness. Explain Zeolite process for the removal permanent hardness from water.	07
	(b)	What do you mean by Volumetric and gravimetric analysis? Discuss the basic requirements and procedure for volumetric and gravimetric analysis. OR	07
Q.4	(a)	Why do you estimate the purity of chemicals? Discuss any two methods to estimate the purity of chemicals.	07
	(b)		07
Q.5	(a)	What is sustainable development? Briefly describe the key aspects of sustainable development.	07
	(b)	Define Air pollution? Describe the measurement of particulate matters in ambient air.	07
0.5	(a)	OR Write a note on	07
Q.5	(a)	Write a note on 1) BOD 2) Apparent & True color 3) Cause of color in water	07
	(b)	Discuss briefly the concept of Neutralization in chemical reaction. Also give its applications in Environmental chemistry.	07

Date: 27/05/2015