Seat No.:	Enrolment No

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- III EXAMINATION - SUMMER 2015

Subject Code: 131301	Date:27/05/2015	
Subject Name: Environment Science -1 Time:02.30pm-05.00pm Instructions:	Total Marks:	70
1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.		
Q.1 (a) Draw figures of seven glasswares used in chemistry lab with spe	cific application	07
(b) Write a note on water hardnessQ.2 (a) Describe Mohr method for chloride ion detection		07 07
(b) Explain zeolite method of water softening OR		07
(b) Describe a Gas laws		07
Q.3 (a) Define following terminologies 1.Atomic weight 2.Molecular weight 4.Valency 5.solution 6.Solvent 7.Raoult's law	_	lent 07
(b) Define Avogadro's number and calculate Avagrado's number of follow 1.2gm of Nacl 2.3gm of NaOH 3.4gm CaCO ₃	•	07
OR Q .3(a) Calculate .Molecular weight and .Equivalent weight of 1.F 4.NaOH 5.Na ₂ CO ₃ 6.KCl 7.HNO ₃	(ICl ₃ 07
 (b) Define Molarity and Normality. Calculate molarity of following d 1.4gm of NaOH in 50 ml water 2.4gm of NaOH in 150ml water Q.4(a) Write the short note on volumetric and gravimetric titration (b) Write the short note on redox titrations 	(07 07 07
OR Q.4 (a) Define pH and write a note on pH meter (b) Describe conductivity meter	(07 07
Q.5 (a) Describe primary and secondary standardization method		07
(b) Describe Henry's law in the point of view of environment engineer	ring (07
OR Q.5 (a) Explain in detail solubility constant of salts (b) Write note on turbidity meter and mention its significant for waste		07 07