Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE – SEMESTER – V (NEW) EXAMINATION – WINTER 2015

	-	t Code: 2150603 Date:08/12/ 20 t Name: Environmental Engineering)15
Tin	ne:10	0:30am to 1:00pm Total Marks:	70
	2. 3.	Make suitable assumptions wherever necessary.	
Q.1	(a) (b)	Explain different phases of microbial growth and draw neat sketch of it. Explain with neat sketch DO sag curve and write stricter Phelp's equation.	07 07
Q.2	(a) (b)	Write a short note on Water borne Diseases. Explain 1^{st} stage BOD and derive its formula with usual notations $L_t = L_0(1-10^{-kt})$.	07 07
	(b)	OR State physical and Chemical characteristics of water and describe any two physical characteristics in detail.	07
Q.3	(a) (b)	Explain zones of pollution in a river with a neat sketch. During BOD test conducted on a 5% dilution of waste, the following observations were taken (i) DO of aerated water used for dilution = 3.6mg/l (ii) DO of original sample = 0.8mg/l .(iii) DO of diluted sample after 5 day incubation = 0.7 mg/l Compute : (a) 5 day BOD (b)Ultimate BOD Assume deoxygenation constant at test temperature = 0.12 OR	07 07
Q.3	(a) (b)	Enlist different components of House drainage system and explain any two in detail. Classify the traps in house drainage system.	07 07
Q.4	(a) (b)	Enlist the advantages and disadvantages of Sanitary land filling. Give the classification of Municipal solid waste in brief. OR	07 07
Q.4	(a) (b)	Write a short note on Incineration. What is solid waste management? Enlist its objectives.	07 07
Q.5	(a) (b)	Explain the effects of air pollution on human health. Give a classification of Air pollutants. OR	07 07
Q.5	(a) (b)	Write a short note on Environmental Impact Assessment. What is Noise pollution? Describe the major effects of Noise pollution.	07 07
