Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER- IV • EXAMINATION - SUMMER 2015

Su	bject	Code: 141304 Date: 08/06/2015	
Su	bject	Name: Water Pollution & Control	
Ti	me: 1	0.30am-01.00pm Total Marks: 70	
Ins	truction	ns:	
		Attempt all questions.	
	2.	Make suitable assumptions wherever necessary.	
	3.	Figures to the right indicate full marks.	
Q.1	(a)	What is thermal pollution? Explain in detail the sources of thermal pollution? What are the abatement strategies for thermal pollution?	07
	(b)	What are the impacts of oil pollution? What measures are taken to control oil pollution?	07
Q.2	(a) (b)	List out the various coagulant & explain its chemistry in wastewater treatment. Write a short note on ASP.	07 07
		OR	
	(b)	Explain the working of trickling filter.	07
Q.3	(a)	Give the classifications of screens.	07
	(b)	Write down the source & effect of pH & Solids in water & wastewater.	07
		OR	
Q.3	(a)	Write a short note on water softening.	07
	(b)	Define & explain the following term. 1. SOR 2. Weir overflow rate 3. F/M ratio	07
Q.4	(a)	Write the impact of Hardness & Turbidity on water.	07
	(b)	Explain wastewater treatment plant with neat & clean diagram. OR	07
Q.4	(a)	Briefly explain the Jar test used for simulating coagulation/flocculation process.	07
	(b)	What is equalization? Explain its significance in wastewater treatment.	07
Q.5	(a)	Differentiate between primary treatment & secondary treatment.	07
	(b)	Enlist the various methods for disinfection & explain the chlorination process. OR	07
Q.5	(a)	Explain the mechanism involved in filtration process.	07
	(b)	Enlist & explain the functional zones of sedimentation tank.	07
