Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-IV (New) EXAMINATION - WINTER 2015

DE BENEGIER IV (New) Eximination VIII ER 2016

Subject Code:2143609			Date:01/01/2016	
Ti	me: 2 tructio 1. 2.	t Name: Industrial Pollution & Control 2:30pm to 5:00pm Total Marks: ons: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	70	
Q.1	(a)	What is influent & effluent? Write the physical & chemical characteristics of industrial water pollution.	07	
Q.2	<ul><li>(b)</li><li>(a)</li><li>(b)</li></ul>	What is emission? Write down the sources of air pollutants.  Define bio-medical waste. Write down the categories of bio-medical waste.  Explain characteristics & treatment of effluent from dyes & pigment industries.  OR	07 07 07	
	<b>(b)</b>	Explain characteristics & treatment of effluent from rubber industries.	07	
Q.3	(a) (b)	Draw the neat diagram of effluent treatment plant and explain its unit operations and unit processes in brief.  What do you mean by TSDF? Write down the applications of TSDF site.	07	
	(D)	OR	U A	
Q.3	(a) (b)	Explain incineration.  Explain the wet combustion method to treat the solid waste.	07 07	
Q.4	(a)	Which types of solid wastes are generated in nuclear & energy industries? Also explain their treatment methods.	07	
	<b>(b)</b>	Explain the treatment facilities provided to solid waste generated at collection centres.	07	
0.4	(-)	OR	05	
Q.4	(a)	What are primary & secondary air pollutants? Explain the effects of air pollutants on human, vegetation and buildings in brief.	07	
	<b>(b)</b>	Enlist the air pollution control equipments & explain gravity settler with neat diagram.	07	
Q.5	(a) (b)	Write a short note on working of cyclone separator with neat diagram. Write down the advantages & disadvantages of ESP.  OR	07 07	

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(b) Enlist the types of scrubbers & explain venturi scrubber with neat diagram.

(a) Write down the advantages and disadvantages of cyclone separator.

Q.5

**07** 

**07**