## GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII EXAMINATION – SUMMER 2016			
Subject Code:180608 Date:16/05/2			Ĵ
Subject Name: Air Pollution Control (Department Elective-II)			
Т	Time:10:30 AM to 01:00 PMTotal Marks: 70		
Instructions:			
<ol> <li>Attempt all questions.</li> <li>Make suitable assumptions wherever necessary.</li> </ol>			
		3. Figures to the right indicate full marks.	
Q.1	(a)	Classify the different types of air pollutants according to their sources?	07
C	(b)	Explain the role of meteorological elements in the dispersion of air pollutants in the atmosphere.	07
Q.2	(a)	Describe the geometric forms of plume behavior under different atmospheric condition.	07
	<b>(b)</b>	Discuss "Bhopal Gas Tragedy" and "London Smog Episode".	07
OR			
	(b)	Discuss effects of air pollutants on human beings.	07
Q.3	<b>(a)</b>	Describe ozone depletion and its effect.	07
	<b>(b</b> )	Discuss: Wind rose, Headley cell.	07
OR			
Q.3	<b>(a)</b>	Discuss effects of air pollution on vegetation and materials.	07
	(b)	What is green house effect? Discuss its effects and remediation.	07
Q.4	(a)	Discuss air pollution from automobile sources and its control.	07
	<b>(b</b> )	Write a note on future engines and fuels to control air pollution.	07
OR			
Q.4	<b>(a)</b>	Discuss high volume sampler and its use.	07
	<b>(b)</b>	Write a note on stack sampling and its principles.	07
Q.5	(a)	Describe adsorption and absorption for controlling of gaseous pollutants.	07
-	<b>(b</b> )	Write a note on electrostatic precipitators with its advantages and disadvantages.	07
OR			
Q.5	(a)	Write a note on gravity settling chamber.	07
	(b)	Sketch and explain working and use of cyclone for removal of air pollutants.	07

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