Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER- V • EXAMINATION – WINTER 2016

Subject Code: 151305 Subject Name: Air Pollution and Control			Date: 28/11/2016	
Tiı	ne: 1	10:30AM – 01:00PM  Total Marks:  Attempt all questions.  Make suitable assumptions wherever necessary.	<b>70</b>	
Q.1	(a) (b)	Give the classification of Air Pollutants and sources of air pollution.  What do you mean by green house effect? What are greenhouse gases and its effect on earth?	07 07	
Q.2	(a) (b)	List the important meteorological parameters that influencing Air pollution and explain any one in detail.  Explain NO <sub>x</sub> control by Catalytic Reduction.	07 07	
	<b>(b)</b>	OR Explain the following Episodes: (1) Meuse Valley (2) Donora (3) London (4) Bhopal	07	
Q.3	(a) (b)	Explain the various effects of air pollutants on human health, plants and materials. What is wind rose diagram? How it is constructed? Explain its applications.  OR	07 07	
Q.3	(a) (b)	What is "Dry Adiabatic lapse Rate" and the "Environmental lapse rate"? Plot and Explain.  Explain Limestone scrubbing method for control of SO <sub>x</sub> .	07 07	
Q.4	(a) (b)	Explain causes and control of Odour Problem.  Write short note on control of exhaust emissions.  OR	07 07	
Q.4	(a) (b)	Explain control of evaporative and crank-case emissions Write a short note on alternative fuels.	07 07	
Q.5	(a) (b)	What is noise pollution? Describe sources of noise pollution.  Write a short note on working of Cyclone separator and its applications.  OR	07 07	
Q.5	<ul><li>(a)</li><li>(b)</li></ul>	Write short note on Gravity settling chamber with its advantage, disadvantage & applications.  With a neat sketch explain Venturi Scrubber. Also state merits & demerits of Scrubbers.	07 07	

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