Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V • EXAMINATION – SUMMER 2013

Subject Code: 151305 **Date: 23-05-2013**

Subject Name: Air Pollution and Control

Time: 10.30 am - 01.00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q-1	(a) Give the classification of Air Pollutants and sources of air pollution.	**07**
	(b) List important meteorological parameter that influencing Air Pollution and explain any one in Detail.	**07**
Q-2	(a) Explain following Episodes: (I) Meuse valley (ii) Donora (iii) London (iv) Bhopal (v) Los Angeles.	**07**
	(b) What is Maximum Mixing depth? How it is determined? What is its importance?	**07**
	OR	
	(b) What are the ill effects of CO on human health, vegetation, plants and property?	**07**
Q-3	(a) Define a wind rose. Explain the importance of wind roses in air pollution studies.	**07**
	(b) Write a detailed note on plume behavior.	**07**
	OR	
Q-3	(a)what is óDry Adiabatic lapse rateô and the óEnvironmental lapse Rateô? Explain.	**07**
	(b) Explain effects of Photochemical Smog.	**07**
Q-4	(a) Explain A/F ratio in detail.	**07**
	(b)Write a short note on Alternative Fuel.	**07**
	OR	
Q-4	(a) Write a short note on emission reduction by engine design changes.	**07**
	(b) Explain NOx control by Catalytic Reduction.	**07**
Q-5	(a) Write a short note on Cyclone separator.	**07**
	(b) What is noise pollution? Describe sources of noise pollution	**07**
	OR	
Q-5	(a) Write a short note on ESP with there advantages and disadvantages.	**07**
	(b) Define Odour. Explain briefly the various methods of odour Control.	**07**

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