

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: **07**  
(I) Meuse valley (ii) Donora (iii) London (iv) Bhopal (v) Los Angeles.  
(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 "Dry Adiabatic lapse rate" and the "Environmental lapse Rate"? 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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