

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

# **GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-VII • EXAMINATION – WINTER 2013**

**Subject Code: 171302**

**Date: 05-12-2013**

**Subject Name: Air Pollution Control and Management**

**Time: 10:30 TO 01:00**

**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) Discuss the Ambient Air quality Standards. **07**

(b) Discuss Air Pollution Control equipment selection criteria. **07**

**Q-2** (a) Define Air Pollution Index. What are the uses of Air Pollution Indices? **07**

(b) Write short note on Photochemical Oxidant. **07**

**OR**

(b) “Air pollution control Management” Discuss in detail. **07**

**Q-3** (a) Explain Catalytic Converter in Detail. **07**

(b) How engine design changes to reduce automobile pollution? **07**

**OR**

**Q-3** (a) Discuss A/F ratio in detail. **07**

(b) Explain Alternative Fuels to reduce air pollution due to automobile. **07**

**Q-4** (a) Discuss combustion control methods for NO<sub>x</sub>. **07**

(b) Write short note on scrubber. **07**

**OR**

**Q-4** (a) Discuss Double alkali method for scrubbing sulfur dioxide. **07**

(b) Write short note on Gravity settler **07**

**Q-5** (a) Write a short note on Cyclone separator with their Principal, Construction, and working. **07**

(b) Write short note on ambient air quality in metro city. **07**

**OR**

**Q-5** (a) Discuss advantages and disadvantages of ESP. **07**

(b) Explain Bag Filter with Diagram and discuss its Cleaning Mechanism in Detail. **07**

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