

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER • 2014

Subject Code: 171302

Date: 02-12-2014

Subject Name: Air Pollution Control and Management

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) What is Air Quality? Which parameters are included in the ambient air quality standards? **07**
- (b) What is A/F ratio in automobile? Discuss with sketch. **07**
- Q.2** (a) Write a short note on combustion control methods for NO_x. **07**
- (b) Discuss alternative fuels in automobile. **07**
- OR**
- (b) Write a short note on Turbojet Engines. **07**
- Q.3** (a) Write short note on Single Alkali Scrubbing System for Sulfur Dioxide. **07**
- (b) Briefly explain Double Alkali Scrubbing System for Sulfur Dioxide. **07**
- OR**
- Q.3** (a) Discuss in detail the selection criteria for the air pollution control Equipment. **07**
- (b) Enlist Advantages and Disadvantages of Bag Filters. **07**
- Q.4** (a) Enlist Advantages and Disadvantages of Cyclone Separators. **07**
- (b) Enlist Advantages and Disadvantages of Venturi Scrubber. **07**
- OR**
- Q.4** (a) Write a Brief note on Types of Cyclone with neat sketch. **07**
- (b) Write a Brief note on Types of Scrubbers with neat sketch. **07**
- Q.5** (a) Write a short note on Electro Static Precipitator. **07**
- (b) Discuss the Air pollution control equipment with respect to removal efficiency, particle size and cost. **07**
- OR**
- Q.5** (a) Write a short note on thermodynamics of photochemical reaction. **07**
- (b) Write a Brief note on Photochemical Smog & Hydrocarbon Reactivity. **07**
