

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER V • EXAMINATION – WINTER - 2012****Subject code: 151305****Date: 23-01-2013****Subject Name: Air Pollution & Control****Time: 02:30 pm to 05:00 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) Explain the effects of Noise Pollution on Auditory & Circulatory system. **07**
(b) Explain any four methods for control of Noise Pollution. **07**
- Q.2** (a) Define following terms: **07**
(1) Air Pollution (2) Wind Rose (3) PAN (4) Scrubber
(5) Heat Island (6) Bag Filter (7) Adsorption
- (b) Describe the causes of hydrocarbon emissions from SI engine. **07**
- OR**
- (b) Explain Air Fuel Ratio & Compression Ratio. **07**
- Q.3** (a) Explain the effects of air pollution on animals & materials. **07**
(b) What are the harmful effects of sulphur dioxide, carbon monoxide & hydrocarbons on human beings? **07**
- OR**
- Q.3** (a) Give the brief classifications of Air Pollutants. Also explain the effects of Photochemical Smog. **07**
(b) List out the methods for Odour control. Explain any three of them. **07**
- Q.4** (a) Explain Limestone scrubbing for control of SO_x. **07**
(b) Explain NO_x control by absorption by liquids. **07**
- OR**
- Q.4** (a) Explain NO_x control by Modification Of Operating & Design Conditions. **07**
Q.4 (b) With neat sketch explain DCDA process. **07**
- Q.5** (a) Write a detailed note on MMD. **07**
(b) With a neat sketch explain Venturi Scrubber. Also state merits & demerits of Scrubbers. **07**
- OR**
- Q.5** (a) Write a short note on electrostatic precipitators. **07**
(b) Explain the Inversion Of Atmosphere. **07**
