

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-V • EXAMINATION – WINTER • 2014

Subject Code: 151305

Date: 08-12-2014

Subject Name: Air Pollution & 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) Explain classification of air pollutant based on sources. **07**
(b) Write a short note on Alternative Fuel. **07**
- Q.2** (a) List important meteorological parameter that influencing Air Pollution and explain any one in Detail. **07**
(b) Describe the Effects of Air Pollution On Human, Vegetation and Materials. **07**
- OR**
- (b) Explain A/F ratio in detail. **07**
- Q.3** (a) List out the methods for Odour control. Explain any three of them. **07**
(b) Explain effects of Photochemical Smog. **07**
- OR**
- Q.3** (a) Explain heat island effect. **07**
(b) Explain the following atmospheric condition **07**
(A) Super-adiabatic
(B) Sub-adiabatic
- Q.4** (a) What are the advantages of using CNG as a fuel? Does it affect engine performance? If so, how? **07**
(b) Explain removal of sulphur from fuels. **07**
- OR**
- Q.4** (a) Explain merits and demerits of cyclone separator. **07**
(b) What are the symptoms of acute and chronic poisoning by the Following pollutants on farm animals? **07**
(A) Fluorine
(B) Arsenic
(C) Lead
- Q.5** (a) Define a wind rose. Explain the importance of wind roses in air pollution studies. **07**
(b) Explain the Inversion Of Atmosphere. **07**
- OR**
- Q.5** (a) Describe following Episodes in detail. (any two): **07**
(i) Meuse valley (ii) Donora (iii) London (iv) Bhopal (v) Los Angeles.
(b) Explain Absorption and Dispersion along with examples. **07**
