

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE SEM-V Examination-Nov/Dec.-2011

Subject code: 151305

Date: 03/12/2011

Subject Name: Air Pollution and Control

Time: 2.30 pm -5.00 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 Absorption and Dispersion along with examples. | 07 |
| | (b) Explain effect of Air pollution on materials in details. | 07 |
| Q.2 | (a) Explain effects of particulate matter and carbon monoxide on health. | 07 |
| | (b) Explain classification of air pollutant based on sources. | 07 |
| | OR | |
| | (b) Explain general characteristics of plumes. | 07 |
| Q.3 | (a) Explain wind rose turbulence. | 07 |
| | (b) Explain control of nitrogen oxide with catalytic reduction. | 07 |
| | OR | |
| Q.3 | (a) Explain construction and working of electrostatic precipitators. | 07 |
| | (b) Explain merits and demerits of cyclone separator. | 07 |
| Q.4 | (a) Write short note on noise pollution and its control. | 07 |
| | (b) Explain causes and control of Odour. | 07 |
| | OR | |
| Q.4 | (a) Explain effects of Photochemical Smog. | 07 |
| | (b) Explain heat island effect. | 07 |
| Q.5 | (a) Explain in brief global circulation of pollutants. | 07 |
| | (b) List emission control methods in automobile and explain any one of them. | 07 |
| | OR | |
| Q.5 | (a) Explain advantages of using CNG as automotive fuel. | 07 |
| | (b) Explain effect of air fuel ratio on pollution of automobile. | 07 |
