

GUJARAT TECHNOLOGICAL UNIVERSITY
BE – SEMESTER – VI (OLD).EXAMINATION – WINTER 2016

Subject Code: 161302**Date: 26/10/2016****Subject Name: Fundamentals of Air Pollution****Time: 02:30 AM 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) Write a short note on Wind Rose Diagram with its Application. **07**
(b) Define Inversion and explain the subsidence and radiation inversion. **07**
- Q.2** (a) Write a short note on Sources of Air Pollution **07**
(b) What are effects of the particulate matter on Environment? **07**
- OR**
- Q.2** (b) Explain the effects of SO_x on Environment. **07**
- Q.3** (a) Write a short note on Maximum Mixing Depth (MMD). **07**
(b) Explain the stability condition of Atmosphere. **07**
- OR**
- Q.3** (a) Write a short note on Lapse rate. **07**
(b) Briefly explain the Heat Island Effect with neat sketch. **07**
- Q.4** (a) Define the Noise. Explain the characteristics of noise. **07**
(b) What are the sources Odor? Enlist and explain the control techniques for the same. **07**
- OR**
- Q.4** (a) What is isokinetic condition? Explain it in detail with neat sketch. **07**
(b) Write a short note on High Volume Sampler. **07**
- Q.5** (a) Write a short note on Wind velocity Profile. **07**
(b) Enlist the primary and secondary parameters of Meteorology and explain any one in detail. **07**
- OR**
- Q.5** (a) Write a short note on National Ambient Air Quality Stanards. **07**
(b) Derive the relationship between ppm and $\mu\text{g}/\text{m}^3$. **07**
