

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI • EXAMINATION – SUMMER 2013****Subject Code: 161302****Date: 27-05-2013****Subject Name: Fundamentals of Air Pollution****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) Define Air Pollution and explain the sources of Air Pollutants. **07**
(b) Discuss the Effects of Particulate Matter on Human Health **07**

- Q.2** (a) Discuss the Effects of Sulfur Dioxide on Plants and Vegetation. **07**
(b) Discuss Primary and secondary Meteorological Parameters which affects the Air Pollution. **07**

OR

- (b) Derive the lapse rate $dt/dz = 1^{\circ}\text{C}/100\text{m}$ **07**

- Q.3** (a) Describe the Stability Condition. **07**
(b) Discuss Plume behavior with respect to the Stability Condition. **07**

OR

- Q.3** (a) Write short note on Temperature Inversion. **07**
(b) Write short note on Maximum Mixing Depth (MMD). **07**

- Q.4** (a) Write Short note on Heat island Effects. **07**
(b) What is Isokinetic samplings discuss in Detail? **07**

OR

- Q.4** (a) Write a short note on Ambient Air Quality standards. **07**
Q.4 (b) Write Short Note on High Volume Air Sampler **07**

- Q.5** (a) Discuss the Effects of Carbone Monoxide on Plants and Vegetation. **07**
(b) Write down the applications of Wind Rose Diagram. **07**

OR

- Q.5** (a) Discuss the Effects of Carbone Monoxide on Human Health. **07**
(b) How to construct the Wind Rose Diagram? **07**
