

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - VIIth Semester–Examination – May/June- 2012****Subject code: 171302****Subject Name: Air Pollution Control and Management****Date: 08/06/2012****Time: 02:30 – 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) Discuss Ambient Air Quality and Emission Standards. **07**
(b) What is A/F ratio in auto mobile? Discuss pollutant generate from mobile sources. **07**

- Q.2** (a) Write short note on engine design change. **07**
(b) Discuss short note on alternative fuels. **07**

OR

- (b) What is catalytic converters? Discuss in detail. **07**

- Q.3** (a) Explain flue gas desulphurization processes. **07**
(b) Discuss Single alkali scrubbing for control of Sulfur Dioxide. **07**

OR

- Q.3** (a) Discuss Combustion control methods for Nitrogen Oxides. **07**
(b) Discuss thermodynamics and kinetics of sulfur dioxide formation. **07**

- Q.4** (a) Discuss selection criteria for particulate control equipment. **07**
(b) Write a short note on Cyclone separator. **07**

OR

- Q.4** (a) Write short note on thermodynamic of photochemical reactions. **07**
(b) Discuss role of oxides of nitrogen in photo oxidation. **07**

- Q.5** (a) Write a short note on Bag filters. **07**
(b) Write a short note on Electrostatic precipitator. **07**

OR

- Q.5** (a) Enlist and explain control methods for gases and vapours. **07**
(b) Write short note on photo chemical smog. **07**
