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. (a) Discuss Ambient Air Quality and Emission Standards. 07 **Q.1** (b) What is A/F ratio in auto mobile? Discuss pollutant generate from mobile 07 sources. **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 0.3 (a) Discuss Combustion control methods for Nitrogen Oxides. 07 (b) Discuss thermodynamics and kinetics of sulfur dioxide formation. 07 (a) Discuss selection criteria for particulate control equipment. **Q.4** 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 (a) Enlist and explain control methods for gases and vapours. **Q.5** 07 (b) Write short note on photo chemical smog. 07
