

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER– IV(NEW) EXAMINATION – SUMMER 2015

Subject Code: 2143609

Date: 03/06/2015

Subject Name: Industrial Pollution & Control

Time: 10:30am-1.00pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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- Q.1** (a) Define following terms. 07
Air pollutant, Mist, Smoke, Garbage, Rubbish, Sewage, Water pollution
- (b) List out the various water pollution parameters. Explain following water pollutant parameters (1) pH, (2) TDS, (3) Alkalinity. 07
- Q.2** (a) Give the brief outline of the Effluent Treatment Plant. 07
- (b) Explain principle, working, advantages and disadvantage of ESP along with neat sketch. 07
- OR**
- (b) Explain principle, working, advantages and disadvantage of wet scrubber along with neat sketch. 07
- Q.3** (a) Explain the Alkalized Alumina process and Manganese Oxide process for removal of the oxide of sulphur. 07
- (b) Explain the Modification in operation condition for removal of the oxide of nitrogen. 07
- OR**
- Q.3** (a) Explain the Lime stone scrubbing process and Magnesium scrubbing process for removal of the oxide of sulphur. 07
- (b) Explain the Absorption process for removal of the oxide of nitrogen. 07
- Q.4** (a) Explain the Biomedical waste categorization. 07
- (b) Explain the incineration process as a solid waste treatment. 07
- OR**
- Q.4** (a) What are the main sources of solid waste? Give the types of solid waste coming from these sources. 07
- (b) Explain the Multi Effect Evaporator as a solid waste treatment. 07
- Q.5** (a) Explain the various environmental aspect of Dyes industry. 07
- (b) Explain the various environmental aspect of Rubber industry. 07
- OR**
- Q.5** (a) Explain the various environmental aspect of Polymer industry. 07
- (b) Explain the various environmental aspect of coal based power plant. 07
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