

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII(NEW) • EXAMINATION – WINTER 2016****Subject Code:2171302****Date:18/11/2016****Subject Name:Air Pollution Control and Management****Time:10.30 AM to 1.00 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) Enlist and explain the selection criteria for the Air pollution control equipment. **07**
(b) What is A/F ratio? Explain the relationship between the CO, HC and NO_x with diagram. **07**
- Q.2** (a) Differentiate between dual alkali scrubbing and single alkali scrubbing **07**
(b) Briefly explain the combustion control methods of NO_x. **07**
- OR**
- (b) Write a short note on Magnesium Oxide scrubbing with neat sketch. **07**
- Q.3** (a) With the help of diagram explain the cleaning mechanisms of Bag filter. **07**
(b) Discuss different types of scrubber. **07**
- OR**
- Q.3** (a) What is catalytic reduction? Explain SNCR with the help of diagram and reaction chemistry. **07**
(b) Define VOC. Enlist control techniques of VOC & explain any one in detail. **07**
- Q.4** (a) Brief note on Gravity Settling Chamber. **07**
(b) Write a short note on Turbojet Engine with diagram. **07**
- OR**
- Q.4** (a) Write a short note on ambient air quality standards **07**
(b) Describe the episodes of London smog cause due to photochemical effect. **07**
- Q.5** (a) Write a short note on cyclone separator with sketch. **07**
(b) Brief note on Alternative fuel for automobile. **07**
- OR**
- Q.5** (a) Enlist the sources & air pollution control system for the Thermal Power Plants. **07**
(b) Enlist and explain the advantages and disadvantages of ESP. **07**
