

GUJARAT TECHNOLOGICAL UNIVERSITY
B. E. - SEMESTER – VII • EXAMINATION – WINTER 2012

Subject code: 171302**Date: 31/12/2012****Subject Name: Air Pollution Control and Management****Time: 10.30 am – 01.00 pm****Total Marks: 70****Instructions:**

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

- Q-1 (a) Write short note on ambient air quality in metro city. 07
(b) Write short note on Emission Standards. 07
- Q-2 (a) Define air pollution index. What are the uses of air pollution indices? 07
Distinguish between short term- long terms indies.
(b) Discuss Air Pollution Control equipment selection criteria. 07
- OR**
- (b) Discuss ambient air quality standard. 07
- Q-3 (a) Discuss A/F ratio in detail. 07
(b) How engine design changes to reduce automobile pollution? 07
- OR**
- Q-3 (a) Explain Catalytic Converter in detail. 07
(b) Discuss alternative fuels to reduce air pollution due to automobile 07
- Q-4 (a) Write short note on scrubber. 07
(b) Write a brief not on double alkali scrubbing. 07
- OR**
- Q-4 (a) With a neat sketch explain the principal, Construction and working of Cyclone separator. And Enlist advantages and disadvantages of cyclone separator. 07
(b) Discuss combustion control methods for NO_x. 07
- Q-5 (a) Write short note on Photochemical Reaction. 07
(b) What are the objections to the lime scrubbing throwaway process for removing SO₂ from stack gases? 07
- OR**
- Q-5 (a) Explain bag filter with diagram. Discuss bag filter cleaning mechanism in detail 07
(b) Write short note on Gravity settler. 07
