## ACHARYA INSTITUTE OF TECHNOLOGY Bangalore - 560090

## Seventh Semester B.E. Degree Examination, Dec.2016/Jan.2017 Air Pollution and Control

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, selecting atleast TWO questions from each part.
2. Draw neat sketches wherever required.

PART - A a. Explain the classification and properties of Air pollution. (12 Marks) Distinguish between Photo – Chemical Smog and Coal Induced Smog. (08 Marks) Discuss the prime factors and various effects of Air pollution on human health. (10 Marks) b. List the Air pollutants affecting plants. (05 Marks) c. Explain the effects of Air pollution on materials. (05 Marks) a. What are the meteorological parameters that influence Air pollution? 3 (08 Marks) b. Explain briefly the Gaussian Dispersion Model. (06 Marks) c. Briefly explain the Wind – Rose diagram. (06 Marks) a. What are the factors to be considered for Industrial plant location based on Environmental considerations? (10 Marks) b. Define Noise Pollution. Explain the sources and different methods of Noise pollution control. (10 Marks) PART - Ba. Explain the classification of Sampling methods, Preliminary considerations and stages of 5 sampling. (12 Marks) Briefly explain the control of gaseous emissions. (08 Marks) a. List the methods to classify the emission from Gasoline powered vehicles. Explain in brief. (10 Marks) b. Describe the control exhaust emissions in vehicles. (10 Marks) a. Define Acid Rain. How it is caused? Explain control method. (10 Marks) b. What is meant by Global Warming? Explain the effects of Global Warming on Environment. (10 Marks) a. Enumerate the Environment (protection) Act 1986. (05 Marks)

(05 Marks)

(05 Marks)

(05 Marks)

b. Mention any five drinking water standards.

c. List the Indian Air quality standards.

d. List the Noise Pollution standards.