

December 2024

B.Tech.- V SEMESTER

Air and Noise pollution Monitoring and control (PCC-EED 303)

Time: 3 Hours

Max. Marks:75

- Instructions:**
1. It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.
 2. Answer any four questions from Part -B in detail.
 3. Different sub-parts of a question are to be attempted adjacent to each other.

PART -A

- Q1 (a) Define Lapse Rate. (1.5)
 (b) Define air pollution and its pollutants. (1.5)
 (c) Write the effect of noise pollution on human health. (1.5)
 (d) What is ELR and ALR. (1.5)
 (e) What is Indoor air pollution? (1.5)
 (f) Define primary and secondary pollutants. (1.5)
 (g) Define point, line and area source of air pollution. (1.5)
 (h) Define the term dispersion. (1.5)
 (i) Define the methods of gaseous pollutant. (1.5)
 (j) Explain How to control noise pollution. (1.5)

PART -B

- Q2 (a) Describe working, principle, advantage of cyclone separator. (10)
 (b) Describe structure of the atmosphere with neat diagram. (5)
- Q3 (a) Explain particulate pollutants and measurements and control methods. (10)
 (b) Describe air quality standards. (5)
- Q4 Explain the following (1) fabric bag filter. (2) Gravitational settling chamber. (3) Catalytic convertors. (15)
- Q5 (a) Analyze the sources and impacts of noise pollution. (5)
 (b) Discuss the sources, types, and effects of gaseous pollutants. (10)
- Q6 Explain how to control sulphur oxide, nitrogen oxides, carbon monoxide. (15)
- Q7 Define noise. With suitable diagram, explain all the properties of sound waves. (15)
