Roll No. ....................... Total Pages : 2

## May 2023
### B.Tech. (ENV) IV SEMESTER
### Air and Noise Pollution Monitoring and Control
### (PCC-ENV-403)

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

1.  (a) Define Aerosols. (1.5)

    (b) Define Lapse Rate.

    (c) List any three methods used for the control of particulate air pollutants. (1.5)

    (d) Explain Wet collectors. (1.5)

    (e) Define Acoustic. (1.5)

    (f) Write effect of Noise pollution on human health.

    (1.5)

    (g) Write the comparison of ELR & ALR. (1.5)

    (h) Define Noise Pollution. (1.5)

(i) What is AQI Index. (1.5)

(j) Write full forms of SCR, SCNR, BSES. (1.5)

## PART-B

2. (a) List and explain (using diagrams) any two control devices for particulates. (10)

 (b) Explain Air-Fuel Ratio. (5)

3. (a) Explain the effect of air pollution on human health and property. (7.5)

 (b) Explain the impact of Noise and vibrations on human Health. (7.5)

4. Define Stack Height and explain all the types of Plume Behaviors. (15)

5. (a) Define Indoor air pollution in detail. (5)

 (b) Convert 120 mg/cubic meter of NO2 into ppm at 20 degrees temperature. (10)

6. (a) List and explain the Sound properties. (10)

 (b) Explain in your own ideas noise abatement methods. (5)

7. Explain the composition and structure of atmosphere. (15)

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