



Term Evaluation (Odd) Semester Examination September 2025

Roll no.....

Name of the Course: B.Tech Civil Engineering

Semester: V

Name of the Paper: Air and Noise Pollution

Paper Code: TCE511

Time: 1.5 hour

Maximum Marks: 50

Note:

- (i) Answer all the questions by choosing any one of the sub-questions
- (ii) Each question carries 10 marks.

Q1. (10 Marks) **C01**
a. Give definition of "Air Pollution". Write the % of gaseous component of Nitrogen, Oxygen, Argon and CO₂.

OR

- b. Classify the air pollutants based on (i) source, (ii) mode of release and (iii) chemical composition and size

Q2. (10 Marks) **C01**

- a. Define the following pollutants: (i) Aerosols (ii) Natural contaminants

OR

- b. Discuss in detail "Photochemical Smog" that occurs naturally in atmosphere.

Q3. (10 Marks) **C01**

- a. In a Tabular form, mentioning Name, Description, sources, Health effects and Ill effects, provide details of the following gases: CO, SO₂, NO₂, OZONE

OR

- b. Discuss the major classification of Air Pollution Sources based on (i) origin, (ii) based on position.

Q4. (10 Marks) **C02**

- a. What do you understand by Active and Passive Air Sampling Techniques? Discuss with examples

OR

- b. Provide definition, purpose and key features of Ambient Air Quality Standards as well as Emission Standards in relation to EPA and CPWD

Q5. (10 Marks) **C02**

- a. What do you understand by AQI? List the gases and particulate matters involved in calculating AQI. How AQI scale is defined?

OR

- b. Discuss the key aspects of Air Pollution Act 1981 as well as Related Legislation & Regulations. What role CPCB plays?