

P P SAVANI UNIVERSITY

Fifth Semester of B. Tech. Examination

December 2021

SECH3530 Air Pollution & Control

16.12.2021, Thursday

Time: 09:00 a.m. To 11:30 a.m.

Maximum Marks: 60

Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION - I

- Q - 1 How the particle size distribution takes place in the air? [05]
Q - 2 (a) Discuss AQI Colour code with Index value. Which index value is hazardous. [05]
Q - 2 (b) Discuss in details: PM_{2.5} and PM₁₀ [05]

OR

- Q - 2 (a) How the stack monitoring is performed. Elaborate. [05]
Q - 2 (b) Explain in details: Factors affecting the Air Pollution in India. [05]
Q - 3 (a) What is Wind rose effect. Explain Mixing Depth effect. [05]
Q - 3 (b) Discuss the effect of air pollution on Living organization. [05]

OR

- Q - 3 (a) Discuss in details: Role of Chemical Engineers in reducing the air pollution in India. [05]
Q - 3 (b) Explain the process of Dust removal for air pollution. [05]
Q - 4 Explain in details: bag filter and its applications. [05]

SECTION - II

- Q - 1 What are effects of indoor air pollution? [05]
Q - 2 (a) Explain in short: major indoor air pollutants. [05]
Q - 2 (b) Elaborate: Recent Trends of Air Pollution in Major Cities of India. [05]

OR

- Q - 2 (a) Explain the Concept of Greenhouse gases and its effect. [05]
Q - 2 (b) Discuss Air rain conditions. [05]
Q - 3 (a) Discuss the Ozone layer depletion effect. [05]
Q - 3 (b) How the Air pollution affects the Human health. [05]

OR

- Q - 3 (a) How air pollution can affect the marine creatures. [05]
Q - 3 (b) Discuss in details: Role of automobile industry in Air pollution and their causes. [05]
Q - 4 Discuss: Role of Chemical Engineers as Warrior in reducing the air pollution. [05]
