

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 Discuss the various sources of air pollution. [05]
- Q - 2 (a) What is AQI. Discuss the concept of AQI with example. [05]
- Q - 2 (b) Discuss the effect of air pollution on eco-system. [05]
- OR
- Q - 2 (a) How the stack monitoring is performed. Elaboarte. [05]
- Q - 2 (b) Explain the factors affecting Air pollution. [05]
- Q - 3 (a) What is Wind rose effect. Explain Mixing Depth effect. [05]
- Q - 3 (b) Discuss in details: PM_{2.5} and PM₁₀ [05]
- OR
- Q - 3 (a) Explain any one Dust removal Equipment used for Air pollution reduction. [05]
- Q - 3 (b) Discuss Electrostatic precipitator in details. [05]
- Q - 4 Attempt any one. [05]
- (i) Discuss the importance of wet scrubber and bag filter and its applications. [05]
- (ii) How the particle size distribution takes place in the air?

SECTION - II

- Q - 1 Which current Trends of Air Pollution are observed in Major Cities of India. [05]
- Q - 2 (a) Explain in short: major indoor air pollutants. [05]
- Q - 2 (b) What are effects of indoor air pollution? [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 Electrical vehicles can reduce the air pollution. [05]
- OR
- Q - 3 (a) How air pollution can affect the marine creatures. [05]
- Q - 3 (b) Explain the role of automobile industry in Air pollution and their causes. [05]
- Q - 4 Suggest the Eco-friendly techniques to reduce the air pollution. Any two innovative ideas. [05]
