

CBCS SCHEME

USN

--	--	--	--	--	--	--	--	--	--

18CH652

Sixth Semester B.E. Degree Examination, July/August 2022

Process Air Pollution and Control

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain the structure and composition of atmosphere. (06 Marks)
b. Explain the air pollution episodes. (07 Marks)
c. Explain the air pollution sources responsible for urban air pollution. (07 Marks)

OR

- 2 a. Discuss air pollution effects on plants and animals. (08 Marks)
b. Write a note on global climate change. (06 Marks)
c. Write a note on air quality emission standards. (06 Marks)

Module-2

- 3 a. Explain various physicochemical processes governing the spread of air pollution. (08 Marks)
b. Discuss different sources of air pollution. (06 Marks)
c. Explain the transport of air pollution in local atmosphere. (06 Marks)

OR

- 4 a. Explain about sampling methods for air pollutants. (05 Marks)
b. With neat sketch, explain plume behavior of stack. (15 Marks)

Module-3

- 5 a. Explain the factors that affects in selection of control equipment. (08 Marks)
b. With neat sketch, explain the cyclone separators, discuss the advantages and disadvantages. (12 Marks)

OR

- 6 a. Explain the principle, operation and design of electrostatic precipitator. (12 Marks)
b. Discuss the operational consideration and costing of air pollution control equipment. (08 Marks)

Module-4

- 7 a. Discuss the factors affecting selection of control of gaseous equipment. (08 Marks)
b. Explain the design and operation of absorption column. (12 Marks)

OR

- 8 a. Write a note on: (i) Bio scrubber (ii) Bio filter. (10 Marks)
b. Discuss the operational consideration for gaseous pollutant control equipments. (10 Marks)

Module-5

- 9 a. Explain the pollution by Automobiles. (10 Marks)
b. Discuss the prevention and control of vehicular pollution in urban areas. (10 Marks)

OR

- 10 a. Discuss the methods in control of noise pollution. (10 Marks)
b. Discuss about air pollution legislations and regulations. (10 Marks)

* * * * *

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.