

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

September / October 2023 Supplementary Examinations

Programme: B.E.

Branch: CIVIL ENGINEERING

Course Code: 20CV5PEAPL

Course: Air Pollution

Semester: V

Duration: 3 hrs.

Max Marks: 100

Date: 25.09.2023

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data if any, may be suitably assumed.

UNIT - I

- 1 a) Define air pollution. Classify the various types of pollutants 10
- b) Mention and explain the different emission source classification 10

UNIT - II

- 2 a) CO is present in standard atmospheric air at a concentration of 50ppm. Compute the volume concentration, mass volume concentration and mass concentration 10
- b) Explain the various health effects of air pollution 10

UNIT - III

- 3 a) With the help of neat sketch, explain the working of cyclone separation. 10
- b) Explain the meteorological factors influencing air pollution. 10

UNIT - IV

- 4 a) With the help of a flow chart, explain activities of conducting EIA for the developmental projects. 10
- b) Discuss on air quality monitoring and its preventive measures. 10

OR

- 5 a) Draw a neat sketch of fabric filters and explain 10
- b) List the advantages and disadvantages of electrostatic precipitators 10

UNIT - V

- 6 a) With a neat sketch explain various compressible flow regimes 10
- b) Illustrate the work done by expanding gas with the help of helium gas gun example. 10

OR

- 7 a) Discuss on the fundamental equations of compressible flow. 10
- b) Explain the Thermodynamic aspects of gases. 10

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.