

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

SEVENTH SEMESTER B.TECH DEGREE EXAMINATION (R), DECEMBER 2023

(2020 SCHEME)

Course Code : 20CET453

Course Name: Environmental Health and Safety

Max. Marks : 100

Duration: 3 Hours

PART A

(Answer all questions. Each question carries 3 marks)

1. Explain any one type of occupational-related disease.
2. Justify the significance of industrial hygiene.
3. Interpret the importance of the material safety data sheet.
4. Define a) fumes b) aerosols c) gas
5. Describe safety precautions for excavation work.
6. Assess the impact of shock on the human body.
7. Categorize various causes of air pollution.
8. Elaborate on the concept of clean coal combustion technology.
9. Elucidate three methods for controlling water pollution.
10. Examine the role of an individual in conserving natural resources.

PART B

(Answer one full question from each module, each question carries 14 marks)

MODULE I

11. a) Construct a graph to depict the threshold limit value and lethal dose definitions. (5)
b) Justify the necessity of health and safety in three distinct industries. (9)

OR

12. Explain three different measures taken for the prevention of occupational diseases. (14)

MODULE II

13. Classify chemical hazards using examples. Outline the various routes of chemical entry into the body and elucidate protective methods. (14)

OR

14. a) Describe control measures for biological hazards. (9)
b) Examine the repercussions of noise and illustrate diverse hearing protection devices. (5)

MODULE III

15. a) Outline the features and applications of scaffolding. Specify safety precautions when working on scaffolding and platforms. (9)
b) Explain the health hazards of welding and cutting. (5)

OR

16. Examine the types and consequences of radiation on the human body, and deliberate on methods for the safe disposal of radioactive wastes. (14)

MODULE IV

17. a) Investigate the causes, effects, and solutions for ozone layer depletion. (7)
b) Describe effluent quality standards comprehensively. (7)

OR

18. Discuss the sources and effects of water pollution. (14)

MODULE V

19. a) Explain the principles governing workplace inspections. (7)
b) Differentiate point source and non-point source. (7)

OR

20. Evaluate the individual's role in pollution prevention and enumerate preventive measures against air pollution. (14)
