

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIFTH SEMESTER B. TECH DEGREE EXAMINATION (Regular), DECEMBER 2023**(2020 SCHEME)****Course Code: 20CHT381****Course Name: Occupational Health and Industrial Hygiene****Max. Marks: 100****Duration: 3 Hours****PART A*****(Answer all questions. Each question carries 3 marks)***

1. Name any three organizations in the field of occupational health.
2. Explain the significance of Occupational Epidemiology.
3. What are the properties of sound?
4. Explain the physical hazards caused by electricity.
5. Identify the toxicity effects of pesticides.
6. Compare acute and chronic effect of toxic chemicals.
7. Explain any two occupational lung diseases.
8. Define Anthropometry.
9. Define threshold limit value.
10. Explain the concept of air-borne contaminants by substitution and isolation.

PART B***(Answer one full question from each module, each question carries 14 marks)*****MODULE I**

11. a) Explain the main components of a health and safety management system. (8)
- b) Explain the different methods to prevent Occupational Health Hazards. (6)

OR

12. a) Explain the different occupational Safety and Health Legislations. (8)
- b) Describe the purpose of different sections of an organization's health and safety policy. (6)

MODULE II

13. a) Explain the different types of ionizing radiation. (8)
- b) Distinguish between ionizing and non-ionizing radiation. (6)

OR

14. a) Explain the various effects of vibration. (8)
b) Explain the significance of the noise control program. (6)

MODULE III

15. a) Explain the process of toxicokinetics. (8)
b) Describe the control measures that could be used to reduce the risk of infection from biological organism. (6)

OR

16. a) Explain the harmful effects of carbon monoxide, phosgene and ammonia. (6)
b) Explain the different control strategies that could be implemented for toxic vapor and mist exposure. (8)

MODULE IV

17. a) Explain the safety precautions that should be implemented to avoid occupational asthma. (6)
b) Define the term ergonomics. List out the application of ergonomics in industry. (8)

OR

18. a) What is Pulmonary function test? Explain. (6)
b) Explain the ILO list of Occupational Diseases. (8)

MODULE V

19. a) What are the information required to prepare a material safety data sheet? (10)
b) List out the applications of material safety data sheet. (4)

OR

20. a) What are respiratory and non-respiratory personal protective equipment? Explain. (10)
b) Explain dilution ventilation system. (4)
