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Question Paper Code	12319
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M.E. / M.Tech - DEGREE EXAMINATIONS, NOV / DEC 2023

First Semester

M.E. - Industrial Safety Engineering

20PISPC103 - OCCUPATIONAL HEALTH AND INDUSTRIAL HYGIENE

(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

- | | <i>Marks,
K-Level, CO</i> |
|--|-------------------------------|
| 1. List the ill effects in human due to overexposure of noise. | <i>2,K1,CO1</i> |
| 2. What are the types of ionizing radiation? | <i>2,K1,CO1</i> |
| 3. Write commonly used sound absorption materials. | <i>2,K2,CO2</i> |
| 4. Interpret the control techniques used in Air Pollution. | <i>2,K2,CO2</i> |
| 5. What are the methods for controlling bio-hazardous agents in workers? | <i>2,K1,CO3</i> |
| 6. Mention the symptoms of CTS. | <i>2,K1,CO3</i> |
| 7. Define occupational health service. | <i>2,K1,CO4</i> |
| 8. Compare pre-employment and post-employment medical examination. | <i>2,K2,CO4</i> |
| 9. Outline Multitasking. | <i>2,K2,CO5</i> |
| 10. Summarize Work efficiency. | <i>2,K2,CO5</i> |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

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|---|------------------|
| 11. a) Explain in detail about the noise control strategies. | <i>13,K2,CO1</i> |
| OR | |
| b) Discuss the monitoring instrument of ionizing radiation. | <i>13,K2,CO1</i> |
| 12. a) Select ambient air sampling techniques and discuss in detail. | <i>13,K3,CO2</i> |
| OR | |
| b) Construct the electrostatic precipitator working principle. | <i>13,K3,CO2</i> |
| 13. a) Identify various classification of biological agent. | <i>13,K3,CO3</i> |
| OR | |
| b) Identify the preventive measures to be adopted for skeletal disorders. | <i>13,K3,CO3</i> |

14. a) Examine the symptoms, causes and preventive measures of silicosis. *13,K3,CO4*

OR

b) Analyze the effects of carcinogen entry into humans. *13,K3,CO4*

15. a) Discover man as a system component. *13,K3,CO5*

OR

b) Analyze how shift work physiologically influence workers? *13,K3,CO5*

PART - C (1 × 15 = 15 Marks)

16. a) Identify the climatic changes due to air pollutants. *15,K3,CO2*

OR

b) Choose physiological requirements for a job. *15,K3,CO5*