

BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

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Course Code

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Sixth Semester B.E. Degree Examinations, September/October 2024

OCCUPATIONAL HEALTH AND SAFETY

Duration: 3 hrs

Max. Marks: 100

*Note: 1. Answer any FIVE full questions choosing ONE full Question from each Module.**2. Missing data, if any, may be suitably assumed*

<u>Q. No</u>	<u>Question</u>	<u>Marks</u>	<u>(RBT:CO:PI)</u>
<u>Module-1</u>			
1.	a. What is occupational health and safety? List the objectives of occupational health and safety.	10	(1 : 1 : 1.2.1)
	b. Explain the principles of occupational safety and health at a work place.	10	(2 : 1 : 1.2.1)
(OR)			
2.	a. Define accident. List general and specific causes of accidents and major accident hazards.	10	(1 : 1 : 1.2.1)
	b. Explain the role and responsibility of supervisory in investigation team.	10	(2 : 1 : 1.2.1)
<u>Module-2</u>			
3.	a. Write a brief note on ergonomic task analysis at work place.	10	(1 : 2 : 1.2.1)
	b. Write a brief note on ergonomics at work place.	10	(1 : 2 : 1.2.1)
(OR)			
4.	a. Write a note on hazard cognition and analysis and list the different methods of analysis.	10	(1 : 2 : 1.2.1)
	b. Explain briefly fault tree analysis.	10	(2 : 2 : 1.2.1)
<u>Module-3</u>			
5.	a. Define fire and discuss the classification of fire.	10	(2 : 3 : 1.2.1)
	b. Define fire hazard. Explain in brief the fire triangle.	10	(2 : 3 : 1.2.1)
(OR)			
6.	a. Discuss any two fire detection systems.	10	(2 : 3 : 1.2.1)
	b. What are fire extinguishers? Explain any two types of extinguishers with neat sketch.	10	(2 : 3 : 1.2.1)
<u>Module-4</u>			
7.	a. Describe the different types of occupational diseases commonly found in engineering industries.	10	(2 : 4 : 1.2.1)
	b. List and explain in detail the different types of PPE used.	10	(2 : 4 : 1.2.1)
(OR)			

Note: (RBT: - Revised Bloom's Taxonomy Level: CO - Course Outcome: PI- Performance Indicator)

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| 8. | a. | Analyze the potential health risks associated with exposure to hazardous substances in engineering industries. How can these risks be mitigated? | 10 | (3 :4 : 1.2.1) |
| | b. | Explain the effects of exposure and treatment for engineering industries. | 10 | (2 :4 : 1.2.1) |

Module-5

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| 9. | a. | Explain the preventive measures for safety in construction industry. | 10 | (2 :5 : 1.2.1) |
| | b. | Explain the importance of proper chemical handling procedures in water and wastewater treatment plants and laboratories. | 10 | (2 :5 : 1.2.1) |

(OR)

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|-----|----|--|----|----------------|
| 10. | a. | Write a brief note on hazard preventions and control in cement plants. | 10 | (1 :5 : 1.2.1) |
| | b. | Explain roles and responsibilities of workers, managers, and supervisors in industrial settings. | 10 | (2 :5 : 1.2.1) |

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