

**BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT**

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

USN Course Code       

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>(RBTL:CO:PI)</u>
<b><u>Module-1</u></b>			
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)
<b><u>Module-2</u></b>			
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)
<b><u>Module-3</u></b>			
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)
<b><u>Module-4</u></b>			
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)			

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**

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)

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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