

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) EXAMINATION – WINTER 2023****Subject Code: 3154006****Date: 13-12-2023****Subject Name: Health and Safety Management****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Explain the direct and indirect costs of an accident.	03
	(b) List out the contents of a standard first-aid kit and briefly discuss them	04
	(c) What is a PPE? Explain the main characteristics of a PPE used for handling various kinds of hazards (chemical, biological, physical etc.)	07
Q.2	(a) What are the six key elements required for effective health and safety management?	03
	(b) What is “OSHA”, discuss briefly.	04
	(c) Explain “HAZID” hazard identification technique.	07
	OR	
	(c) Explain “HAZOP” hazard identification technique.	07
Q.3	(a) List down the benefits of the ISO 45001.	03
	(b) What is an emergency? What are the basic steps to tackle such situations	04
	(c) Explain in detail the process of accident/incident investigation.	07
	OR	
Q.3	(a) Explain hazard and risk assessment.	03
	(b) Explain various steps involved in a risk assessment process.	04
	(c) Explain the hierarchy of controls.	07
Q.4	(a) Briefly explain work organization hazards.	03
	(b) What do you mean by health screening measure? Mention the principles of screening as proposed by Wilson and Jungner.	04
	(c) Explain electrical hazards. Also mention causes and preventive measures for the same.	07
	OR	
Q.4	(a) What is occupational hygiene and what are the five basic principles involved?	03
	(b) List out the sources of fuel and ignition in case of fire hazards.	04
	(c) Discuss the sources of chemical & biological hazards, and the necessary control measures to reduce exposure.	07
Q.5	(a) What are the key data that is covered in accident/incident reports?	03
	(b) Explain physical hazards present in the construction Industry.	04
	(c) What are the employer’s responsibilities under the occupational health and safety act?	07

OR

Q.5	(a)	What is LOPA?	03
	(b)	Discuss the OHS legislations in India and also mention its inadequacies	04
	(c)	What are the employee's basic rights under the occupational health and safety act?	07
