

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-IV (NEW) EXAMINATION – WINTER 2024****Subject Code:3141310****Date:22-11-2024****Subject Name: Occupational Health & Safety****Time:02:30 PM TO 05:00 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) Discuss the objectives of Occupation health and safety.	03
	(b) Define: Risk, Hazard, accident, safety	04
	(c) Describe the functions of Health, Safety and Environment in an Industry.	07
Q.2	(a) What are the Factors Impending Safety?	03
	(b) Explain the various routes of entry of toxicants in to the human body.	04
	(c) Describe symptoms, diagnosis, treatment and prevention of following occupations diseases: (i) Silicosis (ii) Byssionosis (iii) Anthracosis (iv) Bagassosis (v) Asbestosis	07
	OR	
	(c) Define Pneumoconiosis List out the various types of Pneumoconiosis.	07
Q.3	(a) Define (i) TLV (ii) Ceiling Limit, (iii) MSDS	03
	(b) Discuss the various agents responsible for occupational diseases.	04
	(c) Discuss application of Ergonomics for safety and health	07
	OR	
Q.3	(a) Discuss the safety measures for electric works.	03
	(b) Write a short note on factors impending safety and Accident prevention.	04
	(c) Explain five E's for accident prevention.	07
Q.4	(a) Draw & explain the pyramid of fire.	03
	(b) Give the classification of PPEs.	04
	(c) With the help of table explain classification of fire and extinguishers.	07
	OR	
Q.4	(a) Explain the effects of electrical parameters on human body.	03
	(b) With the help of table explain classification of fire and extinguishers.	04
	(c) What is explosion and give the classification of explosion.	07
Q.5	(a) Write a short note on: Preliminary Hazard Analysis (PHA)	03
	(b) Discuss Hazard ranking.	04
	(c) Differentiate between : HAZOP & HAZAN	07
	OR	
Q.5	(a) Write down the need of personal protective equipment.	03
	(b) Differentiate between : Fault Tree Analysis (FTA) & Event Tree Analysis (ETA)	04
	(c) Write a short note on Off-Site Emergency Plan.	07
