

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV (NEW) EXAMINATION – WINTER 2023****Subject Code:3141310****Date:19-01-2024****Subject Name: Occupational Health & Safety****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) What is meant by occupational diseases? Explain any one in detail.	03
(b) Define safety management? Give the objectives of safety management.	04
(c) Explain the various routes of entry of toxicants in to the human body.	07
Q.2 (a) State the functions of scientific safety management.	03
(b) Define permissible exposure limit, threshold limit value, lethal dose and lethal concentration.	04
(c) Explain Accident Causative Factors.	07
OR	
(c) What do you mean by the term ergonomics? Explain its Application.	07
Q.3 (a) Write a short note on factors impeding safety and Accident prevention.	03
(b) Define: (i) Safety (ii) LD50 (iii) MSDS (iv) EHS	04
(c) What is Explosion? Give the Classification of Explosion.	07
OR	
Q.3 (a) Discuss the symptoms and precautions of Byssinosis.	03
(b) Discuss in detail the effect of electrical parameters on human body.	04
(c) Enlist the main safety measures for electric work and explain any two in detail.	07
Q.4 (a) What is Good House Keeping?	03
(b) Describe the significance of Threshold Limit Value (TLV).	04
(c) Write a detailed note on Preliminary Hazard Analysis.	07
OR	
Q.4 (a) Explain different types of Ventilation.	03
(b) List down the five “E” of accident prevention & explain any two in detail	04
(c) With the help of table explain classification of fire and related extinguishers.	07
Q.5 (a) Draw & explain the pyramid of fire.	03
(b) Define Pneumoconiosis. Name the various types of Pneumoconiosis.	04
(c) Enlist the factors affecting the selection of personal protective Equipment (PPE).	07
OR	
Q.5 (a) What do you mean by the terms VCE and BLEVE?	03
(b) Differentiate between HAZOP and HAZAN.	04
(c) Write a short note: Need of personal protective equipment (PPE).	07
