

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VII EXAMINATION – WINTER 2025

Subject Code: 3172426

Date:28-11-2025

Subject Name: Industrial 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) State full form of PPE. State its use and importance.	03
(b) Discuss the role of National Safety Council.	04
(c) Discuss the importance of safety in engineering. Give suitable example.	07
Q.2 (a) State the requirement of promoting safety in industry.	03
(b) Discuss the role and responsibility of administration/management in the field of safety.	04
(c) Discuss salient points of factories act 1948 w.r.t. health & environment, plant & machinery.	07
OR	
(c) Discuss security management of industrial plants.	07
Q.3 (a) State various safety color codes.	03
(b) Describe artificial respiration methods.	04
(c) Discuss 7 steps to perform FMEA.	07
OR	
Q.3 (a) State the difference between earthing and grounding.	03
(b) Discuss injury investigation techniques.	04
(c) Discuss ten-point scale for workplace hazards.	07
Q.4 (a) State different types of fires.	03
(b) Discuss Fault Tree Analysis method for safety analysis.	04
(c) Discuss causes of electrical fires and its prevention techniques.	07
OR	
Q.4 (a) State various types of fire extinguishers.	03
(b) State various precautions to be observed while using electricity.	04
(c) Write a note on fire detection, fire alarm and firefighting systems.	07
Q.5 (a) Discuss first aid for eye injuries.	03
(b) Discuss first aid method for electrical shocks/burns.	04
(c) Write a note on electric hazards and shocks.	07
OR	
Q.5 (a) Define and explain Resuscitation.	03
(b) State the principle and explain the importance of first aid.	04
(c) List various electric safety procedures and explain them in brief.	07
