

M. SC. INDUSTRIAL SAFETY
(MSCIDS)

Term-End Examination

June, 2026

MIS-031 : FIRE SAFETY

Time : 3 Hours

Maximum Marks : 70

Note : (i) Answer any **seven** questions.

(ii) All questions carry equal marks.

1. (a) Define Fire Load and explain its significance in fire safety. 5
- (b) Why are chemical reactions a major source of fire hazards in industrial settings ? 5
2. (a) What factors need to be considered when choosing the right fire extinguisher for a location ? 5

- (b) What are fire resistant materials and how do they prevent fire spread ? 5
3. (a) What are the primary types of fuels used in combustion ? Explain. 5
- (b) How do heat loss mechanism influence flame extinction ? 5
4. (a) How do laminar and turbulent jet flames differ in structure and behaviour ? 5
- (b) How is fire resistance measured and what factors influence it ? 5
5. (a) How fire alarm systems differ from conventional systems ? Discuss. 5
- (b) How does a fire sprinkler system work, and how is it classified ? 5
6. (a) What are the fire safety considerations for public spaces such as mall and theatres ? 5

- (b) Why are emergency evacuation procedures essential ? What are the key components of an effective evacuation plan ? 5
7. (a) What are the essential considerations for transporting a burn victim ? How can burn injuries lead to infections ? 5
- (b) What are the key components of a fire safety plan ? 5
8. (a) What role do fire safety audits play in risk management ? What are the latest technologies used in fire safety ? 5
- (b) What are the key steps involved in fire accident investigation ? 5
9. Write short notes on any *four* of the following : $4 \times 2.5 = 10$
- (a) Fire Prevention Plan (FPP)

- (b) Fire Triangle
- (c) Wet Chemical Extinguisher
- (d) Smoke Detectors
- (e) Fire Drills
- (f) Proper storage and handling of flammable materials.

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