

**M. SC. (INDUSTRIAL SAFETY)
(MSCINDS)**

Term-End Examination

December, 2025

MIS-031 : FIRE SAFETY

Time : 3 Hours

Maximum Marks : 70

Note : *Answer any **seven** questions. All questions carry equal marks.*

1. (a) Explain the importance of Fire Prevention Plans (FPP) in industrial settings. 5
- (b) Explain how radiation can cause fires to spread even without direct contact. 5
2. (a) What is a fire extinguisher ? How does it work against fire ? Explain. 5

- (b) What are the key steps in conducting fire risk assessment ? 5
3. (a) What are the key stages of thermal decomposition in combustion ? 5
- (b) What role do chemical suppressants play in combustion control ? 5
4. (a) What are the key factors influencing ignition delay time in vapour/air mixtures ? 5
- (b) What strategies can be used to control smoke in large enclosed space ? 5
5. (a) What are the key components of a fire alarm system ? Explain. 5
- (b) How is fire-fighting equipment maintained and inspected ? 5

6. (a) What are the best fire prevention strategies in industrial workplace ? 5
- (b) What role does communication play in emergency evacuations ? 5
7. (a) What are the critical steps in managing an electrical burn injury ? What is the role of airway management in fire-related injuries ? 5
- (b) What technologies are used in modern fire detection and suppression systems ? 5
8. (a) How does National Building Code (NBC) contribute to fire safety in India ? Discuss. 5
- (b) What are the challenges of conducting fire drills in industrial settings ? 5

9. Write short notes on any *four* of the following : 4×2.5=10

- (a) Occupational Safety and Health Administration (OSHA)
- (b) Fire Development Stages
- (c) Foam Extinguisher
- (d) Flame Detectors
- (e) Fire Door and Emergency Exits
- (f) Fire Resistance

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