

**POST GRADUATE CERTIFICATE IN  
INDUSTRIAL SAFETY (PGCINDS)**

**Term-End Examination**

**June, 2022**

**MIS-021 : SAFETY PHILOSOPHY AND PRINCIPLES  
OF ACCIDENT PREVENTION**

*Time : 3 hours*

*Maximum Marks : 70*

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**Note :** *Question no. 1 is **compulsory**. Attempt any  
**five** questions from Questions no. 2 to 8.*

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1. (A) Choose the correct option : 5×2=10
- (a) When should you follow 5“S” ?
- (i) For an inspection
  - (ii) Spring cleaning
  - (iii) All the time, continuously
  - (iv) When a visitor comes to your place
- (b) What should be firmly secured to the machines ?
- (i) Guards
  - (ii) Operating instructions
  - (iii) Awareness barrier
  - (iv) Personal Protective Equipment

- (c) Which of the following is a physical hazard agent ?
- (i) Falls
  - (ii) Electricity
  - (iii) Inhalation
  - (iv) All of the above
- (d) Class-A fire consists of fire due to
- (i) Wood
  - (ii) Oil
  - (iii) Transformer
  - (iv) Chemical
- (e) \_\_\_\_\_ is best suited to extinguishing oil or flammable liquid fire.
- (i) Soda acid
  - (ii) Vaporizing liquid
  - (iii) Foam
  - (iv) Dry chemical
- (B) Distinguish between the following : *5×2=10*
- (a) Accident and Incident
  - (b) Internal and Accident analysis
  - (c) Fire and Explosion
  - (d) Hazard and Risk
  - (e) Severity rate and Incidence risk

2. Discuss the fire protection measures in detail. 10
3. (a) Describe the various elements of loss control.  
(b) Explain the role of safety awareness posters and National Safety Day. 5+5=10
4. (a) Explain SEISO and its benefits.  
(b) Briefly explain the checkpoints to ensure safe loading of a crane. 5+5=10
5. Enlist any five industrial disasters that occurred in India. Discuss any one of them in detail. 10
6. Describe the elements of incident investigation forms. 10
7. (a) Explain the purpose of investigation and analysis.  
(b) Describe the Functional Resonance and Accident Model. 5+5=10
8. Write short notes on any **two** of the following : 5+5=10
- (a) The Domino Theory  
(b) Engineered Material Handling System  
(c) Occupational Health Hazards  
(d) Ergonomics in Industry
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