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POST GRADUATE CERTIFICATE IN INDUSTRIAL SAFETY/POST GRADUATE DIPLOMA IN INDUSTRIAL SAFETY (PGCINDS)/(PGDINDS) Term-End Examination June, 2023

MIS-021: SAFETY PHILOSOPHY AND PRINCIPLES OF ACCIDENT PREVENTION

Time: 3 Hours Maximum Marks: 70

Note: Question No. 1 is compulsory. Attempt any five questions from the remaining questions.

- 1. (a) Choose the correct answers: 2 each
 - (i) The worker requires foot protection in work environment with:
 - (A) Fine dust and Fluff
 - (B) Hot and poisonous fumes
 - (C) Electrical hazards
 - (D) Penetrating materials such as nails or spikes

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- (ii) Fire extinguisher is:
 - (A) Active fire protection system
 - (B) Passive fire protection system
 - (C) To be brought during fire hazard
 - (D) Fire detection unit
- (iii) In case of arc welding, one should protect his eyes using:
 - (A) Dark glass screen
 - (B) Mask
 - (C) Safety goggles
 - (D) Helmet
- (iv) OSHA stands for:
 - (A) Occupation Safety and Hazard Agency
 - (B) Occupational Safety and Health Administration
 - (C) Only Some Hazards are Actual
 - (D) Occupational Safety and Hazard Administration

- (v) "Class D" fire extinguisher can be used to treat fires involving as fuel sources
 - (A) Ordinary combustibles (Wood, Plastics etc.)
 - (B) Flammable or combustible liquid
 - (C) Electrical equipments
 - (D) Combustible metals
- (b) Answer the following questions in short:

 $5 \times 2 = 10$

- (i) What are safety functions and subfunctions?
- (ii) Define active fire protection system.
- (iii) Define the severity of an accident.
- (iv) What is safety awareness?
- (v) What are the principles of an audit?
- 2. What are the various types of safety training techniques? Explain any *one* of them.
- 3. What are loss control techniques? How are these are used to reduce the possibility of a loss and limit the severity? Explain.

4.	(a) Describe the process of evolution of work
	place safety. 5
	(b) What are the roles and responsibilities of
	line supervisors in Industries?
5.	What is an accident ? Explain the various
	factors involved in calculating the cost of the
	accidents. 10
6.	Explain the modern theory of Accident. 10
7.	Explain the general guidelines for the usage of
	Cranes. 10
8.	Describe SEISO and SEIKETSU in detail. 10
9.	Write short notes on any two of the
	following: $2 \times 5 = 10$
	(a) National Safety Day
	(b) Handling of hazardous material

(c) Design aspects for safe operation