

No. of Printed Pages : 5

MIS-024

**M.SC. INDUSTRIAL SAFETY (MSCIDS)/
P.G. DIPLOMA IN INDUSTRIAL
SAFETY (PGDINDS)/P.G. CERTIFICATE
IN INDUSTRIAL SAFETY (PGCINDS)**

Term-End Examination

June, 2024

**MIS-024 : MECHANICAL AND
ELECTRICAL SAFETY MANAGEMENT**

Time : 3 Hours

Maximum Marks : 70

Note : (i) Attempt *six* questions in all.

(ii) Q. No. 1 is compulsory.

1. (A) Objective type questions : $5 \times 2 = 10$

(i) The objective of earthing or grounding is :

- (a) To provide high resistance to ground
- (b) To provide low resistance to ground
- (c) To provide high conductivity to ground

P.T.O.

[2]

MIS-024

- (d) To provide low conductivity to ground
- (ii) One of the main functions of personal protective grounds is to provide a impedance path for a short circuit.
 - (a) High
 - (b) Low
 - (c) Smooth
 - (d) Adequate
- (iii) The purpose of Cardio Pulmonary Resuscitation (CPR) is to :
 - (a) Build upper body strength
 - (b) Stabilize body temperature to avoid hypothermia
 - (c) Dislodge blood clots within the victim's lungs
 - (d) Maintain oxygenated blood circulation
- (iv) Decibel (dB) is a unit used to measure :
 - (a) Light
 - (b) Frequency
 - (c) Sound
 - (d) Electron

[3]

MIS-024

(v) According to the IS code, the colour of Earth wire is usually :

- (a) Green
- (b) Yellow
- (c) Red
- (d) Black

(B) Short Answer Type Questions : 5×2=10

- (i) List out the various types of safe guarding devices.
 - (ii) What are the limitations and drawbacks in material handling ?
 - (iii) What is meant by safe working practices ?
 - (iv) What are the equipments required to prevent the fire in the work place ?
 - (v) What is the purpose of First Aid Box ?
2. (a) What are the criteria to identify hazard in the work place ? Explain. 5
- (b) What are the various types of controls that can reduce the extent of safe guarding ? List out the machine safe guarding devices. 5

P.T.O.

[4]

MIS-024

3. (a) What are the risk factors associated with Manual Material handling ? How can it be avoided ? 5
- (b) What are the different types of failed system ? How do you overcome from the failure ? 5
4. (a) What is Wood manufacturing plant ? What are the main precautions works that should be followed in a wood plant ? 5
- (b) Explain in brief the various hazards in welding operation. 5
5. (a) Describe the steps taken to control the preliminary damage after gas leakage accident. 5
- (b) Write down the importance of fuse in electrical equipments. 5
6. (a) Discuss about the various electrical tools and its uses with appropriate diagrams. 5
- (b) What are the main precautions to be taken at the time of work at height. 5
7. (a) What is Cardio Pulmonary Resuscitation (CPR) ? What are the procedures of first aid to be followed for unconscious electric-shock victims ? 5

[5]

MIS-024

- (b) Discuss various safety tips when working on transformer. 5

8. Write short notes on any *two* of the following :

5+5

- (a) First Aid in education and training
(b) Job Safety analysis
(c) MTTR and MTBF
