

No. of Printed Pages : 5

MIS-023

**M. SC. (INDUSTRIAL SAFETY) /
POST GRADUATE CERTIFICATE IN
INDUSTRIAL SAFETY /
POST GRADUATE DIPLOMA IN
INDUSTRIAL SAFETY
(MSCINDS/PGCINDS/PGDINDS)
Term-End Examination**

June, 2026

**MIS-023 : SAFETY IN CONSTRUCTION
INDUSTRY**

Time : 3 Hours

Maximum Marks : 70

Note : (i) *Question No. 1 is compulsory.*

(ii) *Attempt any **five** more questions
from the remaining (Q. Nos. 2 to 8).*

1. (A) Choose the most appropriate answer from the given options : $5 \times 2 = 10$
- (a) According to Domino theory, 88% of the accidents are caused by :
- (i) Acts of god
 - (ii) Unsafe conditions
 - (iii) Unsafe acts of people
 - (iv) Natural forces
- (b) Stage(s) in Cumulative Musculoskeletal Injury (MSI) is/ are :
- (i) One
 - (ii) Two
 - (iii) Three
 - (iv) No stage
- (c) Different types of filters are used to provide safety to workers in different kinds of exposures. 'Type K' filter protect against :
- (i) Chlorine
 - (ii) Ammonia
 - (iii) Sulphur dioxide
 - (iv) Toluene

- (d) Any type of excavation which is carried out at more than 1.5 m of depth is considered as :
 - (i) No-risk construction work
 - (ii) Low-risk construction work
 - (iii) Average-risk construction work
 - (iv) High-risk construction work
- (e) To protect the workers from noise hazard, it is advised that no unprotected ear should be exposed to a peak sound pressure level (instantaneous) of more than :
 - (i) 40 dB
 - (ii) 80 dB
 - (iii) 100 dB
 - (iv) 140 dB

(B) Answer the following questions : $5 \times 2 = 10$

- (a) What is detonator ?
- (b) Explain team lifting.
- (c) Define tunneling.
- (d) Define stock ladder.
- (e) Enlist personal protective equipments.

2. Describe the essentials of a good training.
Discuss the different types of training. 10
3. (a) Discuss the hazards and risks which
are involved in tunneling work. 5
(b) Differentiate between a single pole
scaffold and an independent scaffold. 5
4. (a) Describe the safe practices to be
followed during the use of ladders. 5
(b) Describe various safety measures to be
taken while using pulleys. 5
5. (a) Enlist the commonly used equipment
for material handling applications.
Describe any *two* in brief. 5
(b) Discuss various safety measures to be
taken by employers regarding the use of
cranes. 5
6. (a) What are the potential sources of air
pollution and noise at construction sites ?
Explain briefly. 6

- (b) Mention important government regulations related to pollution control.

4

7. (a) Write a note on demolition work using explosives. 5

- (b) What precautions should be taken before and during demolition work ? 5

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

2×5=10

- (a) Safety measures to be taken by employees regarding cranes

- (b) Differentiate between dilution ventilation and displacement ventilation

- (c) Causes of injury while performing mechanical roof demolition

× × × × ×