

B.Tech 8th Semester Exam., 2022

(New Course)

SAFETY MANAGEMENT

Time : 3 hours

Full Marks : 70

Instructions :

- (i) The marks are indicated in the right-hand margin.
- (ii) There are **NINE** questions in this paper.
- (iii) Attempt **FIVE** questions in all.
- (iv) Question No. 1 is compulsory.

1. Answer/Fill in the blanks/Choose the correct option of the following (any seven) : $2 \times 7 = 14$

- (a) List two trainings that employers are responsible for providing to employees as per OSHA requirements.
- (b) _____ are responsible for providing a safe workplace under the OSH Act.
- (c) Name two measures that can help control of heat stress on workers.
- (d) List two items of personal protective equipment used in high rise buildings.

- (e) Probability of the event that might occur multiplied by the severity of the event if it occurs is a measure of
 - (i) risk
 - (ii) hazard
 - (iii) accident
 - (iv) None of the above
- (f) Which of the following is an indirect cost of an accident?
 - (i) Money paid for the treatment of the worker
 - (ii) Cost of lost time of the injured worker
 - (iii) Compensation paid to the worker
 - (iv) All of the above
- (g) Which of the following is (are) physical hazard agent(s)?
 - (i) Falls
 - (ii) Electricity
 - (iii) Inhalation
 - (iv) All of the above

(h) Which of the following is the type of sign used in safety signboard?

(i) Prohibition and Warning Sign

(ii) Emergency and First-aid Sign

(iii) Mandatory Sign

(iv) All of the above

(i) Which colour is used to indicate a danger sign?

(i) Red

(ii) Amber Yellow

(iii) Green

(iv) Blue

(j) Industrial safety management is that branch of management which is concerned with _____ hazards from the industries.

(i) controlling

(ii) reducing

(iii) eliminating

(iv) All of the above

2. Why does it make good business sense to have a reliable safety program, as an organization? List four reasons. 14

3. List and explain any three important responsibilities of safety professionals. 14

4. What are the major construction safety problems the safety practitioner is likely to encounter on the job? 14

5. Would you agree that Fire Safety Audit is found to be an effective tool for assessing fire safety standards of an organization or an occupancy? 14

6. Outline the method for identification and control of fire hazards. 14

7. Detail the hazard of fall arising out of any two of the following causes : 7×2=14

(a) Objects in the walkway

(b) Slippery surfaces

(c) Distractions

8. Suggest measures to mitigate the risk of the following occupational illnesses caused by heat stress :

14

(a) Heat stroke

(b) Heat exhaustion

9. Elaborate upon the risk of injury arising out of the following conditions (any two) : $7 \times 2 = 14$

(a) Slippery surfaces

(b) Absence of correct footwear

(c) Absence of protective headgear/hard hats

(d) Occupational exposure to heat and hot environments
