ST-C-1007 **SISS-11**

SHORT TERM EXAMINATION – FEBRUARY 2025.

Industrial Safety and Security

INDUSTRIAL SAFETY AND SECURITY – THEORY

Time : 3 hours Maximum marks : 70

PART A — (20 × 2 = 40 marks)

Answer ALL questions.

1. Which of the following is a primary objective of industrial safety?

   (a) Maximizing production output

   (b) Reducing operational costs

   (c) Preventing accidents and injuries

   (d) Increasing employee satisfaction

2. Which of the following is NOT common safety equipment used in industrial environments?

(a) Fire extinguisher

(b) hard hat

(c) Safety gloves

(d) Safety sunglasses (for regular use)

3. What does the acronym PPE stand for in the context of industrial safety?

(a) Personal Protective Equipment

(b) Personal Production Equipment

(c) Product Protection Equipment

(d) Public Protective Equipment

4. Which of the following is the most effective way to prevent industrial accidents?

(a) Providing adequate training to workers

(b) Maintaining equipment regularly

(c) Having clear emergency procedures

(d) All of the above

5. Which of these safety measures is essential when working with hazardous chemicals?

(a) Wearing high-visibility jackets

(b) Installing fire alarms

(c) Proper labeling and storage

(d) All of the above

6. What is the first step in responding to a workplace accident?

(a) Contacting emergency services

(b) providing first aid

(c) Securing the area to prevent further harm

(d) reporting the incident to supervisors

7. In an industrial setting, fire safety protocols should include all of the following EXCEPT:

(a) Regular fire drills

(b) Keeping fire exits unobstructed

(c) Storing flammable materials near ignition sources

(d) Ensuring that fire extinguishers are easily accessible

8. Which of the following is a common hazard in confined space work?

(a) Excessive heat

(b) Oxygen deficiency

(c) Toxic gases

(d) All of the above

9. What is the main purpose of safety data sheets (SDS) for chemicals in the workplace?

(a) To provide detailed information on chemical properties

(b) To inform employees of required protective equipment

(c) To outline first aid procedures for chemical exposure

(d) All of the above

10. Which of the following is a key factor in workplace security?

(a) Fire drills

(b) Employee training

(c) Access control

(d) Ergonomics

11. Which of the following is a common cause of workplace accidents in industrial settings?

(a) Lack of maintenance of machinery

(b) Inadequate employee training

(c) Failure to follow safety procedures

(d) All of the above

12. What is the purpose of conducting regular safety audits in industrial environments?

(a) To increase production speed

(b) To ensure compliance with safety regulations

(c) To reduce employee wages

(d) To evaluate the effectiveness of marketing strategies

13. Which of the following is the primary goal of a safety management system in a workplace?

(a) To reduce operational costs

(b) To minimize the risk of accidents and injuries

(c) To improve production output

(d) To train employees in new skills

14. Which of the following is the best example of a passive safety measure in an industrial setting?

(a) Safety training programs

(b) Guardrails around dangerous equipment

(c) First aid kits

(d) Safety eyewear

15. Which type of fire extinguisher is suitable for electrical fires?

(a) Water-based extinguisher

(b) Foam extinguisher

(c) Carbon dioxide (CO_2) extinguisher

(d) Powder extinguisher

16. Which of the following would be most appropriate for protecting workers from falling hazards?

(a) Safety harnesses

(b) Fire extinguishers

(c) Personal protective gloves

(d) Welding masks

17. What is the role of a "lockout/tagout" procedure in industrial safety?

(a) To prevent machinery from starting up during maintenance or repairs

(b) To signal a fire hazard in the workplace

(c) To monitor employee productivity

(d) To prevent workers from taking breaks

18. Which of the following is a safety concern when working with heavy machinery?

(a) Noise exposure

(b) Falling objects

(c) Moving parts

(d) All of the above

19. Which of the following should be included in a comprehensive emergency response plan for an industrial facility?

(a) Evacuation routes

(b) First aid and medical procedures

(c) Roles and responsibilities of emergency response teams

(d) All of the above

20. Which of these actions would be most appropriate if an employee experiences exposure to a toxic chemical?
    (a) Leave the area immediately and seek medical attention
    (b) Apply more chemical to neutralize the effects
    (c) Ignore the symptoms until the shift ends
    (d) Continue working to avoid wasting time

PART B — (5 × 6 = 30 marks)

Answer any FIVE of the following questions.

21. Mention the common causes of workplace accidents.

22. List the laws and regulations relating to Safety and Health of industrial Workers.

23. Explain about fire triangle.

24. How fuels are classified?

25. What are the factors to be considered before attempting to lift a load?

26. What are the safety rules to be followed for crane operators?

27. What does PPE stand for in industrial safety?

28. Discuss the code of practice in the construction site.

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ST-C-1008 **SISS–P1**

SHORT TERM EXAMINATION FEBRUARY 2025.

Industrial Safety and Security

INDUSTRIAL SAFETY AND SECURITY-PRACTICAL

Time : 3 hours Maximum marks : 70

PRACTICAL QUESTIONS

Answer any TWO questions.

(2 × 35 = 70)

1. How do you prepare an accident report form?

2. What precautions must be taken to protect employees during excavation work?

3. Discuss the safety measures needed before operating conveyors.

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