

BSc F & S Sem.-4 Examination

CC

Safety Equipments & Documentation (New)

Time : 2-30 Hours]

May-2025

[Max. Marks : 70

- Q 1(i) What are the important checkpoints under the 'supply' law those are required to check by the user to ensure that the machine is safe before it is used? 7
- (ii) What is CE Marking? State its significance. What is declaration of conformity? 7
- OR
- (i) Discuss the various types of maintenance of work equipment. How will you ensure that maintenance work would be carried out safely? 7
- (ii) State important points to be ensured by an employer who operates a steam boiler and/or a pressurized hot water plant and/or an air receiver. 7
- Q 2(i) State various hazards related to Hand-held power tools. State important control measures required to minimize the hazards related to Hand tools. 7
- (ii) State various hazards related to Mechanical machinery. State important control measures required to minimize the hazards related to Mechanical machinery. 7
- OR
- (i) What are the important hazards related to Bench top grinding machine? Provide their control measures. 7
- (ii) Describe important hazards and control measures related to Chainsaw? 7
- Q 3(i) Justify the need of PPE. Explain important features of a safety shoes to protect foot in an industry? 7
- (ii) What are the possible ways through which toxic materials can enter into the body? Explain briefly. During ammonia release how many possible ways to enter into body. 7
- OR
- (i) Explain Air-supplying respiratory protective equipment and their classification. 7
- (ii) What are detection instruments? Explain their classification. Write down those atmospheric conditions where these instruments are used. 7

(P.T.O)

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Q 4(i) What is a Work Permit? Why is a Work Permit used? Describe briefly the format of work permit. 7

(ii) Name and describe importance of operational system during emergency. What is mutual aid? 7

OR

(i) What are the important key elements of the on-site emergency plan? Explain Elements of the Planning for emergencies. 7

(ii) What is Risk Assessment? Explain the important steps to carry out the risk assessment? What is the difference between an audit and risk assessment process. 7

Q 5 Attempt any seven out of twelve. 14

MCQ Tick marks the correct option:

1. Which is not a work equipment:
 - a. Hand tools
 - b. Ladders
 - c. Domestic Sewing Machine
 - d. Photocopiers
 - e. Laboratory apparatus
2. Which regulation requires manufacturers and suppliers to ensure that machinery is safe when supplied and has CE marking:
 - a. PUWER 98
 - b. The Supply of Machinery (Safety) Regulations 1992
 - c. LOLER 98
 - d. The Pressure Systems Safety Regulations 2000
3. Primary purpose of which regulation is to protect people at work:
 - a. PUWER 98
 - b. The Supply of Machinery (Safety) Regulations 1992
 - c. LOLER 98
 - d. The Pressure Systems Safety Regulations 2000
4. All mobile equipment safeguards should comply with the essential health and safety requirements of
 - a. PUWER 98
 - b. The Supply of Machinery (Safety) Regulations 1992
 - c. LOLER 98
 - d. The Pressure Systems Safety Regulations 2000

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5. Falling object protective structures (FOPS) are required where there is a significant risk of:
 - a. Heavy rains.
 - b. UV radiations
 - c. Falling Objects
 - d. Rollover
 6. In agriculture and forestry, fifty percent of overturning accidents occur on slopes of less than 10° . (True / False)
 7. It is sometimes safer to improve the working conditions by engineering controls first. Then the use of PPE may be recommended. [True / False]
 8. Lead – lined gloves are used to prevent from
 - a. Chemical spurt
 - b. Ionising radiation
 - c. Excess Heat
 - d. Grease oil
 9. Electrical hand gloves are used to prevent High voltage electric shocks up to:
 - a. 2000 V
 - b. 4000 V
 - c. 8000 V
 - d. 11000 V
 10. A ----- should identify strengths and weaknesses of a safety programme.
 - a. Permit System
 - b. Risk Assessment
 - c. Safety Audit
 - d. OSEP
 11. The effectiveness of any program within organization increases or diminishes according to the degree of support and encouragement of.....
 - a. Labor union
 - b. Safety committee
 - c. Management
 - d. Engineers
 12. OSHA 200 log is meant for:
 - a. Log of Work-Related Injuries and Illnesses
 - b. Log of mechanical maintenance of equipment
 - c. Log of issuance of PPE
 - d. Log of Hazardous chemicals
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