

B.Sc (Sem-4) (F&S) Examination

CC

Safety Equipments & Docu (New)

April 2022

Time : 2-00 Hours]

[Max. Marks : 50

Instruction: All questions in section-I carry equal marks.
 Attempt any three questions in section-1.
 Question in section-II is compulsory.

Section-I

- Question-1 A. Describe the importance of "Declaration of Conformity and CE Marking". Discuss relevant information provided by these documents. 7
 B. What are the important checkpoints under the 'supply' law those are required to check by the manufacturer to ensure that the machine is safe before it is sold out? 7
- Question-2 A. Describe "Maintenance Management Scheme" with numbers of techniques to prevent health and safety risks 7
 B. Describe briefly how the information, instruction and training part is fulfilled for the new equipment. 7
- Question-3 A. Describe in detail the functions, importance and mandatory requirement for ROP and FOP 7
 B. Describe various non-mechanical machinery hazards. State important control measures. 7
- Question-4 A. What are the important safe guards required for smooth operation of the Work Equipment? 7
 B. Describe important hazards and control measures related to Chainsaw? 7
- Question-5 A. Explain Air-supplying respiratory protective equipment and their classification. 7
 B. Give short note on training, maintenance, precaution and care of PPE. 7
- Question-6 A. What are respiratory hazards? How respiratory equipment are selected and classified on the basis of types of hazards? 7
 B. What are detection instruments? Explain their classification. Write down those atmospheric conditions where these instruments are used. 7
- Question-7 A. What is HAZOP? Describe the procedure of HAZOP with merit and demerit. 7
 B. What are hazard identification techniques? Describe the Classification of hazard identification techniques on the basis of area in which they are predominantly applied. 7

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Question-8

- A. Describe how a Work Permit System is set up in an industry? 7
- B. Describe responsibilities of Site Controller and Incident controller during emergency. 7

Section-II

Question-9

MCQ Tick marks the correct option:

8

- (i) The primary purpose of the Supply of Machinery (Safety) Regulations 1992 is to:
- Prevent barriers to trade across the EU (European Union),
 - Protect people at work.
 - Provide cheap machinery at reasonable cost
 - Prepare service and operation manual
- (ii) Overheated bearing is detected during monitoring, it will be attended during:
- Preventive maintenance
 - Condition based maintenance
 - Breakdown based maintenance
 - Anytime
- (iii) Musculoskeletal disorders belong to:
- Mechanical hazard
 - Non-mechanical hazard
 - Physiological hazard
 - Psycho-physiological hazard
- (iv) The hazard which is developed due to the rotating drive belt and pulley is an example of:
- Entanglement
 - Drawing in
 - Crushing
 - Puncture
- (v) There is possibility of fire when operated:
- Chainsaw
 - Bench-mounted circular saw
 - Conveyor System
 - Pedestal drill
- (vi) Safeguards are mandatory to prevent access to dangerous parts of machinery under:
- PUWER 98
 - The Supply of Machinery (Safety) Regulations 1992
 - LOLER 98
 - The Pressure Systems Safety Regulations 2000

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- (vii) For carrying out work near radioactive material, which permit is required:
 - a. Entry Permit
 - b. Unique Permit
 - c. Hot work permit
 - d. General Permit
- (viii) Record of significant finding during risk assessment is not necessary:
 - a. If Internal assessment is carried out
 - b. If nos. of employee <5
 - c. Against statutory non-compliance
 - d. As per Instruction of Unit head

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