

- Q.19 You should only attempt to repair a conveyor that isn't locked and tagged when you have a co- worker assist you with the work. (True or False)
- Q.20 _____ a small metal or plastic object that you wear on the end of your finger to protect it when you are sewing

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Destructive and Non Destructive testing
- Q.22 Purchasing Policy
- Q.23 Inspection and testing of hand tools.
- Q.24 Various types of defects of wire ropes.
- Q.25 Ergonomics of machine guarding.
- Q.26 Improving safety and productivity through work place design.
- Q.27 Centralized tool control.
- Q.28 Hazards associated with power presses.
- Q.29 Control measures against the human errors.
- Q.30 Safety requirements in roof work and fragile surface.
- Q.31 Common defects in lifting chain and slings.
- Q.32 Scaffold and its type
- Q.33 Fragile roof
- Q.34 Riving Knife
- Q.35 Discuss the statutory provisions related to lifts and hoists.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Discuss in detail about the precautions required to be observed for ensuring the safety of people working at height.
- Q.37 Describe the competent persons, duties and responsibilities under the various safety Legislation
- Q.38 (i) Control Measures against the human errors.
(ii) Potential tripping and slipping hazard

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Subject:- Safety Engineering-I

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 What is the difference between a guard and a safety device?
- a) The guard creates no new hazards; the safety device is a physical barrier that prevents contact with the moving parts.
 - b) The guard is a physical barrier that prevents access to danger areas; the device performs one of several functions.
 - c) The guard requires the operator to use both hands to run the machine; the device is a physical barrier.
 - d) There is no difference
- Q.2 Which Machine motion is the most dangerous?
- a) Cutting action
 - b) Punching action
 - c) Bending action
 - d) All motions can cause serious injuries
- Q.3 Which one of the following is NOT classified as a manual handling activity?
- a) Throwing
 - b) Pushing
 - c) Carrying
 - d) Pulling

- Q.4 Which of the following information about a hazardous material can be found on a Material Safety Data Sheet (MSDS)?
- Physical and chemical properties
 - All hazards regarding the material
 - Precautions for safe handling and storage
 - All of the above
- Q.5 Which of the following information does a forklift nameplate contain?
- Fuel type
 - Load capacity
 - Name of the forklift operator
 - Both a and b
- Q.6 How to prevent falls of material from height?
- By providing the toe-board
 - By securing the loose material
 - by using hand tools strap and tools bag
 - All of the above
- Q.7 Which is known as Corrective maintenance?
- Breakdown maintenance
 - Predictive maintenance
 - Preventive maintenance
 - Scheduled maintenance
- Q.8 An abrasive wheel is checked for cracks or defects with a...
- Sound or ring Test
 - Hit and trial Test
 - Forward or rewind Test
 - X-ray machine
- Q.9 What is the full form of BIS?
- Board of Indian Standard
 - Bureau of Indian Standard
 - Board of International Standard
 - Bureau of International Standard

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- Q.10 When working with power tools outdoors or in a damp environment, where should the cord be plugged in to
- A non-waterproof extension cord
 - A GFCI (Ground Fault Circuit Interrupter)
 - An outlet without a grounding plug
 - All of the above

SECTION-B

Note: Objective type questions. All questions are compulsory.
(10x1=10)

- Q.11 Any distortion causing an increase in throat opening exceeding 5% or as otherwise directed by the hook manufacture is known as_____.
- Q.12 Formula of Factor of Safety.
- Q.13 As per Section 29 of The Factories Act 1948, all parts, including the working gear, whether fixed or movable, of every lifting machine and every chain, rope or lifting tackle shall be thoroughly examined by a competent person at least once in every period of _____ months.
- Q.14 _____ is the maximum safe force that a piece of lifting equipment, lifting device or accessory can exert to lift, suspend, or lower, a given mass without fear of breaking
- Q.15 You should only attempt to repair a conveyor that isn't locked and tagged when you have a co- worker assist you with the work.(True or False)
- Q.16 _____ does not prevent the fall, allowing the user to reach a zone where free fall risk exists, but should a free fall occur, the system stops it, limiting the length of fall to prevent collision with the ground, with the structure from where the worker is falling or other obstacles.
- Q.17 Condition when the end of the rope breaks off into loose strands is called_____.
- Q.18 Which section of The Factories Act, 1948 mention about "Fencing of Machinery"?

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