

Roll No _____

RLI-095408A

One Year Post Diploma in Industrial Safety

Branch: Industrial Safety

Subject: Safety in Engineering Industries

Time : 3 Hrs.

MM: 100

Section –A

Note: Multiple Choice questions. All questions are compulsory.

10x1=10

- Q.1 Base metal' in welding is
- The metal to be joined or cut
 - The metal of the electrode
 - The metal of the conductor wires of the welding machine
 - None of the above
- Q.2 _____ is not a type of guard used in power presses
- Individual die guard
 - Gate closure device
 - Sweep device
 - Safety net
- Q.3 The 'right of workers to warn about imminent danger' is given under _____ of the Factories Act, 1948.
- Section 41E
 - Section 41F
 - Section 41G
 - Section 41H
- Q.4 Symptoms of 'welder's flash' or 'arc eye' may include
- Sensation of "sand in the eye"
 - Watering from the eyes
 - Conjunctivitis
 - All of the above
- Q.5 First-Aid measure for 'welder's flash' or 'arc eye.'
- Flushing the eyes for several minutes with water or saline solution
 - Use of topical antibiotic eye drop
 - Routine use of eye patch
 - All of the above
- Q.6 The following are true for rolling, except
- Velocity of metal at exit is same as that at the entry
 - Grains are elongated in the direction of rolling
 - After crossing the stress zone the grain starts refining
 - The greater the coefficient of friction more the possible reduction
- Q.7 In rolling, the pressure is maximum at
- Entrance
 - Exit
 - Both the extremities
 - At a point somewhat between the two extremities
- Q.8 In rolling, the point of maximum pressure is called
- No slip point
 - Slip point
 - Neutral point
 - Extreme point
- Q.9 Tubes can be manufactured by
- Hot forging
 - Hot spinning
 - Hot extrusion
 - Hot rolling
- Q.10 During extrusion of steel, adequate lubrication around the billet is done by providing a coating of
- Vegetable oil
 - Graphite
 - Water
 - Powdered glass

Section-B

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

- Q.11 Case Hardening is a material processing method that is used to increase the hardness of the _____ of a metal.
- Q.12 _____ protects the operator from direct frontal contact with rotating components of the spindle, of the tool and from projection of shavings and lubricant-coolant in drill machine.
- Q.13 Drop hammers should never be operated when dies are cold. **True or False**
- Q.14 When working in sandblast rooms, employees should be equipped with air-supplied hoods and full body protection. **True or False**
- Q.15 Temperature at which deformed grains are replaced by a new set of non-deformed grains that nucleate and grow until the original grains have been entirely consumed is called _____
- Q.16 An undesired flame propagation opposite to the direction of flow is known as _____
- Q.17 Full form of SCBA
- Q.18 Unlike buffing, which is mainly focused on removing scratches and other blemishes, polishing goal is to produce a mirror-like finish. **True or False**
- Q.19 Radiant heat is transmitted through _____ waves
- Q.20 Ring Test is performed by tapping the grinding wheel from a non-metallic tool at an angle of _____ degree from an imaginary vertical center line

Section –C

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

- Q.21 Lock out/Tagged out
- Q.22 Arc Eye
- Q.23 Name Hazards in Foundry Shop.
- Q.24 Safety Precautions in Resistance Welding.
- Q.25 Safety in blasting operations.
- Q.26 Care in the use of hoses and hose connections in gas welding.
- Q.27 Safe procedures for the use of compressed gas cylinders in gas welding.
- Q.28 Safety in wheel mounting of grinding machine.
- Q.29 Safety in Metal Shears.
- Q.30 Safety in disposal of used cyanide salts
- Q.31 Safety in ladle handling
- Q.32 Hazards associated with electroplating.
- Q.33 Hazards and safety measures of foundry
- Q.34 Difference between hot and cold working
- Q.35 Dressing of Grinding Wheel.

Section-D

Note: Long answer questions. Attempt any two questions out of three questions.

2x10=20

- Q.36 Describe in brief various hazards and safe guards during use of Grinding Wheel.
- Q.37 Safe procedures for charging of die or a drop forging hammer.
- Q.38 Explain the Hazards and Safety measures in the use of Boring Machines & Milling Machines