

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
 a) The metal to be joined or cut
 b) The metal of the electrode
 c) The metal of the conductor wires of the welding machine
 d) None of the above

- Q.2 _____ is not a type of guard used in power presses
 a) Individual die guard
 b) Gate closure device
 c) Sweep device
 d) Safety net

- Q.3 The 'right of workers to warn about imminent danger' is given under _____ of the Factories Act, 1948.
 a) Section 41E
 b) Section 41F
 c) Section 41G
 d) Section 41H

- Q.4 Symptoms of 'welder's flash' or 'arc eye' may include
 a) Sensation of "sand in the eye"
 b) Watering from the eyes
 c) Conjunctivitis
 d) All of the above

- Q.5 First-Aid measure for 'welder's flash' or 'arc eye.'
 a) Flushing the eyes for several minutes with water or saline solution
 b) Use of topical antibiotic eye drop
 c) Routine use of eye patch
 d) All of the above

- Q.6 The following are true for rolling, except
 a) Velocity of metal at exit is same as that at the entry
 b) Grains are elongated in the direction of rolling
 c) After crossing the stress zone the grain starts refining
 d) The greater the coefficient of friction more the possible reduction

- Q.7 In rolling, the pressure is maximum at
 a) Entrance
 b) Exit
 c) Both the extremities
 d) At a point somewhat between the two extremities

- Q.8 In rolling, the point of maximum pressure is called
 a) No slip point
 b) Slip point
 c) Neutral point
 d) Extreme point

- Q.9 Tubes can be manufactured by
 a) Hot forging
 b) Hot spinning
 c) Hot extrusion
 d) Hot rolling

- Q.10 During extrusion of steel, adequate lubrication around the billet is done by providing a coating of
 a) Vegetable oil
 b) Graphite
 c) Water
 d) 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