

1st Year/One Year Post Diploma in Industrial Safety
Branch: Industrial Safety
Subject: Safety in Engineering Industries

Time: 3 Hrs.

Maximum Marks: 100

Section –A

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

- Q.1 Cold working of metal increases
a) tensile strength
b) yield strength
c) hardness
d) all of these
- Q.2 A cylindrical section having no joints is known as ,
a) Seamless
b) Ideal
c) Economical
d) Perfect
- 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 How does welding impact the environment?
a) Welding has no impact on the environment
b) Welding releases harmful gases and pollutants
c) Welding reduces greenhouse gas emissions
d) Welding improves air quality
- Q.5 Which of the following operations in the production of castings gives rise to excessive noise in the foundry?
a) Pouring
b) Shakeout
c) Coating
d) Melting
- Q.6 After dressing a wheel it may be necessary to adjust the _____.
a) Guard
b) Eye shield
c) Tool rest
d) All of these
- Q.7 Which of the following is not an example of a finishing process?
a) grinding
b) broaching
c) lapping
d) honing
- 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 Which type of force is applied through die in forging operation
a) Tensile
b) shear
c) compressive
d) twisting
- Q.10 Safety precaution(s) while using torches is/are
a) Set the regulator to the recommended pressure
b) Keep the blow pipe nozzle near to source of ignition

- c) Both (a) and (b)
- d) None of the above

Section-B

Note: Objective type questions. All questions are compulsory.

10x1=10

- Q.11 Full form of TIG welding.
- Q.12 _____ is a heat treatment process that changes the physical and sometimes also the chemical properties of a material to increase ductility and reduce the hardness to make it more workable..
- Q.13 One should never enter a welding shop without wearing_____
- Q.14 When working in sandblast rooms, employees should be equipped with air-supplied hoods and full body protection. **(True or False)**
- Q.15 While welding, ventilation should be placed as close to the fume source as practical. **(True or False)**
- Q.16 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.
- Q.17 Coal workers' pneumoconiosis (CWP), commonly known as_____, occurs when coal dust is inhaled
- Q.18 _____is inert gases and typically used for the MIG welding of non-ferrous metals such as aluminium.
- Q.19 The function of equalization tank is to equalize the raw effluent emanating from different processing units **(True or False)**
- Q.20 A minor open wound should be washed thoroughly with soap and water. **(True or False)**

Section –C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen questions.

12x5=60

- Q.21 Safety in electric arc welding
- Q.22 Hazards in milling machine
- Q.23 Hazards associated with Cupola Furnace
- Q.24 Safety in disposal of used cyanide salts
- Q.25 Safety in wheel mounting of grinding machine
- Q.26 Difference between hot and cold working
- Q.27 Hazards and Safety Measures during"- electrolytic deposition of Chromium
- Q.28 Care in the use of hoses and hose connections in gas welding
- Q.29 Safety measures in Soldering operation
- Q.30 Hazards associated in sand blasting machine.
- Q.31 Describe types of steel
- Q.32 Hazards and safety measures in high speed steel salt bath.
- Q.33. Safe procedures for the use of compressed gas cylinders in gas welding.
- Q.34 Safety in buffing operation
- Q.35 Safety in disposal of used cyanide salts

Section-D

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

2x10=20

- Q.36 What are the Various Hazards and safety measures of material handling in Foundries
- Q.37 Discuss the Hazards and safety measures in Gas Welding and Cutting.
- Q.38 Discuss in brief the various Hazards & Safety Measures of Rolling Mills