

### SECTION-C

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

- Q.21 Gas Shielded Arc Welding.
- Q.22 Gas poisoning in heat treatment.
- Q.23 Safety in Polishing & Buffing.
- Q.24 Safety in Metal Shears.
- Q.25 Safety in the use of Turning Machines.
- Q.26 Hazards and safety measures in high speed steel salt bath.
- Q.27 Safety measures in Soldering operation.
- Q.28 Safety In ladle handling.
- Q.29 Hazards associated with Cupola Furnace.
- Q.30 Safety Precautions in Resistance Welding.
- Q.31 Hazards & Safety measure Forging operation.
- Q.32 Safety measures in Soldering operation.
- Q.33 Describe in brief various hazards and safe guards during use of Grinding Wheel.
- Q.34 Explosion proof fittings.
- Q.35 Describe types of steel.

### SECTION-D

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

- Q.36 Explain briefly the safety measures to be followed in electroplating operations.
- Q.37 Discuss the Hazards and safety measures in Gas Welding and Cutting.
- Q.38 Discuss the hazards and safety measures of lathe machine.

No. of Printed Pages : 4

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Roll No. ....

### 1st Years/Post Diploma in Industrial Safety

#### Subject:- Safety in Engineer industries

Time : 3Hrs.

M.M. : 100

### SECTION-A

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

- Q.1 Types of feed used in power presses is/are.
  - a) Gravity feed
  - b) push feed
  - c) Dial feed
  - d) All the above
- Q.2 under section 2 (cb) of the factories act,1948 the following is defined.
  - a) Hazardous substance
  - b) Hazardous industry
  - c) Hazardous Zone
  - d) Hazardous Process
- Q.3 The Chapter IV of the Factories Act, 1948 deals on the following.
  - a) Safety
  - b) Provisions relating to hazardous processes
  - c) Welfare
  - d) None of the above
- Q.4 Chip breaker tools are used for.
  - a) Joining of metal chips
  - b) Braking down scrap materials
  - c) Breaking long chips given out during material removal operation
  - d) None of the above

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- Q.5 Drawing operation is defined as.
- Operation of forming sheet metal
  - Operation of material removal
  - Operation of pre-heating material
  - Operation of forming wires
- Q.6 Ladles are used to \_\_\_\_\_ during casting operation.
- Heat molten metal
  - Pre heat metal
  - Pour molten metal
  - Remove slag
- Q.7 Most accidents in grinding operations occur due to \_\_\_\_\_.
- Improper grinding wheels
  - Poor maintenance of grinding machines
  - Improper storage of grinding wheels
  - All of the above
- Q.8 In gas welding \_\_\_\_\_ is used along with a fuel gas.
- Argon
  - Nitrogen
  - Both (a) and (b)
  - Oxygen or air
- Q.9 Safety precaution(s) while using torches is/are.
- Set the regulator to the recommended pressure
  - Keep the blow pipe nozzle near to source of ignition
  - Both a) and b)
  - none of these
- Q.10 "Which of the following forms permanent joints:
- Bolts
  - screws
  - rivets
  - adhesive bonding
  - welding
- (i) and (ii)
  - (i), (ii) and (iii)
  - (iii) and (v)
  - (iv) and (v)

## SECTION-B

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

- Q.11 \_\_\_\_\_ 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.12 \_\_\_\_\_ is defined as the maximum concentration of a chemical allowable for repeated exposure without producing adverse health effects.
- Q.13 \_\_\_\_\_ is the test used to check whether the wheel is cracked or damaged.
- Q.14 Write full form of 5S.
- Q.15 \_\_\_\_\_ is the means by which a crude casting is turned into a cost effective quality component that meets all the standards required by the customer.
- Q.16 Radiant heat is transmitted through \_\_\_\_\_ waves.
- Q.17 Name the BIS standard code for Safety Audit.
- Q.18 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.19 Quenching is a cooling process in which either furnace cooling or ambient air cooling is done. (True or False)
- Q.20 MIG welding uses a non-consumable tungsten electrode with a shielding gas fed through a supply line and a separate, hand held filler rod that is manually fed into the weld pool. (True or False)