

**Skill Development and Entrepreneurship Department**  
**Directorate of Vocational Education and Training**  
**Directorate of Skill Development, Employment and Entrepreneurship**  
**Question Paper Group Name: Mechanical-2**  
**Question Paper Post Names: Craft Instructor – Electroplater**

Duration: 60 Minutes

Total Question: 40

**INSTRUCTIONS**

1. This Question Paper Booklet contents 40 mandatory questions. Candidate should check the Question Paper Booklet and ensure that it contents all pages and questions before starting to answer. If candidate finds any problem pertaining to printing/ binding/ incomplete pages etc, candidate should immediately get the Question Paper replaced from the Invigilator.
2. Candidate has to write his/ her seat number in this block. 

--	--	--	--	--	--	--	--
3. The Question Booklet Number as printed above should be mentioned at the appropriate place on the OMR Answer Sheet.
4. All the Questions are provided with 4 options as 1, 2, 3 and 4. Candidate should select the most correct Option and mention the Option Number on the OMR Answer Sheet in front of the respective Question Number by **fully shading the Option Number with BLACK INK BALL POINT PEN Only.**
5. All Questions carry equal marks i.e. 1 Question has a weightage of 1 marks. Candidate should mind the available time for the examination and solve the questions accordingly.
6. The option shaded once on the OMR Answer Sheet should not be roughed or in any other way changed. Thus cand should take utmost care while marking their options on OMR Answer Sheet. Such changes if any or any attempt to rc change options shall not be checked by the authorities.
7. Marks shall be awarded to the correct answers only during the evaluation of the OMR Answer Sheet. No marks sha. — deducted for registering wrong answers (shading wrong option) or not attempting questions. Thus there is **NO NEGATIVE MARKING SYSTEM.**
8. All the rough work has to be done on the sheet provided for Rough Work in the Question Booklet only. Writing anything on the Question Paper Booklet, OMR Answer Sheet or any other Paper Sheet shall be treated as an unfair means and entitle for action under “**Prohibition of Unfair Practices during examination Ordinance – 1982**”.
9. Method of Shading the Correct Option on the OMR Answer Sheet:

Q.No. 25. How many Centimeters make 1 Meter?

- |          |           |
|----------|-----------|
| (1) 10   | (2) 100   |
| (3) 1000 | (4) 10000 |

The Correct Option for this Question is (1) and hence the (2) option on the OMR Answer Sheet in front of Question Number 25 has to be shaded as following

**USE ONLY BLACK INK BALL POINT PEN FOR SHADING****IMPORTANT**

This Question Paper Booklet and OMR Answer Sheet is the property of the Department and is being handed over to the candidate for examination purpose only in the examination hall.

Any means of copying this Question Paper Booklet or any matter within in part or full, and/or transferring/ circulating during the examination period is prohibited and shall be treated as a means of criminal offence and the respective person shall be booked under “**Prohibition of Unfair Practices during examination Ordinance – 1982**” and shall be entitled for imprisonment for 1 year and / or penalty of Rs. 1000.

Further unauthorized handling, transfer or copying of this Question Paper Booklet and OMR Answer Sheet during examination period by the staff including Departmental Staff and Staff appointed for Examination purpose is also prohibited and entitled for action as per above ordinance.

**THIS QUESTION PAPER BOOKLET AND PART – 1 OF OMR ANSWER SHEET HAVE TO BE SUBMITTED TO THE INVIGILATOR AFTER THE EXAMINATION.**

**SEAL**

1. Class C Fire is due to

- |                      |                          |
|----------------------|--------------------------|
| 1. Wood, Paper Cloth | 2. Metals                |
| 3. Flammable Liquids | 4. Gas and liquefied gas |

2. For skinning the single strand cables, tool used is

- |                  |                      |
|------------------|----------------------|
| 1. Plier         | 2. Screw Driver      |
| 3. Wire stripper | 4. None of the above |

3. An electric device has a resistance of 30 ohms. Voltage to be applied to the device to cause 1.6 ampere of current to flow is

- |               |              |
|---------------|--------------|
| 1. 18.1 volts | 2. 30 volts  |
| 3. 48 volts   | 4. 540 volts |

4. Thickness of wire SWG25 is

- |           |            |
|-----------|------------|
| 1. 25 mm  | 2. 2.50 mm |
| 3. 5.1 mm | 4. 0.51 mm |

5. Which of the following is a part of megger?

- |                       |                     |
|-----------------------|---------------------|
| 1. Small generator    | 2. Ohm meter        |
| 3. Galvanizing system | 4. All of the above |

6. As per BIS and NEC recommendation the height of main and branch distribution boards in electrical wiring should

- |                                       |  |
|---------------------------------------|--|
| 1. Not more than 2 m from floor level | 2. Not less than 2m from floor level   |
| 3. Be 1.3 m above the floor level     | 4. Not less than 2.25 m from the floor |

7. Lugs and terminal are fixed with

- |                       |                  |
|-----------------------|------------------|
| 1. Side cutting plier | 2. Gas plier     |
| 3. Hammer             | 4. Crimping tool |

8. Which of the following is not primary cell?

- |                  |                |
|------------------|----------------|
| 1. Voltaire cell | 2. Edison cell |
| 3. Carbon zinc   | 4. Alkaline    |

9. To bring too accurate size with a high degree of finish a file used is

- |                     |                    |
|---------------------|--------------------|
| 1. Bastard file     | 2. Smooth file     |
| 3. Dead smooth file | 4. Second cut file |

10. To drill holes up to 12.5 mm most suitable machine is

- |                                     |                            |
|-------------------------------------|----------------------------|
| 1. Sensitive bench drilling machine | 2. Pillar drilling machine |
| 3. Column drilling machine          | 4. Radial drilling machine |

11. The flux used in soldering is

- |                      |                     |
|----------------------|---------------------|
| 1. Hydrochloric acid | 2. Zinc chloride    |
| 3. Ammonium chloride | 4. All of the above |

12. Material used to prepare permanent magnets is

- |               |                 |
|---------------|-----------------|
| 1. Soft iron  | 2. Cobalt steel |
| 3. Mild steel | 4. Cast iron    |

13. To improve power factor electric supply company suggests to install

- |                   |                   |
|-------------------|-------------------|
| 1. Inductive load | 2. Capacitor bank |
| 3. Load Bank      | 4. Rheostat       |

14. The size of copper plate used in plate earthing is

- |                       |                       |
|-----------------------|-----------------------|
| 1. 200 X 200 X 2.5 mm | 2. 300 X 300 X 3.5 mm |
| 3. 400 X 400 X 4.5 mm | 4. 600 X 600 X 6.5 mm |

15. Bidirectional switching device is

- |                |                 |
|----------------|-----------------|
| 1. Zener-diode | 2. Diac         |
| 3. Triac       | 4. Diode bridge |

16. Which of the following is comes under brush families

- |                   |                             |
|-------------------|-----------------------------|
| 1. Graphite       | 2. Carbon & carbon graphite |
| 3. Metal graphite | 4. All of the above         |

17.  $\text{Ni Cl}_2 \text{ H}_2\text{O}$  is

- |                       |                       |
|-----------------------|-----------------------|
| 1. Nickel chloride    | 2. Double nickel salt |
| 3. Black nickel salts | 4. Nickel anodes      |

18. Small articles like nuts, both are cleaned by

- |                      |                     |
|----------------------|---------------------|
| 1. Alkaline cleaning | 2. Hand cleaning    |
| 3. Barrel cleaning   | 4. Solvent cleaning |

19. The process in which a mixture of water and abrasives is propelled through a nozzle using compressed air is called

- |                  |                       |
|------------------|-----------------------|
| 1. Wet blasting  | 2. Sand blasting      |
| 3. Shot blasting | 4. Glan bead blasting |

20. Hand chromium is plated to

- |                                      |                     |
|--------------------------------------|---------------------|
| 1. To reduce coefficient of friction | 2. Inverse handers  |
| 3. To withstand high Temperature     | 4. All of the above |

21. A Steel melded tank without rubber lining is used for

- |                   |                   |
|-------------------|-------------------|
| 1. Nickel plating | 2. Silver plating |
| 3. Tin Plating    | 4. Zinc plating   |

22. The electronic process of giving protective coatings to iron and steel surface is

- |                |                |
|----------------|----------------|
| 1. Phosphating | 2. Bheeing     |
| 3. Galranigang | 4. Passivation |

23. Concentration of double nickel salt advised in Nickel plating is

- |                     |                  |
|---------------------|------------------|
| 1. 75-100 gms/litre | 2. 125 gms/litre |
| 3. 300 gms/litre    | 4. 525 gms/litre |

24. Chromatic process is applicable for

- |                    |                     |
|--------------------|---------------------|
| 1. Aluminum alloys | 2. Magnesium alloys |
| 3. Steel           | 4. Copper alloys    |

25. Heavy components are plated by

- |                   |                      |
|-------------------|----------------------|
| 1. Barrel plating | 2. Rack plating      |
| 3. Strip plating  | 4. None of the above |

26. When current passes through a part and acts as an anode is

- |                       |                      |
|-----------------------|----------------------|
| 1. Auto corrosion     | 2. Contact corrosion |
| 3. External corrosion | 4. All of the above  |

27. Non-destructive methods to determine coating thickness is

- |                     |                       |
|---------------------|-----------------------|
| 1. Eddy current     | 2. Magnetic induction |
| 3. Beta backscatter | 4. All of the above   |

28. Highest electrical conductivity is offered by

- |                   |                     |
|-------------------|---------------------|
| 1. Nickel plating | 2. Zinc plating     |
| 3. Silver plating | 4. All of the above |

29. Sodium chloride and Hydrogen Peroxide solution is used to test

- |              |               |
|--------------|---------------|
| 1. Thickness | 2. Porosity   |
| 3. Adhesion  | 4. Appearance |

30. Burnishing test is used to check

- |             |               |
|-------------|---------------|
| 1. Adhesion | 2. Thickness  |
| 3. Porosity | 4. Appearance |

31. The atoning solution Ferric chloride and copper sulphate with water is used to test

- |                    |                    |
|--------------------|--------------------|
| 1. Copper coatings | 2. Lead coatings   |
| 3. Zinc coating    | 4. Cadmium coating |

32. The Etching solution potassium fluoride and resublimed iodine is used to test

- |                   |                   |
|-------------------|-------------------|
| 1. Nickel coating | 2. Silver coating |
| 3. Zinc coating   | 4. Lead coating   |

33. The test used to test corrosion resistance is

- |                            |                         |
|----------------------------|-------------------------|
| 1. Neutral salt spray test | 2. Sulphur dioxide test |
| 3. Corrodokote test        | 4. All of the above     |

34. The scratch test to find out the minimum load required to expose the bare metal

- |                   |                       |
|-------------------|-----------------------|
| 1. Stripping test | 2. Dry film thickness |
| 3. Flexibility    | 4. Adhesive           |

35. The safe concentration limits of zinc oxide as a hazardous metal in

- |                        |                         |
|------------------------|-------------------------|
| 1. 6 mg/m <sup>3</sup> | 2. 15 mg/m <sup>3</sup> |
| 3. 6 ppm               | 4. 15 ppm               |

36. Accelerator used in electrode Nickel baths is

- |              |                 |
|--------------|-----------------|
| 1. Lactates  | 2. Selenic acid |
| 3. Tellurium | 4. Lead ions    |

37. Stabilizers used in steel holes Nickel bath is

- |             |              |
|-------------|--------------|
| 1. Glycerin | 2. Fluorides |
| 3. Pb ions  | 4. Cd ions   |

38. Thickness of electroplating deposit is given by T is equal to

- |   |                    |
|---|--------------------|
| 1. $\frac{\text{Weight of deposit } (W)}{\text{Area } (A) \times \text{Density of deposit } (D)}$ | 2. $\frac{WXA}{D}$ |
| 3. $\frac{WXD}{A}$  | 4. $\frac{W}{A}$   |

39. Which of the following solvent is more toxic?

- |               |             |
|---------------|-------------|
| 1. Chloroform | 2. Methanol |
| 3. Acetone    | 4. Benzol   |

40. Which of the following is not toxic?

- |             |               |
|-------------|---------------|
| 1. Toluol   | 2. Cellosolve |
| 3. Kerosene | 4. Methanol   |

SPACE FOR ROUGH WORK

SEAL