

**Skill Development and Entrepreneurship Department**  
**Directorate of Vocational Education and Training**  
**Directorate of Skill Development, Employment and Entrepreneurship**  
**Question Paper Group Name: Mechanical-10**  
**Question Paper Post Names: Craft Instructor-Sheet Metal Worker**

Duration: 60 Minutes

Total Questions: 40

**INSTRUCTIONS**

1. This Question Paper Booklet contents 40 mandatory questions. Candidate should check the Question Paper Booklet and ensure that it contains 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. 

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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 candidate should take utmost care while marking their options on OMR Answer Sheet. Such changes if any or any attempt to rough/ 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 shall be 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



Correct Method of Shading



Wrong Method of Shading

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

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

1. The standard length of hacksaw blade is

- |                      |                      |
|----------------------|----------------------|
| 1. 200 mm and 250 mm | 2. 250 mm and 300 mm |
| 3. 310 mm and 350 mm | 4. None of above     |

2. Dot punch are used for

- |                       |                              |
|-----------------------|------------------------------|
| 1. Punching operation | 2. To make indentation marks |
| 3. both 1 and 2       | 4. None of above             |

3. The external angle of an octagon is

- |        |        |
|--------|--------|
| 1. 30° | 2. 50° |
| 3. 45° | 4. 60° |

4. Development of cone is done by

- |                         |                       |
|-------------------------|-----------------------|
| 1. Parallel line method | 2. Radial line method |
| 3. Both 1 and 2         | 4. None of above      |

5. The spring back in sheet metal works depends on

- |                      |                 |
|----------------------|-----------------|
| 1. Material of sheet | 2. Thickness    |
| 3. Bending pressure  | 4. All of above |

6. The angle of wire notch is usually

- |        |                  |
|--------|------------------|
| 1. 15° | 2. 20°           |
| 3. 30° | 4. None of above |

7. The allowance is necessary for

- |                             |                     |
|-----------------------------|---------------------|
| 1. Maintaining correct size | 2. Improve strength |
| 3. To avoid cracking        | 4. All of above     |

8. As compared to cold riveting, in hot riveting hole clearance will be

- |          |         |
|----------|---------|
| 1. Equal | 2. More |
| 3. Less  | 4. Zero |

9. Tallow is

- |                   |                  |
|-------------------|------------------|
| 1. Soldering flux | 2. Animal fat    |
| 3. Both 1 and 2   | 4. None of above |

10. For soldering brass, copper and jewellery type of solder used are

- |                  |                      |
|------------------|----------------------|
| 1. Common solder | 2. Fine solder       |
| 3. Coarse solder | 4. Extra fine solder |

11. The splinter used in brazing compared to soldering is

- |                   |                  |
|-------------------|------------------|
| 1. Soft           | 2. Hard          |
| 3. Equal strength | 4. None of above |

12. A maroon colour in welding setup indicates

- |           |                  |
|-----------|------------------|
| 1. Air    | 2. Water         |
| 3. Oxygen | 4. Acetylene gas |

13. For welding brass type of flame used is

- |              |                 |
|--------------|-----------------|
| 1. Neutral   | 2. Carburising  |
| 3. Oxidising | 4. All of above |

14. Cleaning work piece in welding is required for avoiding work to become

- |           |                 |
|-----------|-----------------|
| 1. Porous | 2. Brittle      |
| 3. Weak   | 4. All of above |

15. The strongest joint is

- |                   |                   |
|-------------------|-------------------|
| 1. Bolted joint   | 2. Rivitted joint |
| 3. Soldered joint | 4. Welded joint   |

16. Jigs and fixtures are used for

- |                          |                    |
|--------------------------|--------------------|
| 1. Interchangeability    | 2. Skill reduction |
| 3. Increase productivity | 4. All above       |

17. For under watered gas cutting of steel fuel gas used is

- |           |             |
|-----------|-------------|
| 1. Oxygen | 2. Coal gas |
| 3. LPG    | 4. Hydrogen |

18. Rotary shears are used to cut sheet metal along

- |                  |              |
|------------------|--------------|
| 1. Straight line | 2. Circle    |
| 3. Curved line   | 4. All above |

19. Type of joint used in toys is

- |                  |                  |
|------------------|------------------|
| 1. Screwed joint | 2. Stake joint   |
| 3. Welded joint  | 4. None of above |

20. The fly press is also known as

- |                     |               |
|---------------------|---------------|
| 1. Hand press       | 2. Ball press |
| 3. Automobile press | 4. All above  |

21. Multi start threads are provided on screw of fly press for

- |                            |                        |
|----------------------------|------------------------|
| 1. Slow motion of ram      | 2. Quick motion of ram |
| 3. To increase life of ram | 4. None of above       |

22. In power press, capacity of press is

- |  |                                     |
|--|-------------------------------------|
| 1. Maximum pressure exerted by machine | 2. Maximum force exerted by machine |
| 3. Both 1 and 2                        | 4. None of above                    |

23. Press brakes are designed to bend to a rated capacity depends on die ratio

- |         |        |
|---------|--------|
| 1. 1:1  | 2. 5:1 |
| 3. 1:10 | 4. 8:1 |

24. In press work material removed is job in

- |             |             |
|-------------|-------------|
| 1. Punching | 2. Piercing |
| 3. Blanking | 4. Bending  |

25. In automotive body cleaning, type of abrasives used are

- |                   |                    |
|-------------------|--------------------|
| 1. Aluminum oxide | 2. Silicon carbide |
| 3. Emery garment  | 4. All above       |

26. Radiator is

- |                    |                   |
|--------------------|-------------------|
| 1. Cooling device  | 2. Heating device |
| 3. Increases power | 4. None of above  |

27. Which is not a type of muffler?

- |                   |                  |
|-------------------|------------------|
| 1. Baffle type    | 2. Cooler type   |
| 3. Resonance type | 4. Absorber type |

28. Stainless steel has great resistance to

- |            |                 |
|------------|-----------------|
| 1. Power   | 2. Corrosion    |
| 3. Welding | 4. All of above |

29. Brass is alloy of

- |             |                  |
|-------------|------------------|
| 1. Aluminum | 2. Nickel        |
| 3. Copper   | 4. None of above |

30. Aluminum gives better resistance to atmosphere due to

- |                                       |                  |
|---------------------------------------|------------------|
| 1. White colour                       | 2. Light weight  |
| 3. Formation of protective oxide film | 4. None of above |

31. Plasma sheet metal cutting machine uses following type of tool

- |                 |                  |
|-----------------|------------------|
| 1. HSS          | 2. Carbide       |
| 3. Single point | 4. None of above |

32. The clearance between die and punch is normally expressed in

- |                                    |  |
|------------------------------------|--|
| 1. Percentage of length            | 2. Percentage of thickness of material |
| 3. Percentage of diameter of punch | 4. None of above                       |

33. Which one is not welding defect

- |             |             |
|-------------|-------------|
| 1. Undercut | 2. Overcut  |
| 3. Overlap  | 4. Blowhole |

34. The causes of defect 'crack' in welding is

- |                   |                 |
|-------------------|-----------------|
| 1. Local stress   | 2. Fast cooling |
| 3. Poor ductility | 4. All above    |

35. In TIG welding electrodes used are

- |                                       |   |
|---------------------------------------|---|
| 1. Pure tungsten                      | 2. Tungsten with 1-2 % of thorium oxide |
| 3. Tungsten with 0.3 - 0.5% Zirconium | 4. All above                            |

36. Which one is not a pipe joint?

- |                 |                 |
|-----------------|-----------------|
| 1. Hook's joint | 2. 'L' joint    |
| 3. Y - joint    | 4. Flange joint |

37. Polarity in Arc welding indicates

- |                              |              |
|------------------------------|--------------|
| 1. Current                   | 2. Voltage   |
| 3. Direction of current flow | 4. All above |

38. The abrasive compound for buffing are

- |            |                  |
|------------|------------------|
| 1. Tripoli | 2. Pumice        |
| 3. 1 and 2 | 4. None of above |

39. The elements of costing in sheet metal is

- |                  |                       |
|------------------|-----------------------|
| 1. Material cost | 2. Manufacturing cost |
| 3. Profit        | 4. All above          |

40. Standard wire gauge is used for

- |                                |                     |
|--------------------------------|---------------------|
| 1. Checking thickness of sheet | 2. Diameter of wire |
| 3. 1 and 2                     | 4. None of above    |

SPACE FOR ROUGH WORK

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