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C20-M-106

**7054**

**BOARD DIPLOMA EXAMINATION, (C-20)  
JUNE/JULY—2022**

**DME - FIRST YEAR EXAMINATION**

**WORKSHOP TECHNOLOGY**

Time : 3 hours ]

[ Total Marks : 80

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**PART—A**

3×10=30

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **three** marks.  
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. List any six types of planes.
2. Write the specifications of a chisel.
3. Draw a neat sketch of a stake and name the parts.
4. Write any six operations which can be performed with a drilling machine.
5. List out various types of drills.
6. Write the advantages of casting process.
7. State the properties of good moulding sand.
8. List any six casting defects.
9. Write the advantages of cold working over hot working.
10. Write about spinning.

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**PART—B**

8×5=40

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **eight** marks.  
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) Explain ratchet brace and wheel brace with neat sketches.

**(OR)**

(b) Explain the vernier depth gauge with the help of a neat sketch.

12. (a) Describe the following hand forging operations with neat sketches :

- (i) Setting down
- (ii) Drawing down
- (iii) Upsetting
- (iv) Bending

**(OR)**

(b) Explain soldering and brazing.

13. (a) Explain the twist drill nomenclature with the help of a neat sketch.

**(OR)**

(b) List out the work holding devices used in drilling machines and explain any three with neat sketches.

14. (a) Explain die casting and write its advantages and disadvantages.

**(OR)**

(b) List out various hand moulding tools and explain any four with simple sketches.

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15. (a) Explain the hot rolling processes.

(OR)

(b) List out various types of cold working processes and explain any two with simple sketches.

**PART—C**

10×1=10

**Instructions :** (1) Answer the following question.  
(2) The question carries **ten** marks.  
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

16. Classify wood working machines. Describe vertical band saw with a neat sketch.

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