

## 5046-A

### BOARD DIPLOMA SUPPLEMENTARY (INSTANT) EXAMINATION, (C-16)

JUNE - 2019

# DME - FIRST YEAR EXAMINATION WORKSHOP TECHNOLOGY

Time: 3 Hours [Total Marks: 80

#### PART - A

 $2 \times 15 = 30$ 

#### Instructions:

- (1) Answer any 15 questions.
- (2) Each question carries 2 marks.
- (3) Answer should be brief and straight to the point and shall not exceed five simple sentences.
- 1 Draw a neat sketch of hand saw and name its parts.
- 2 What are the striking tools used in carpentry?
- 3 State any two differences between rip saw and cross cut saw.
- 4 Draw a neat sketch of hack saw and label the parts.
- 5 What is a file? Write the specifications of file.
- 6 What is a tap? Name three types of taps.
- 7 Draw a neat sketch of ball peen hammer and label the parts.
- 8 Draw a neat sketch of anvil and label the parts.
- 9 State any two types of snips used in sheet metal work.
- 10 List out the metals used in sheet metal work.
- 11 What is meant by a seam in sheet metal? Name any two types of seams.
- 12 Draw a twist drill and name the parts.

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- 13 List various materials used for drill bit manufacturing
- 14 List any four drilling machine operations.
- 15 What is pattern?
- 16 What are the two common defects in casting?
- 17 State any two differences between hot working and cold working.
- 18 List any four hot working processes.
- 19 State any two advantages of cold working.
- 20 List out the various methods of extrusion.

#### PART - B

 $10 \times 5 = 50$ 

Instructions:

- (1) Answer any **FIVE** questions.
- (2) Each question carries **TEN** marks.
- (3) Answer should be comprehensive and criterion for valuation is the content but not the length of the answer
- 21 Describe metal jack plane with the help of a neat sketch.
- 22 Explain the construction and working principle of vernier height gauge with a neat sketch.
- 23 Explain the following hand forging operations with neat sketches.
  - (a) Setting down (b) Drawing down (c) Upsetting
- 24 Explain any four stakes used in sheet metal with sketches.
- 25 Draw a neat sketch of radial drilling machine, label the parts and explain their functions.
- What are the types of patterns used in foundry? Explain any four with a neat sketch.
- 27 (a) List various properties of moulding sand and explain any two.
  - (b) List various types of hand moulding tool.
- **28** (a) Explain Direct or Forward extrusion with a neat sketch.
  - (b) List out all the joints used in carpentry and explain any one.

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