

C20-M/RAC-106

7054

BOARD DIPLOMA EXAMINATION, (C-20)

FEBRUARY/MARCH —2022

DME - FIRST YEAR EXAMINATION

WORKSHOP TECHNOLOGY

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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.** Draw a neat sketch of hand saw and name its parts.
- **2.** List out different types of files used in fitting section.
- **3.** Write about seaming. Name any four types of seams used in sheet metal work.
- **4.** List out various types of drilling machines.
- **5.** Write the sequence in which the following operations will be performed (a) boring, (b) drilling and (c) reaming and why?
- **6.** List any six commonly used patterns.
- **7.** List any six hand moulding tools.
- **8.** Write the advantages of green sand mould.
- **9.** State the differences between hot working and cold working.
- **10.** Write short note on hot rolling.

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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) Describe various types of saws used in carpentry work.

OR

- (b) Explain different types of fitting operations.
- **12.** (a) Describe with neat sketch the working of pneumatic hammer.

OR

- (b) Explain any five types of snips used in sheet metal with neat sketches.
- **13.** (a) Describe radial drilling machine with a neat sketch.

OR

- (b) Describe various operations that can be performed on drilling machine.
- **14.** (a) Explain about shell moulding with a neat sketch.

OR

- (b) List the common defects of casting and explain any four among them.
- **15.** (a) Explain with the aid of neat sketch direct and indirect hot working processes.

OR

- (b) Describe the following cold working processes.
 - (i) Spinning
 - (ii) Shot peening
 - (iii) Cold heading
 - (iv) Cold extrusion

PART—C 10×1=10

Instructions: (1) Answer the following question.

- (2) The question carries **ten** marks.
- (3) Answer should be comprehensive and criterion for valuation is the content but not the length of the answer.
- **16.** Describe the following fastening methods used in sheet metal work with neat sketches :
 - (a) Riveting
 - (b) Soldering
 - (c) Spot welding

