

7054

BOARD DIPLOMA EXAMINATION, (C-20) OCTOBER/NOVEMBER—2023

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. State the difference between rip saw and cross cut saw.
- **2.** What is setting of saw teeth? Why is it done?
- **3.** Draw a neat sketch of hacksaw and name its parts.
- **4.** What are the advantages and disadvantages of drilling?
- **5.** Distinguish between drilling and reaming.
- **6.** List any six hand moulding tools used in foundry shop.
- **7.** State the properties of good moulding sand.
- **8.** Write the advantages of green sand mould.
- **9.** What are the advantages of cold working over hot working process?
- **10.** Write short note on hot rolling.

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 wood turning lathe with a neat sketch.

(OR)

- (b) Explain any four types of fitting operations with sketches.
- **12.** (a) Name different types of power hammers. Explain the working of drop hammer with a neat sketch.

(OR)

- (b) Explain any four stakes used in sheet metal with neat sketches.
- **13.** (a) Draw and explain the radial drilling machine with a neat sketch.

(OR)

- (b) Explain any four operations performed on a drilling machine.
- **14.** (a) Explain shell moulding. Write its advantages, disadvantages and applications.

(OR)

- (b) Explain investment casting and state its advantages and disadvantages.
- **15.** (a) Explain indirect extrusion method with a diagram.

(OR)

- (b) Describe the following processes:
 - (i) Hot drawing
 - (ii) Hot piercing

- **Instructions:** (1) Answer the following question.
 - (2) The question carries **ten** marks.
 - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- **16**. (a) Draw and explain four types of seam.
 - (b) Draw and explain the combination set.

