## 7054

#### **BOARD DIPLOMA EXAMINATION, (C-20)**

# MAY-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.** Draw a neat sketch of hand saw and name the parts.
- **2.** List out any six types of planes used in carpentry.
- **3.** List out any six types of files used in fitting.
- **4.** Draw a neat sketch of twist drill and label the parts.
- **5.** Write the differences between drilling and reaming.
- **6.** Write any three advantages of casting.
- **7.** List out six types of moulding sand using in foundry.
- **8.** What is the purpose of core?
- **9.** Define cold working. State its advantages.
- **10.** What is meant by spinning?

**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 wood turning lathe with the help of neat sketch.

(OR)

- (b) Explain any four operations performed in fitting section.
- **12.** (a) Explain the working of spring hammer with a neat sketch.

(OR)

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

(OR)

- (b) Explain any four drilling operations with neat sketches.
- **14.** (a) Explain investment casting and state the advantages.

(OR)

- (b) Explain shell moulding process and state the advantages of shell moulding.
- **15.** (a) Describe the following hot working process with neat sketches:
  - (i) Drawing (Cupping)
  - (ii) Piercing

(OR)

- (b) Describe the following cold working process with neat sketches:
  - (i) Cold extrusion
  - (ii) Cold heading

**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.** What is the difference between hem and seams? Explain various hem joints.

