

C14-M-106/RAC-106

4055

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2017

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. List out any six carpentry process.
- 2. Draw the neat sketches of the following:
 - (a) Mortise and tenon joint
 - (b) Dovetail joint
- **3.** Name the various types of vices used in fitting shop.
- **4.** Define the following:
 - (a) Drilling
 - (b) Boring
- **5.** List any six forging defects.
- **6.** Distinguish between blanking and punching.
- **7.** Sketch the twist drill and label the parts.

- **8.** List any four properties of moulding sand and explain any one of them.
- 9. State the function of risers.
- **10.** Describe the process of hot piercing with a neat sketch.

PART—B

 $10 \times 5 = 50$

Instructions: (1) Answer any **five** questions.

- (2) Each question carries ten marks.
- (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- 11. Explain with neat sketches:
 - (a) Bandsaw
 - (b) Wood planer
- **12.** (a) Describe the use of gauge block.
 - (b) Sketch and describe a V-block.
- **13.** Explain any five types of files used in fitting with neat sketches.
- **14.** Distinguish between open fire and stock fire with neat sketches.
- **15.** (a) Explain any two snips used in sheet metal work with sketches.
 - (b) Explain any two stakes used in sheet metal work with sketches.
- **16.** What are the different work-holding devices used in drilling machine? Discuss any three of them with neat sketches.
- **17.** Discuss, in detail, how plunge-operated hot-chamber die casting machine works.
- **18.** What are the advantages and disadvantages of hot working over cold working?

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