$3 \times 10 = 30$ 



# 6449

# **BOARD DIPLOMA EXAMINATION, (C-16)**

# MARCH / APRIL — 2021

#### DME — FOURTH SEMESTER EXAMINATION

### PRODUCTION TECHNOLOGY - II

Time: Three Hours] [Maximum Marks: 80

# PART-A

**Instructions:** 

- (i) Answer all questions.
- (ii) Each question carries three marks.
- (iii) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.
- 1. Classify milling machines based on constructional features.
- **2.** Draw the line diagrams of following tool holding devices used on milling machine:

Arbor, Collet and Adapter

- 3. List out various gear finishing operations.
- **4.** Define Grade. How does it effect the selection of grinding wheel?
- 5. Write any three differences between Lapping and Honing.
- 6. List out any three limitations of Ultrasonic Machining.
- 7. What are the advantages of plastics over other materials?
- 8. Differentiate between blanking and piercing.
- **9.** Define Jig and Fixture.
- 10. What arc the applications of Jig boring Machine?

**PART-B**  $10 \times 5 = 50$ 

**Instructions:** (i) \*Answer any **five** questions.

- (ii) Each question carries ten marks.
- (iii) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- **11.** Explain Simple Indexing, Compound Indexing and Differential Indexing.

  2+4+4
- **12.** Explain any four methods of heat treatment of gears.  $4\times2.5$
- 13. What are various methods of grinding? Explain any three methods.  $4\times2.5$
- **14.** Explain Electrical Discharge Machining with a neat sketch. List out its advantages and disadvantages. 3+3+2+2
- **15.** Explain any four forming techniques of plastics.  $4\times2.5$
- **16.** What are different types of dies? Explain any two with sketches. 2+4+4
- **17.** Explain any five types of clamps used in Jigs and Fixtures.
- **18.** Explain any four hole location methods used on Jig boring Machine.

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