

**6449****BOARD DIPLOMA EXAMINATION, (C-16)****MARCH / APRIL — 2021****DME — FOURTH SEMESTER EXAMINATION****PRODUCTION TECHNOLOGY - II***Time : Three Hours]**[Maximum Marks : 80***PART-A**

3×10=30

- 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 are the applications of Jig boring Machine?

- * **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. 4×2.5
13. What are various methods of grinding ? Explain any three methods. 4×2.5
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. 4×2.5
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. 10
18. Explain any four hole location methods used on Jig boring Machine. 10

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