

4654

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2021

DME - FIFTH SEMESTER EXAMINATION

PRODUCTION TECHNOLOGY - III

Time: 3 hours [Total Marks: 80

PART—A

 $4 \times 5 = 20$

Instructions:

- (1) Answer any five questions.
- (2) Each question carries **four** marks.
- (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- **1.** State the advantages and limitations of non-conventional machining over conventional machining.
- 2. State any three advantages of electric discharge machining.
- **3.** State the principles of chemical machining.
- **4.** What are the advantages of plastics over other materials?
- **5**. How are the plastics extruded?
- **6**. What is meant by power press?
- 7. State the difference between compound die and combination die.
- **8.** What is the function of drill bush?
- **9.** What are the advantages of using jigs and fixtures?
- **10.** What is button boring?

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Instructions: (1) Answer any four questions.

- (2) Each question carries fifteen marks.
- (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- **11.** Describe the ultrasonic machining with a neat sketch. State its applications, advantages and limitations.
- **12.** Explain the abrasive jet machining with a neat sketch. State its advantages and disadvantages.
- **13.** Describe the process of injection moulding with a neat sketch.
- **14.** Explain different stages involved in lamination of sheets with a line diagram.
- **15.** Explain the clearances for blanking and piercing operations with neat sketches.
- **16.** Define spring back. Explain the method used to compensate for its harmful effects.
- **17.** Explain different types of clamp used in jigs and fixtures.
- **18.** Explain the working of a cross rail-type jig boring machine with a neat sketch.

