

C14-M-506

4654

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2018 DME—FIFTH SEMESTER EXAMINATION

PRODUCTION TECHNOLOGY—III

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. Define—(a) transducer and (b) abrasive slurry used in USM.
- 2. Give the classification of modern machining processes.
- 3. What are the applications of laser beam machining?
- 4. What are the types of plastic? Give an example for each.
- **5.** Write a short note on calendaring.
- **6.** List out the forming operations.
- **7.** Write briefly about the bend allowance.

- 8. What are the elements of jigs and fixtures?
- 9. Write about drawing operation.
- **10.** What is meant by jig boring?

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. Describe the working of LBM with neat sketch.
- **12.** (a) Write any three advantages and three disadvantages of abrasive jet machining.
 - (b) Write the application of abrasive jet machining.
- **13.** Describe the process of injection moulding with a neat sketch.
- **14.** Describe the process of transfer moulding with a neat sketch.
- **15.** List out the cutting operations of press tools and explain any three of them with neat sketches.
- **16.** List out the types of fixture and explain boring fixtures with a neat sketch.
- **17.** What is meant by clamping? What are the basic principles of clamping?
- **18.** Explain the working of open front jig boring machine with a sketch.

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