

## C14-M-506

# 4654

# BOARD DIPLOMA EXAMINATION, (C-14) OCT/NOV-2017 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. Write the classification of modern machining process.
- 2. Mention any four advantages of laser beam machining process.
- 3. Draw the neat sketch for the principle of EDM.
- **4.** List out any six properties of plastics used in engineering applications.
- **5.** What is meant by thermosetting plastics? Give any two examples of thermoplastics used in our daily life.
- **6.** What is meant by power press?
- **7.** What is meant by blanking operation?

- 8. What are jig and fixtures?
- **9.** List out any four types of fixtures.
- **10.** State the functions of a jig boring machine.

#### 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 USM with a neat sketch.
- **12.** What are the advantages and disadvantages of electric discharge machining?
- **13.** Explain (a) blow moulding and (b) flash-type compression moulding.
- **14.** (a) Draw the neat sketch for manufacturing of rods or tubes in plastics.
  - (b) What are the advantages of extrusion?
- **15.** Explain compound die with a neat sketch.
- **16.** Explain leaf jig with a neat sketch.
- **17.** Write briefly about any three types of clamps with neat sketch.
- **18.** Explain the working of a cross rail-type jig boring machine with a neat sketch.

\* \* \*