

CO9-M-402

## 3502

# BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2017 DME—FOURTH SEMESTER EXAMINATION

## MANUFACTURING TECHNOLOGY—II

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.** State the principle of gear shaving.
- 2. Write the classification of milling machines.
- **3.** What are the uses of the following milling cutters?
  - (a) Form-milling cutter
  - (b) Shell-end mill
  - (c) Metal-slitting saw
- 4. What is meant by 'superfinishing'?
- **5.** List out any three special purposes of grinding machines.
- **6.** List any three functions of dielectric fluid used for EDM.
- **7.** List different methods of plastic welding.

- 8. What are the advantages of using jigs and fixtures?
- 9. Name different types of drill jigs.
- **10.** Write the situation where jig boring machines are needed.

### 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.** Explain the detailed procedure to cut spur gear on milling machine.
- **12.** What are the various milling attachments used? Explain any one in detail.
- **13.** Explain powder method of metal spraying with the help of a sketch.
- **14.** Explain the principle of laser beam machining with a sketch and state its advantages and limitations.
- **15.** (a) Draw a sketch of moulding press and label the parts.
  - (b) Describe the principle of extrusion moulding with a sketch.
- **16.** (a) Explain progressive die with a sketch.
  - (b) Explain compound die with a sketch.
- 17. How are presses classified? Explain any one with a neat sketch.
- **18.** (a) List and explain various types of work-holding devices used in grinding.
  - (b) What are the different types of jig boring machines? Explain any one of them.

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