

C14-M-406

4482

BOARD DIPLOMA EXAMINATION, (C-14) OCT/NOV-2016

DME—FOURTH SEMESTER EXAMINATION

PRODUCTION 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. List various types of milling machine.
- 2. Name any six important parts of milling machine.
- 3. What are various types of tool-holding devices used in milling?
- 4. State the differences between lapping and honing of gear teeth.
- **5.** Write various gear-finishing operations.
- **6.** What is bonding material? Mention any two commonly used bonding materials.
- **7.** State the advantages and limitations of grinding.

- 8. State the working principle of an optical flat.
- **9.** List out the application of honing.
- 10. Define sine bar and state its uses.

PART—B

 $10 \times 5 = 50$

5

5

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.** Draw a neat sketch of a horizontal milling machine and explain the functions of its parts.
- **12.** State various milling operations and explain any four of them in detail.
- **13.** Discuss various work-holding devices with a neat sketch of a milling machine.
- 14. Explain gear shaping using pinion cutter.
- 15. State the advantages and limitations of centerless grinding.
- **16.** Draw neat sketch of a horizontal spindle surface grinder. Name the parts and explain their functions.
- **17.** (a) State the different methods of surface measurement.
 - (b) Explain any one method of coating by hot dipping.
- **18.** (a) State the advantages of mechanical comparator over optical comparator.
 - (b) Describe the working principle of pneumatic comparator, stating its advantages.

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