



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

3×10=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

10×5=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. 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. 5

(b) Describe the working principle of pneumatic comparator, stating its advantages. 5
