

C14-M-406

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BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—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 out different types of milling machine.
- 2. Explain briefly metal slitting saw.
- **3.** List any six milling operations.
- **4.** State any three differences between gear forming and gear generating.
- **5.** Write various gear finishing operations.
- **6.** What is the principle of superfinishing?
- **7.** Write any three advantages of centreless grinding.

8. What is anodizing? Write its purpose. **9.** What is a comparator? Write its uses. **10.** Write any three types of mechanical comparator. 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. List various types of milling cutter and explain briefly any two with neat sketches. 12. Write different attachments used on milling machine and explain any two with neat sketches. **13.** (a) Discuss briefly various work-holding devices used on milling machine. 5 (b) Draw a neat sketch of horizontal milling machine and label 5 the parts. 14. Explain briefly the methods of heat treatment of gears. **15.** Draw a neat sketch of vertical spindle rotary table surface grinder and label the parts, and explain their functions. **16.** Describe the principle of honing with a neat sketch and write the advantages, disadvantages and applications.

18. Describe the working of profilometer and state its uses.

17. (a) Explain various types of organic coating.

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(b) Write the principle of reed-type mechanical comparator.

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