

4482

BOARD DIPLOMA EXAMINATION, (C-14) JUNE—2019

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 any three materials used for making milling cutters.
- 2. Explain briefly about angular milling cutters.
- **3.** List out various milling attachments.
- 4. Why gears are heat treated? What are defferent methods employed for gear teeth heat treatment?
- **5.** Write various gear making methods.
- **6.** Describe the principle of metal spraying.
- 7. Write the differences between laping and honing.
- **8.** Write any three differences between centre type grinding and centre less grinding.
- **9.** Write the applications of autocollimator.
- **10**. What are the methods used to measure surface roughness?

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.** Draw a neat sketch of vertical milling machine and explain the functions of each part.
- **12.** Explain briefly various tool holding devices on milling machine with neat sketch.
- **13.** What is an indexing? Explain the principle of simple indexing.
- **14.** Explain the operation of gear hobbing with a neat sketch and state its advantages.
- **15.** What are various methods of grinding. Explain with a neat sketch the principle of centre less grinding.
- **16.** Draw a neat sketch of horizontal spindle surface grinder, label the parts and write their functions.
- **17.** (a) Describe electroplating.
 - (b) Write the principle of an optical flat.
- **18.** Describe with neat sketch the working of sigma mechanical comparrator.

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