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**4482****BOARD DIPLOMA EXAMINATION, (C-14)  
MARCH/APRIL-2019  
DME - FOURTH SEMESTER EXAMINATION  
PRODUCTION TECHNOLOGY – II**

Time: 3 Hours ]

[Max. Marks : 80

**PART -A****3x10=30M**

**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) Explain the working principle of milling machine.
- 2) Define the term cutting speed and feed as applied to milling.
- 3) List out various attachments used on milling machine.
- 4) What is the necessity of gear finishing?
- 5) What are the advantages of gears made of plastic material?
- 6) Define grade. How it effects the selection of grinding wheel.
- 7) Describe the principle of super finishing.
- 8) Write any three advantages of centre less grinding.
- 9) What are the most commonly used dimensional measurements?
- 10) State the working principle of optical flat.

**PART-B**

**5x10=50M**

- 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 answer
- 11) List out different types of milling cutters and explain any three with neat sketches.
  - 12) Explain vertical milling machine with line diagram.
  - 13) (a) Explain the principle of simple indexing with line diagram.  
(b) Calculate indexing for 35 division.
  - 14) Write the principle of gear and explain the operation of gear hobbing machine.
  - 15) What are the different types of wheel maintenance methods and explain only dressing.
  - 16) Explain vertical spindle rotating table surface grinding machine.
  - 17) Explain the working of autocollimator with detailed diagram.
  - 18) a) Explain optical flat method of measuring surface roughness.  
b) Explain parkerising method of metal coating.

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