



# 4452

## BOARD DIPLOMA EXAMINATION, (C-14) OCTOBER/NOVEMBER-2018 DME-FOURTH SEMESTER EXAMINATION

### MANUFACTURING TECHNOLOGY-II

Time: 3 Hours] [Total Marks: 80

#### **PART-A**

3X10=30

Instructions:

- 1. Answer **All** questions.
- 2. Each question carries **Three** marks.
- 3. Answer should be brief and straight to the point and shall not exceed five simple sentences.
- 1. Name any six important parts of milling machine?
- 2. Define the term cutting speed and feed as applied to milling?
- Find out the indexing movement required to mill a square shaped block by direct indexing.
- 4. What is the necessity of gear finishing?
- 5. Write various gear finishing operations?
- 6. Define 'grade'. How it effects the selection of grinding wheel?
- 7. Write any three advantages of centreless grinding?
- 8. What is anodizing and where it is done?
- 9. List out different instruments used for linear measurement?
- 10. Write the application of autocollimator?

#### **PART-B**

10X5=50

#### Instructions:

- 1. Answer any **Five** questions.
- 2. Each question carries **ten** marks.
- 3. Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer
- 11. State and explain any vive milling operations with neat sketches?
- 12. Discuss briefly various tool holding devices on milling machine?
- 13. Sketch and explain vertical milling machine with a line diagram?
- 14. Explain various method of heat treatment of gears?
- 15. What are the various methods of grinding? Sketch and explain and internal grinding operations.
- 16. What are the various method of grinding? Sketch and explain and internal grinding operations.
  - a. Oil base paints
  - b. Lacquers
  - c. Enamels
  - d. Varnishes
- 17. (a) Distinguish between honing and lapping?
  - (b) Describe the working principle of interference microscope a neat sketch?
- 18. With the aid of diagram, explain the principle of operation of interferometer?

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