



4754

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

COMPUTER AIDED MANUFACTURING

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. Define computer aided manufacturing write any three benefits of CAM.
- 2. Define MRP-II write its two basic characteristics.
- 3. Differentiate between NC, CNC systems.
- 4. Write shot notes on Recirculatory ball screw.
- 5. Draw the block diagram of CNC system and name the components.
- 6. What is a canned cycle?
- 7. What is an interpolation? List the types of interpolation.
- 8. Write the necessity of CIMS in a manufacturing industry.
- 9. What are the advantages of CNC CMM?
- 10. What is an end effector? List different types of grippers?

PART-B

10X5=50

Instructions:

- 1. Answer any **Five** questions, choosing at least one from each section.
- 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. Explain Computer Integrated production system.
- 12. Explain MRP-I by using suitable block diagram.
- 13. Explain in details about basic components of a NC system.
- 14. Explain the types of slide ways used in CNC machines.
- 15. Explain the types of statements used in APT programming.
- 16. Differentiate between Manual part programming and Computer aided part programming.
- 17. Explain the construction & working of Bridge type CNC CMM with neat sketch.
- 18. Explain the components of a Robot with neat sketch.
