4760

BOARD DIPLOMA EXAMINATION, (C–14)
MARCH/APRIL—2018
DME—SIXTH SEMESTER EXAMINATION

COMPUTER-AIDED MANUFACTURING

Time : 3 hours]   [*Total Marks* : 80

PART—A   3×10=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. What are the advantages of CAM?

2. Define *(a)* MRP-I and *(b)* MRP-II.

3. Draw the layout of NC system.

4. What are slide ways? List out the types of slide ways used in NC machines.

5. Write the specifications of a CNC turning centre.

6. Write a short note on subroutine.

7. What is a miscellaneous function? Give two examples.

8. Define *(a)* CIMS and *(b)* FMS.

9. Write any three advantages of CNC-CMM.

10. What is an artificial intelligence?

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. Explain integrated CAD/CAM concept.

12. *(a)* What is a computer-integrated production system?

(b) What are the features and advantages of a computer-integrated production system?

13. *(a)* Describe the working of recirculatory ball screw used in NC machines.

(b) Differentiate between NC and CNC.

14. What are the types of statements used in APT programming? Explain in detail.

15. Explain the manufacturing methodology on NC system.

16. Write a part program for the profile given by using G-codes and M-codes assuming suitable data (all dimensions are in mm) :
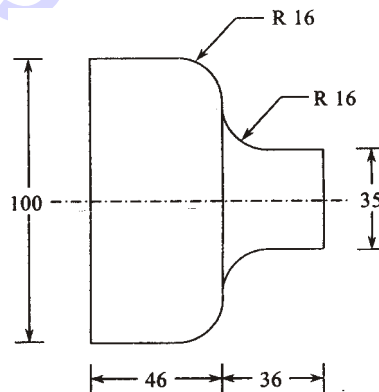
17. Explain the features of CIMS.

18. Explain the basic components of robot with a neat sketch.

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