C09–M–**604**

3782

BOARD DIPLOMA EXAMINATION, (C–09)
OCT/NOV—2017
DME—SIXTH SEMESTER EXAMINATION

CAD/CAM

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. Write the advantages of CAD.

2. Write the types of output devices.

3. Write the list of cursor control devices used in CAD systems.

4. Define an encoder. Give two examples.

5. Distinguish between NC and CNC.

6. What is machining centre? Write the types of machining centre.

7. Define word address format. Give an example of NC instruction (block) written in word address format.

8. Explain briefly about canned cycle for turning.

9. Define flexible manufacturing system (FMS).

10. Explain the function of coordinate measuring machine.

**PART—B** 10×5=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. *(a)* How the computers and other peripheral devices share the information in a network?

    (b) Explain briefly with a neat sketch various types of layout of LAN. 5+5

12. Explain MRP–I and MRP–II by using suitable block diagram.

13. *(a)* Describe the working of an automatic tool changer with a sketch.

    (b) Define tool magazine. Describe the working of tool magazine. 5+5

14. Explain manufacturing methodology on CNC machining.

15. Write a part program for the component shown in the figure. The machining parameters are given below (dimensions are in mm) :
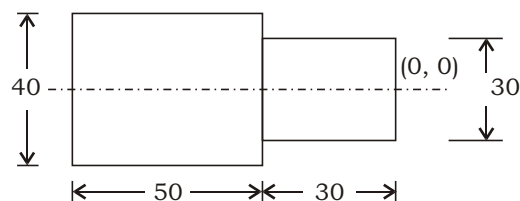
Cutting speed = 800 r.p.m.
Feed = 200 mm/min
Max. depth of cut = 3 mm

16. Explain briefly the linear and circular interpolation. Give one example for each.

17. *(a)* Describe the main features of CNC, CMM with neat sketch for each.

(b) What are the advantages of CNC, CMM? 5+5

18. Write the classification of robots and their advantages.

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