C09–M–**604**

3782

BOARD DIPLOMA EXAMINATION, (C–09)

MARCH/APRIL—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. Define CAD.

2. List out any four functions of CAM.

3. What is material requirement planning?

4. List out any four applications of NC machines.

5. What are the functions of CNC?

6. List out the components of DNC system.

7. List out the categories of commands in CNC part programming.

8. What is the use of preparatory function in CNC part programming?

9. What are the components of FMS?
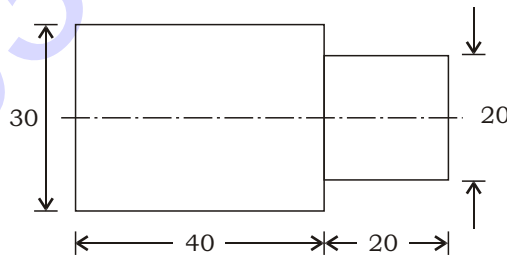
10. List out any four advantages of FMS.

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. What is graphic work station? State its components.

12. Explain any four output devices in detail.

13. Explain the steps followed in NC manufacturing.

14. What is tool magazine? Describe the working of tool magazine with neat sketch.

15. What is tool nose radius compensation? What is its necessity in programming?

16. Write a part program for the component shown in the figure below. The machining parameters are given below (All dimensions are in mm) :

Cutting speed = 600 r.p.m.
Feed = 1·50 mm/min
Depth of cut should not exceed 2 mm

17. Explain in brief about coordinate measuring machine.

18. Explain degrees of freedom with respect to ROBOT.

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