



C09-M-604

3782

**BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2016
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 down the advantages of computer integrated production system.
2. List out the limitations of CAM system.
3. List out various softwares used for CAD/CAM.
4. What are the drawbacks of NC machines?
5. State the function of machine control unit in NC machine tools.
6. Give the major specifications of a CNC machining centre.

7. Write down the tasks performed by preparatory functions.
8. State the purpose of post-processing in computer-assisted part programming.
9. Mention any three limitations of CIMS.
10. List out the benefits of FMS.

PART—B

10×5=50

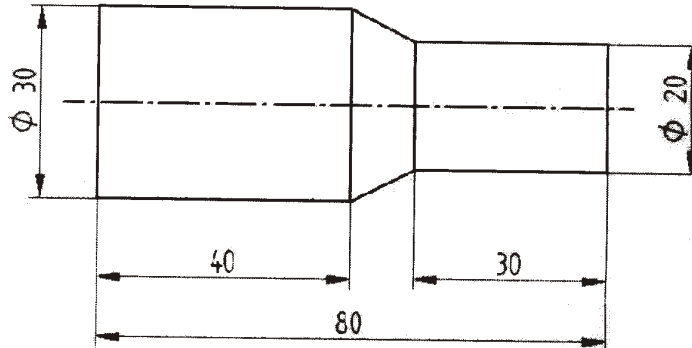
Instructions : (1) Answer *any five* questions.

(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) Give the detailed classification of output devices. 3
 (b) What is a plotter? How does platter work? 7
12. What do you understand by CAD? Write down reasons for implement CAD in industry.
13. (a) Explain construction and working of recirculating ball screw.
 (b) How is it better than an ordinary lead screw?
14. Explain the features of numerical control systems in detail.
15. (a) What is tool nose radius compensation?
 (b) Discuss when it is used and how it is included in the part program.

16. Write a part program for the component shown in the figure below :



Work material : mild steel, work size : 32 mm dia, length : 90 mm, speed : 800 r.p.m., feed 200 mm/min. Depth of cut 2 mm. Assume all other data.

17. Describe the features of CNC CMM with a neat sketch.
18. (a) Draw the neat sketch of an industrial robot and show its salient parts.
- (b) What are the advantages and limitations of a robot?
