



C09-M-604

**3782**

**BOARD DIPLOMA EXAMINATION, (C-09)**

**OCT/NOV—2013**

**DME—SIXTH SEMESTER EXAMINATION**

CAD/CAM

*Time : 3 hours ]*

*[ Total Marks : 80*

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**PART—A**

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **three** marks.  
(3) Answers should be brief and straight to the point.

1. Define the terms CAD and CAM.
2. State the advantages of CAD.
3. Write any two cursor control input devices used in CAD system.
4. Write any three differences between CNC and DNC.
5. What is an automatic tool changer?
6. Define 'numerical control'.

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7. Define 'subroutine'. State its applications in CNC programming.
8. Define 'computer-aided part programming'.
9. Define 'flexible manufacturing system'.
10. Mention any three advantages of CIMS.

**PART—B**

- 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. How do the computers and author peripheral devices share the information in network? Explain briefly with a neat sketch the various types of layout of LAN.
  12. Explain various phases in computer-aided design process by using line diagram.
  13. (a) Explain briefly with neat sketch the features of CNC machining center.  
(b) What are the maintenance aspects of CNC machine?
  14. (a) Describe various types of spindle drive.  
(b) Explain about the hydrostatic slide ways with neat sketch.
  15. (a) Explain the reference point and zero point.  
(b) Explain briefly the linear interpolation and circular interpolation. Give one example for each.

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- 16.** What are the types of statements used in APT programming? Explain them in brief.
- 17.** Define CIMS. Explain the necessity of CIMS in a manufacturing industry.
- 18.** Draw the neat sketch of industrial ROBOT, label its parts and explain the functions of each part of the ROBOT.

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