Roll No. | | | | | | | | | | | |

Total No. of Questions : 18

Total No. of Pages : 02

B.Tech. (ME) (2012 Onwards) (Sem.–5)

COMPUTER AIDED DESIGN AND MANUFACTURING

Subject Code : BTME-502

M.Code : 70603

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Answer briefly :

1. List down various functions of a graphic package.
2. What is a graphic standard IGES stands for?
3. Explain using suitable examples application of Geometrical transformations.
4. What is CSG in GM?
5. Define and give equation of B-spline curve.
6. List down certain points related to recent development in FEM.
7. Give the advantages of CNC over NC machine.
8. Explain the concept of fixed zero and floating zero.
9. What is a part family?
10. Give benefits of FMS.

SECTION-B

11. Discuss with suitable examples various application areas of CAD.

12. Using suitable 2D examples explain various types of Geometric transformations.

13. Explain how mass and volumetric properties calculation is done for parametric modeling technique?

14. Give differences between Bezier and B-spline curves.

15. Write a short note on Combined DNC/CNC system.

SECTION-C

16. a) Explain the concept of Group technology machine cells.

    b) How group technology can be implemented in industries?

17. Discuss the concept and benefits of CAPP and also explain its types.

18. a) Explain the basic concept of CIMS using flexibility.

    b) Discuss the physical components of an FMS.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.