Roll No. | | | | | | | | | | | | | Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(PE) (Sem.–1)

COMPUTER AIDED DESIGN & MANUFACTURING

Subject Code : PE-505

M.Code : 39006

Time : 3 Hrs. Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. **Attempt any FIVE questions out of EIGHT questions.**
2. **Each question carries TWENTY marks.**

1. a) Discuss in detail with suitable diagrams various input devices used in CAD/CAM systems. (10)

   b) Discuss the role of hardware integration and networking in CAD/CAM industry. (10)

2. a) Discuss the software configuration of a graphic package. (10)

   b) Discuss with suitable examples industrial application of CAD/CAM software. (10)

3. Discuss in details several features of Microprocessor based CAD/CAM systems. (20)

4. a) Explain the differences between analytical and synthetic curve. (10)

   b) What is a wire-frame model and explain hidden line removal concept in it? (10)

5. a) Explain what do you mean by parametric representation of analytical surfaces? (10)

   b) What is a solid model and how it is different from surface model? (10)

6. What is Geometric Transformation? And discuss its design and application using suitable example. (20)

7. a) Discuss the general basic rules used in assembly of Mechanical parts. (10)

   b) Give the advantages of CNC machines over the NC machines. (10)

8. a) Discuss the basic NC procedure. (5)

   b) Discuss the concept of tool path generation in CNC machines. (15)

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.