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

Total No. of Questions : 08

M.Tech.(CAD/CAM) (Sem.–2)
COMPUTER INTEGRATED MANUFACTURING SYSTEM
Subject Code : ME-506
M.Code : 23510

Time : 3 Hrs.   Max. Marks : 100

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

1. a) What is a production system? Discuss the applications of computers in production system.   10

    b) Discuss the need and advantages of CAD/CAM integration.   10

2. a) What is meant by flexibility? Discuss various types of flexibility desirable in manufacturing system.   12

    b) What is the role of networking in manufacturing environment?   8

3. a) What are the components of a FMS? Discuss the issues in design of FMS'?   12

    b) How integration of different elements in CIMS is achieved?   8

4. Discuss the factors considered in design of AS/RS system. Also discuss the storage policies for calculation of storage space.   20

5. a) Discuss the application of GT in CAPP.   6

    b) Discuss the rank order clustering technique of machine-part grouping using 8 machines × 8 components situation.   14

6. a) What are the different types of sensors used in automation1? How are these integrated in CIMS?   10

    b) "*Concurrent engineering can help in improving the product quality and productivity*". Comment on this statement.   10

7. a) Discuss the use of computers in shop floor control.   12

    b) What are the issues in use of rapid prototyping technologies?   8

8. Discuss the MIS for a CIMS environment.   20

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.