

B.E/B.Tech. (Full-time) DEGREE EXAMINATION, OCT/NOV 2011

Sixth Semester

Industrial Engineering

IE9352 – Principles of Computer Integrated Manufacturing

Answer ALL questions

PART A – (10 x 2 = 20)

1. What is group technology?
2. Name three production situations in which FMS technology can be applied
3. What is manual assembly line?
4. What is an automated production line?
5. What is computer aided design?
6. What is concurrent engineering?
7. List the advantages of fibre optical cable in computer network
8. What are the needs of communication in CIM environment?
9. Give few examples for manufacturing data
10. Differentiate between relational structure and hierarchical structure data base

PART-B (5 x 16 = 80)

11. Explain i) FMS Planning and design issues and ii) FMS operational issues

- 12 a) i) Describe the work part transfer mechanism in automated production lines (8)
ii) Discuss the applications of Automated production lines (8)

OR

- 12 b) i) Explain the system configuration in the automated assembly systems (8)
ii) Explain the parts delivery at workstations in automated assembly systems (8)

13 a) Explain the computer aided process planning

OR

13 b) Describe the lean production and waste in manufacturing

14 a) Describe the seven layers – OSI model

OR

14 b) Explain about the network topologies used in LAN

15 a) Explain the operations of DBMS with the an example

OR

15 b) Explain the meaning of the following terms

i) Data ii) Data base iii) DBMS iv) RDBMS