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Question Paper Code : 42858

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2018
Seventh Semester
Mechanical Engineering
ME 2402 – COMPUTER INTEGRATED MANUFACTURING
(Regulations 2008)
(Common to PTME 2402 – Computer Integrated Manufacturing for BE
(Part-Time) Sixth Semester – Mechanical Engineering – Regulations 2009)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions.

PART – A

(10×2=20 Marks)

1. Write the various methods for representing the solids.
2. Mention the reasons for implementing CAD.
3. Write the importance of CIM.
4. What are all the components of a LAN ?
5. Define : Cellular manufacturing.
6. Define Part family.
7. What is an FMS ?
8. Distinguish between PULL and PUSH systems.
9. List the Activities of production planning.
10. Define the term DDC.

PART – B

(5×16=80 Marks)

11. a) i) What are homogeneous co-ordinates ? How the composition of 2D Transformations can be carried out ? (6)
ii) What is CAD ? Discuss the various design related tasks performed by CAD. (10)

(OR)



- b) i) Discuss the computer graphics display devices. (10)
ii) List the benefits and applications of CAD. (6)
- a) i) Compare the characteristics of various LAN topologies. (6)
ii) List the various benefits of implementing a CIM system. (10)

(OR)

- b) i) Compare the characteristics of various guided transmission media. (8)
ii) Write short notes on : (8)
1) Multiplexers
2) Synchronous transmission

- a) i) Explain the criteria for selecting a CAPP system. (10)
ii) List out the factors should be considered while selecting a suitable coding system. (6)

(OR)

- b) Discuss the various benefits of implementing a GT in a firm. Also bring out the advantages and limitations of using GT. (16)

- a) i) List and explain the functions of the Material handling systems in a FMS. (8)
ii) Discuss the types of data collected by FDC. (8)

(OR)

- b) i) Distinguish between Dedicated FMS and Random order FMS. (8)
ii) Write short notes on : (8)
1) CODE 39
2) Functions of SFC

- a) i) Explain the problems associated with the traditional production planning and control. (8)
ii) How the input and output variables are classified in structural model of manufacturing ? (8)

(OR)

- b) i) List the benefits of MRP. (8)
ii) Explain the optional distributed control with neat sketch. (8)