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# Question Paper Code : 23859

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2018.

Seventh Semester

Mechanical Engineering

ME 2402 — COMPUTER INTEGRATED MANUFACTURING

(Regulations 2008)

(Common to PTME 2402 — Computer Integrated Manufacturing for B.E. (Part-Time) Sixth Semester – Mechanical Engineering – Regulations 2009)

Time : Three hours | Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List the most desirable features of CAD package.
2. Identify the four application areas of CAD system.
3. What are the types of communication in CIM?
4. Give some network topologies used in CIM.
5. Write down the benefits of Group Technology.
6. State the objectives of cellular manufacturing.
7. Mention the purpose of factory data collection system.
8. What are the design considerations in material handling?
9. Write the need for cost planning and control.
10. List the major components of Direct Digital Control (DDC).

PART B — (5 × 16 = 80 marks)

11. (a) (i) Elaborate on common editing features available on a CAD system. (10)

(ii) Describe the features of CAD packages. (6)

Or

(b) (i) Show and explain typical CAD command structure. (10)

(ii) Compare wireframe versus solid modeling. (6)

12. (a) (i) Outline the functions of computer in CIM system. (10)

(ii) Write down the benefits of CIM. (6)

Or

(b) Discuss the various CIM data transmission methods, in detail. (16)

13. (a) Narrate the methods of parts classification and coding system. (16)

Or

(b) Explain the approaches used to Computer Aided Process Planning (CAPP). (16)

14. (a) (i) Describe the three phases of shop floor control system. (10)

(ii) Summarize the principal components of automatic identification technologies. (6)

Or

(b) Elaborate on components of Flexible Manufacturing System (FMS). (16)

15. (a) (i) Explain the functions of traditional production planning and control. (10)

(ii) Show the structure of Material Requirements Planning (MRP). (6)

Or

(b) (i) Discuss lean manufacturing. (10)

(ii) Explain any two process control strategies. (6)

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