

Total No. of Printed Pages:2

SUBJECT CODE NO:- H-1711
FACULTY OF SCIENCE AND TECHNOLOGY
M.E. (Mechanical)
Elective-IV: Computer Integrated Manufacturing
(REVISED)

[Time: Three Hours]

[Max. Marks: 80]

Please check whether you have got the right question paper.

- N.B
1. Solve any three questions from each section.
 2. Figures to the right indicate full marks.
 3. Assume suitable data wherever necessary and state it correctly.

Section A

- | | | |
|-----|---|----|
| Q.1 | a) What is CIM? Explain in detail. | 07 |
| | b) What in manufacturing automation protocol? | 06 |
| Q.2 | a) What is Group Technology (G.T)? | 07 |
| | b) What are part families? How they are classified and coded? | 06 |
| Q.3 | a) Discuss the two approaches to computer aided process planning (CAPP). | 07 |
| | b) What is cellular manufacturing? | 06 |
| Q.4 | What is Flexible Manufacturing System (FMS)? Discuss its components, types, layout and material handling and storage systems. | 13 |
| Q.5 | Write short notes on: (any two) | 14 |
| | a) OPITZ coding system | |
| | b) Role of process planning in CAD/CAM integration | |
| | c) Bar Code Technology | |

Section B

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|-----|--|----|
| Q.6 | a) What are system modeling tools? | 07 |
| | b) Explain activity cycle diagram. | 06 |
| Q.7 | a) What are automated data collection systems? | 07 |
| | b) What is CIM implementation software? | 06 |
| Q.8 | a) Explain Product Data Management. | 07 |
| | b) What is Local Area Network (LAN)? | 06 |
| Q.9 | a) Discuss the advantages of database and relational database. | 07 |
| | b) Explain database terminology. | 06 |

Q.10 Write short notes on: (any two)

- a) IDEF models
- b) CIMOSA
- c) MAP/TOP

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