

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER 2013

Subject Code: 173403

Date: 07/12/2013

Subject Name: Computer Integrated Manufacturing

Time: 10:30 TO 01:00

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Describe CIM. Write the elements used in CIM Systems. **07**
(b) Define Group Technology and Part families. Write the benefits of Group Technology **07**
- Q.2** (a) Write the FMS components, Types and work station. **07**
(b) Write any seven Material Handling System used in Industry. **07**
- OR**
- (b) Write the various types of FMS layout. Explain about any FMS one layout with sketch. **07**
- Q.3** (a) Classify the various coding system used in Group Technology. Explain in brief about any one coding system. **07**
(b) Write short notes about the Cellular Manufacturing System with suitable sketch. **07**
- OR**
- Q.3** (a) Write about Automated storage and Retrieval system. **07**
(b) Write the types and applications of Automated Guided Vehicle Systems. **07**
- Q.4** (a) Write the types of CAPP. Explain in brief about any one CAPP. **07**
(b) Explain the role of Process Planning in CAD/CAM integration. **07**
- OR**
- Q.4** (a) Define conveyor system. Write the types of conveyorsystems and its advantages. **07**
(b) Write short notes about Automated Production Line. **07**
- Q.5** (a) Write the various activities to be monitored in Shop floor control. **07**
(b) Write the advantages of bar code technology. What do you understand by automated data collection system? **07**
- OR**
- Q.5** (a) Explain the CIM architecture. Write short notes about product data management. **07**
(b) Write the advantages of LAN implementations and discuss about network management. **07**
