Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII EXAMINATION – WINTER 2015

Subject Code: 173403 **Date:09/12/2015**

Subject Name: Computer Integrated Manufacturing

Time: 10:30am to 1:00pm **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)**	Define CIM. List major elements of CIM system.	**07**
	(b)	What do you mean by CIM architecture? Explain data management in CIM environment.	**07**
Q.2	**(a)**	What is G.T.? Explain three basic code structures used in G.T. with illustration.	**07**
	(b)	Discuss MICLASS coding system.	**07**
		OR	
	(b)	Write short note on shop floor control.	**07**
Q.3	**(a)**	Explain variant approach of computer aided process planning (CAPP).	**07**
	(b)	Discuss benefits of CAPP.	**07**
		OR	
Q.3	**(a)**	Describe automated production lines.	**07**
	(b)	Write 10 principles of material handling.	**07**
Q.4	**(a)**	What is AGV? Explain different types of AGVs.	**07**
	(b)	Why storage systems needed? Describe the factors used for performance measurement of storage system.	**07**
		OR	
Q.4	**(a)**	Define FMS. Explain basic components of FMS.	**07**
	(b)	List types of FMS layout. Explain any one FMS layout with sketch.	**07**
Q.5	**(a)**	What are the advantages of LAN implementations? Discuss about network management.	**07**
	(b)	Describe various types of Automated Storage / Retrieval System.	**07**
		OR	
Q.5	**(a)**	Draw and explain the logical layout of Network Topology.	**07**
	(b)	Write short notes on Factory Data Collection System.	**07**

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