Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC - SEMESTER–VIII • EXAMINATION – SUMMER 2013

Subject Code: X81903 **Date: 17-05-2013**

Subject Name: Computer Integrated Manufacturing

Time: 10.30 pm - 01.00 pm **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)**	Explain utilization of CNC machines in batch production.	**07**
	(b)	Explain axes designation for CNC machines.	**07**
Q.2	**(a)**	Explain G00, G01 and G03 codes with appropriate example.	**07**
	(b)	Explain open loop and closed loop control system of CNC machines.	**07**
		OR	
	(b)	What is canned cycles? Explain any three canned cycles with their syntax.	**07**
Q.3	**(a)**	Define GT. Explain parts classification and coding for GT.	**07**
	(b)	What is composite part concept? Explain objectives of cellular manufacturing.	**07**
		OR	
Q.3	**(a)**	Explain different types of machine cells and layouts in GT.	**07**
	(b)	Explain different types of flexibilities in FMS.	**07**
Q.4	**(a)**	Explain different FMS components.	**07**
	(b)	Explain types of FMS.	**07**
		OR	
Q.4	**(a)**	Explain common robot configurations.	**07**
	(b)	Explain different applications of robots.	**07**
Q.5	**(a)**	Explain Retrieval CAPP system.	**07**
	(b)	Explain production planning and production control.	**07**
		OR	
Q.5	**(a)**	Explain Generative CAPP system.	**07**
	(b)	List inputs to the MRP and explain each of them.	**07**

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