Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

PDDC - SEMESTER–VIII • EXAMINATION – SUMMER • 2014

Subject Code: X 81903 **Date: 02-06-2014**

Subject Name: CIM

Time: 10:30 am - 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 role of Computer in Industry	**07**
	(b)	CAD is Pre requisite for CIM: Justify	**07**
Q.2	**(a)**	Explain with suitable example open loop and close loop system for CNC machines	**07**
	(b)	What is Numerical Control? Explain how it works.	**07**
		OR	
	(b)	Discuss Adaptive control system and explain how it becomes very advantageous?	**07**
Q.3	**(a)**	Explain: Rotary Encoder and Techo generator	**07**
	(b)	Explain one block of part program (assume dimension) that include turning operation on CNC lathe.	**07**
		OR	
Q.3	**(a)**	Explain (i) Machine Datum (ii) Machine Reference Point	**07**
	(b)	Explain one block of part program (assume dimension) that include multiple drilling on Machining centre	**07**
Q.4	**(a)**	What is group technology? Explain production flow analysis with suitable example	**07**
	(b)	Distinguish between FMS and FMC	**07**
		OR	
Q.4	**(a)**	Explain retrieval type CAPP	**07**
	(b)	Explain shuttle type material handling system	**07**
Q.5	**(a)**	What is robotics? Explain Industrial robot.	**07**
	(b)	Explain role of MRP-I in CIM	**07**
		OR	
Q.5	**(a)**	Discuss different robot configuration	**07**
	(b)	Explain computer added Inventory management system as a part of CIM	**07**

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