Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (OLD) - EXAMINATION - SUMMER 2017

Subject Code: 172501 Date: 09/05/2017

Subject Name: Computer Aided Manufacturing

Time: 02:30 PM to 05:00 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)	How CAM is better than conventional manufacturing Explain. What are its	07
	(b)	Limitations? Differentiate NC, CNC and DNC machines with their relative merits and demerits.	07
		List down and Explain various types of tape readers with neat sketches.	07
Q.2	(a) (b)	What are the basic components of numerical control system? briefly discuss function of each component.	07
		OR What do you understand by NC coding? Explain the ISO and EIA standard codes	07
	(b)	for NC coding.	
0.0	(-)	Explain subroutine, Do loop and Macro with suitable examples.	07
Q.3	(a) (b)	Explain structure of part programming. OR	07
0.0		Define CIM .Explain the various elements of CIM.	07
Q.3	(a) (b)	Explain Co-Ordinate Measuring Machine.	07
Q.4		Select a job of your choice and prepare a part program including a canned cycle.	07
Q.4	(b)	Explain Axis Identification in any two machines. OR	07
Q.4	(a)	Explain different types of FMS layouts with neat diagram.	07
Q.4	(b)	What is Group Technology? Explain various classification and coding system of GT.	07
			07
Q.5	(a) (b)	Classify and explain robots. Differentiate between Generative process planning and Variant process planning. OR	07
Q.5	(a)	What is Mechatronics? How it is integrated? Role of Mechatronics in Manufacturing.	07
	(b)	Explain how RPT is useful in modern industrial context. What are its limitations?	07

1