Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

		BE - SEMESTER-VII (OLD) - EXAMINATION – SUMMER 2017	
Su	ıbjec	t Code: 171702 Date: 02/05/20	017
Ti	me: structi	t Name: Programmable Automation Controller 02:30 PM to 05:00 PM Total Marks: ions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.	: 70
Q.1	(a) (b)	List out PLC advantage & disadvantage. Draw and explain PLC input module.	07 07
Q.2	(a) (b)	List out input analog devices used with a PLC and explain any one in detail. List out output analog devices used with a PLC and explain any one in detail OR	07 07
	(b)	Discuss PLC operational faults in detail.	07
Q.3	(a) (b)	Discuss functioning of holding registers, input registers with examples. Explain PLC timer functions in detail.	07 07
Q.3	(a)	OR Explain PLC counters functions with application.	07
	(b)	Explain PLC advanced comparison function.	07
Q.4	(a) (b)	What is MASTER CNTROL RELAY function? Explain it with application. Explain the FAL function and the one shot function of PLC. OR	07 07
Q.4	(a) (b)	Explain PLC Digital Bit Functions with applications. Discuss PLC Matrix Functions in detail.	07 07
Q.5	(a) (b)	Discuss jump with non-return and jump with return functions. List out PLC trigonometric functions and explain. OR	07 07
Q.5	(a) (b)	What is the importance of grounding & suppression in PLC based system? Explain both in detail. Explain factors to be considered while selecting the PLC.	07 07
