Seat No.:	Enrolment No.
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Subject Code: 182403

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII • EXAMINATION - SUMMER 2014

Date: 27-05-2014

-		Name: Industrial Automation 2:30 am TO 01:00 pm Total Mai	rks: 70
Instru	ction 1. 2.	-	
Q.1	(a) (b)	Draw PLC system layout & explain the merits of PLC over conventional relay logic. Draw internal block diagram of PLC CPU and explain various blocks.	07 07
Q.2	(a) (b)	Describe PLC scanning considerations in detail.	07 07 07
		OR	
	(b)	Describe PLC I/O blocks with necessary diagrams.	07
Q.3	(a)	Explain various output analog and ON / OFF devices which can be used with PLC.	07
	(b)		07
Q.3	(a) (b)	11	07 07
Q.4	(a) (b)		07 07
		OR	
Q.4	(a) (b)		07 07
Q.5	(a)	When the lights are turned off in a go-down ,an exit door light is to remain on for an additional 42 seconds. In addition , the parking plot lights are to be remain on for an additional 3 minutes after the door light goes out. Assume suitable input & outputs and make ladder logic for the above requirement.	07
	(b)		07
Q.5	(a)	-	07
	(b)	Explain about DCS, its functions, advantages & limitations.	07
