

Enroll No

K.E.Society's
Rajarambapu Institute of Technology, Rajaramnagar
 (An Empowered Autonomous Institute, affiliated to SUK)
Unit Test -I / II (2025-26)

Q.P. Code
UT 2959

T.Y. B.Tech.-Robotics and Automation Engineering

Course Code:RA323

Course Name: Programmable Logical Controller and SCADA

Day & Date: 12.08.2025

Time: 10:30 to 11:30am

Max Marks- 25

- Instructions:**
- 1) All questions are compulsory.
 - 2) Figures in rounded () brackets within the question, indicate the scheme of marking for respective part of the question, whereas, figures in the first right column indicate total marks for that whole question.
 - 3) CO is the index number of the Course Outcome statement.
 - 4) The Bloom's taxonomy level (BL) for 1,2,3,4,5 and 6 is remember, understand, apply, analyze, evaluate and create respectively.
 - 5) Assume suitable data if necessary.
 - 6) Use of non-programmable calculators is allowed

			Marks	BT Level	COs
Q.1	A	Draw the PLC function diagram and explain the parts of it.	06	3	CO1
	B	Give the comparison between Hardwired Control System and PLC System. Explain the need of PLC.	03	2	CO1
		OR			
	B	Which are the different types of counters in PLC?	03	2	CO2
	C	What is PLC? Define with basic block diagram	03	3	CO1
Q.2	A	Explain different types of timers with ladder diagram.	06	2	CO2
	B	Discuss the different program control instruction present in PLC system.	03	2	CO2
	C	What are the advantages, disadvantages and applications of PLC?	04	2	CO1
		OR			
	C	How the signal flow takes place in PLC system?	04	2	CO1

