Code: R7420205

R7

B.Tech IV Year II Semester (R07) Supplementary Examinations March/April 2013

PROGRAMMABLE LOGIC CONTROLLERS
(Electrical and Electronics Engineering)

Time: 3 hours   Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
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1   Explain the architecture of PLC system and discuss about its components in detail.

2   Explain the drill press operation. Explain with neat ladder diagram.

3 (a) Discuss PLC equivalent digital logic gates.
   (b) Explain ladder diagram for spray process control.

4   Explain the characteristics of PLC registers and explain any of two types of PLC registers.

5   Explain the function of timer for the applications of dual counter for conveyer belt.

6 (a) What are the different types of data handling functions?
   (b) Explain skip, jump, FIFO with examples.

7 (a) Explain the movement of robot in two axis motion with PLC diagram.
   (b) Explain matrix functions briefly.

8   Write a short notes on:
   (a) PLC master control relay.
   (b) Position indicator with PID.
   (c) Analog signal processing.
   (d) PID tuning.

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