Q.26 Write Advantages of PLC (CO2)

Q.27 Explain SCADA with suitable diagram. (CO6)

Q.28 Explain roll of common system components of SCADA. (CO6)

Q.29 What are the advantages of PLC over electromagnetic relays ? (CO1)

Q.30 Write a short note on Real Time clock (CO3)

Q.31 Write short note on memory structure of PLC.(CO2)

Q.32 Discuss about Scan cycle. (CO3)

Q.33 Difference between open architecture and dedicated system . (CO6)

Q.34 Explain the operation of a PLC (CO2)

Q.35 Explain programming terminal for PLC. (CO3)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 What is automation ? Explain generalized automation, production systems and their classification . (CO1)

Q.37 Draw block diagram of PLC and explain function of each in detail. (CO1)

Q.38 Write short note on : (CO3)

(a) Basic instruction of Timer in PLC

(b) Memory Structure of PLC

Roll No. .....

6th Sem / Eltx

Subject:- Industrial Automation

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 Input/ output modulus of PLC consists of (Co3)

a) Discrete b) Analog

c) Register d) All of the above

Q.2 PLCs analog input/output has (CO2)

a) I-bit address b) I-byte address

c) I-world address d)I double word address

Q.3 What is the largest integer number that a PLC counter function can reach if it uses a 16-bit register? (CO4)

a) 32,768 b) 65, 535

c) 65, 536 d) 65, 537

Q.4 ____ of PLCs can be done in very little time.(CO2)

a) Programming b) Installation

c) Commissioning d) All of the above

Q.5 DCS is a ____ (CO7)

a) Distributed Control System

b) Data Control System

c) Data Column System

d) Distributed Column System

Q.6 The PLCs were originally designed to replace (CO1)

a) Analog controllers b) DCS

c) Microcomputers d) Hardwired control

Q.7 The ____is moved toward the relay electromagnet when the relay is on. (CO7)

a) Armature b) Coil

c) No Contact d) NC contact

Q.8 Which of following in the Arth metic Instruction (CO3)

a) ADD b) SUB

c) DIV d) All of the above

Q.9 The control in SCADA is ____ (CO7)

a) Online control b) Direct control

c) Supervisory control d) Automatic control

Q.10 The PLCs were originally designed to replace(CO1)

a) Analog controllers b) DCS

c) Microcomputres d) Hardwired control

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Expand EPROM. (CO1)

Q.12 Expand RAM ? (CO1)

Q.13 There are _____type of timers in PLC. (CO3)

Q.14 There are _____type of timers in PLC. (CO3)

Q.15 The symbol of XIC? (CO1)

Q.16 What is scan time of a PLC ? (CO1)

Q.17 What is watch dog timer ? (CO1)

Q.18 _____full form DCS (CO2)

Q.19 Give two manufactures of PLC. (CO3)

Q.20 What is counter ? (CO1)

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Enlist five advantages of PLC in industry. (CO5)

Q.22 Explain timer and counter instructions of PLC . (CO2)

Q.23 Explain the different programming languages of PLC. (CO4)

Q.24 Explain the methods of speed control of motor (CO7)

Q.25 Explain I/O structure of PLC (CO3)