No. of Printed Pages : 4
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170953

5th Sem. / Electrical Engg.

Subject : PLC & Microcontrollers

Time : 3 Hrs. M.M. : 100

SECTION-A

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

Q.1 PLC stands for _____ (CO-1)

Q.2 Give two manufactures of PLC. (CO-1)

Q.3 8051 is _____ pin IC. (CO-7)

Q.4 Expand EPROM. (CO-1)

Q.5 There are _____ type of timers in PLC. (CO-3)

Q.6 _____ counter count zero up to the preset value. (CO-2)

Q.7 FBD stands for _____ . (CO-1)

Q.8 8051 microcontroller has _____ I/O ports. . (CO-7)

Q.9 _____ instruction copies from one list to another. (CO-3)

Q.10 Expand SCADA.. (CO-6)

SECTION-B

Note: Very short answer type questions. Attempt any ten questions out of twelve questions. (10x2=20)

Q.11 Write the two programming languages of PLC. (CO-1)

Q.12 What is Program Counter? (CO-9)

Q.13 What is Ladder diagram? (CO-4)

Q.14 Expand SCON & PCON. (CO-8)

Q.15 What is real time clock function in PLC? (CO-3)

Q.16 What is PSW? (CO-7)

Q.17 What is microcontroller? (CO-7)

Q.18 What is interrupt? (CO-8)

Q.19 Name two counter of PLC. (CO-3)

Q.20 Write two limitation of Relay. (CO-1)

Q.21 Define assembler directives. (CO-9)

Q.22 What is MOV instruction? (CO-3)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x5=40)

Q.23 What are the applications of PLC in industry? (CO-5)

Q.24 What do you mean by SCADA? What are its applications? (CO-6)

Q.25 What are the assembler directives? (CO-9)

Q.26 Explain interfacing of Keypad with 8051. (CO-10)

Q.27 Draw ladder diagram for NAND combination. (CO-4)

Q.28 What are the various interrupt of 8051? (CO-8)

Q.29 Compare assembler and compiler. (CO-9)

Q.30 Explain comparison instruction of PLC like equal, not equal, greater, greater than equal to. (CO-3)

Q.31 What is the difference between microprocessor and microcontroller? (CO-7)

Q.32 What is PIC? Give its applications. (CO-11)

SECTION-D

Note: Long answer type questions. Attempt any three questions out of four questions. (3x10=30)

Q.33 Explain pin diagram of 8051 microcontroller. (CO-7)

Q.34 Explain in detail the architecture of PLC. (CO-2)

Q.35 Write short note (any two)

(a) Basic instruction of Timer in PLC. (CO-3)

(b) Memory Structure of PLC. (CO-2)

(c) What are the various addressing modes of 8051? (CO-8)

Q.36 Explain any one application of PLC with ladder diagram. (CO-5)

(**Note:** Course outcome/CO is for office use only)