Q.32 What are the applications of PLC in industry?

Q.33 Differentiate between PLC & dedicated control?

Q.34 Explain counter instructions in PLC.

Q.35 Write a short note on power supply unit of PLC.

Section-D

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

Q.36 Explain block diagram of PLC in detail

Q.37 Explain application of PLC in car parking and traffic light control.

Q.38 Explain different types of instructions used in ladder programming of PLC.

Branch : Power Eltx

Subject : Programmable Logic controllers & Applications

Time : 3 Hrs.   **M.M. : 100**

SECTION-A

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

Q.1 Ladder logic programming consists of _____
a) Function blocks
b) Logicgates
c) Relay contacts and coils
d) Text bases code

Q.2 AND function implemented in ladder logic uses:
a) A single normally closed contact
b) Normally open contact is series
c) Normally closed contact in parallel
d) Normally open contact in parallel

Q.3 What are the components used in PLC?
a) I/O module   b) CPU
c) Power supply   d) All of above

Q.4 _____ is connected to the PLC input.
a) Lamp   b) sensorse
c) Motor   d) None

Q.5 Which of the following is not a PLC manufacturer?
 a) Siemens b) Texas
 c) ABB d) Microsoft

Q.6 The PLC operation ____ checks the status at the input side.
 a) Program scan b) Input scan
 c) Output scan d) None

Q.7 The accumulated value is increamented by 1 in ____ counter.
 a) UP b) Down
 c) Both d) None

Q.8 A switch or push button is a ____ input
 a) Analog b) Discretec
 c) Register d) None

Q.9 Which one is the PLC programming language?
 a) MMI b) FBD
 c) HMI d) None

Q.10 Which type of memory used in PLC?
 a) RAM b) ROM
 C) Both d) None

Section B

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

Q.11 PLC stands for ____.

Q.12 Relay is hardwired control. (T/F)

Q.13 Write two advantages of PLC.

Q.14 What is MOV Instruction?

Q.15 Write the two names of PLC manufacturer.

Q.16 Expand ROM.

Q.17 Electromagnetic relay is better than PLC. (T/F)

Q.18 Draw logic symbol of XIC.

Q.19 What is ADD instruction?

Q.20 Write any two applications of PLC.

Section-C

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

Q.21 What are the advantages of PLC over relay?

Q.22 Write programming languages used in PLC.

Q.23 Write a short note on I/O structure of PLC.

Q.24 Explain operation of a PLC.

Q.25 Explain comparison instruction of PLC like equal, ot equal,greater and greater than.

Q.26 Explain basic instruction used in PLC.

Q.27 What is sequencer? What is the type of sequencer?

Q.28 Explain applications of PLC is sorting of objects.

Q.29 Write difference between PLC and personal computer?

Q.30 What is the function of Reset and MOV instruction?

Q.31 Explain the process of assembly using PLC.