



- Q.5 The PLC is used in \_\_\_\_\_. (CO2)
- Machine tools
  - Automated assembly equipment
  - Molding & extrusion machines
  - All of the above
- Q.6 Which of the following is not required when creating or changing a PLC program?
- PL
  - Programming device
  - Programming software
  - Printer
- Q.7 Which of the following are the application of modern DCS? (CO3)
- Wireless systems and their protocols
  - Mobile interfaces
  - Embedded web servers
  - All the above
- Q.8 Which of the following is a machine language?
- 10AB
  - 10111
  - Add5
  - AX or B
- Q.9 EQU, LES, LEQ instructions are examples of which of the following instructions? (CO2)
- Comparison instructions
  - Sequencer Instructions
  - Data handling instructions
  - Composite instructions
- Q.10 \_\_\_\_\_ handle mathematical operations necessary to deliver the output signal. (CO4)
- Small sensors
  - Mat sensors
  - Soft sensors
  - Super sensors

## SECTION-B

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

- Q.11 Ladder logic is being developed to mimic \_\_\_\_\_ logic. (CO1)
- Q.12 Define scan cycle. (CO2)
- Q.13 \_\_\_\_\_ instruction will allow a line to be true for only one scan. (CO2)
- Q.14 Draw instruction symbol of EQU instruction. (CO2)
- Q.15 What is retentive timer? (CO2)
- Q.16 Expand EEPROM. (CO1)
- Q.17 SCADA focus on \_\_\_\_\_ level. (CO3)
- Q.18 What is counter. (CO1)
- Q.19 Define Gateway. (CO4)
- Q.20 Define Ethernet. (CO4)

## SECTION-C

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

- Q.21 What is contactor? Explain the construction and working of contractor. (CO1)
- Q.22 Differentiate between relay and switch. (CO2)
- Q.23 Explain the input-output module of PLC. (CO2)
- Q.24 Explain PLC scanning process in brief. (CO2)
- Q.25 Draw ladder diagram to start / stop a fan regulator using single push switch. Green lamp will glow when fan is on and red lamp will glow when fan is off. (CO2)