F 3547 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Eighth Semester

Branch : Applied Electronics and Instrumentation Engineering

COMPUTERISED PROCESS CONTROL (A)

(Old Scheme—Prior to 2010 Admissions—Supplementary/Mercy Chance)

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 4 *marks.*

1. Explain the types of programmable logic device.
2. Write a note on programmable array logic.
3. Explain microprocessor based PLCs.
4. Differentiate sequential and combinatorial logic controllers.
5. Write a short note on cost estimating.
6. Explain flow sheet symbols.
7. Explain the advantages of fiber.
8. Explain TOP.
9. Explain operator interfaces.
10. Write short note on noises present in communication systems.

(10 × 4 = 40 marks)

Part B

Answer **all** *questions.*
Each question carries 12 *marks.*

11. (a) Explain the design of programmable logic array.

Or

(b) Explain basic concepts of programmable logic devices. Explain programming technologies.

12. (a) Explain the design of combinatorial logic controllers.

Or

(b) Explain PLC programming languages.

Turn over

13. (a) Explain the operation of CRT with a diagram.

Or

(b) Write short notes on (i) data highways ; (ii) field buses ; (iii) multiplexers.

14. (a) Explain the tasks and configurations of supervisory computers.

Or

(b) Explain the optical local area networks.

15. (a) With a neat sketch explain communication systems.

Or

(b) Explain Allen Bradley protocol.

(5 × 12 = 60 marks)