

G 1684

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Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2016

Eighth Semester

Branch : Applied Electronics and Instrumentation Engineering/Electronics and Instrumentation Engineering

AI 010 802/EI 010 802—INSTRUMENTATION IN PROCESS INDUSTRIES (AI, EI)

(New Scheme—2010 Admission onwards)

[Regular/Supplementary]

Time : Three Hours

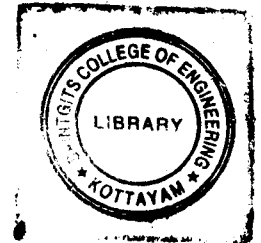
Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

1. Which are the commonly used unit operations ?
2. What is the use of analyzers in food industry ?
3. Write a note on computer applications in iron and steel industry.
4. Write a note on valves in paper industry.
5. Which is the measurement hardware used in pharmaceutical industry ?



(5 × 3 = 15 marks)

Part B

Answer all questions.

Each question carries 5 marks.

6. Explain about compressors with sketches.
7. Briefly describe the process of instrumentation in food industry.
8. Describe controllers and displays used in iron industry.
9. Describe the control system in nuclear industry.
10. Explain valves and feeders used in pharmaceutical industry.

(5 × 5 = 25 marks)

Part C

Answer all questions.

Each question carries 12 marks.

11. Explain reactors and dryers with neat diagram.

Or

12. Explain : (i) Centrifuges ; (ii) Pumps ; (iii) extruders.

Turn over

13. Explain important measurement hardware used in food industry.

Or

14. Describe the applications of computers and controllers in food industry.

15. Write short note on the following with respect to iron industry : (i) Measurement hardware ;
(ii) Control systems.

Or

16. Explain the instrumentation process in iron and steel industry.

17. Compare and contrast between the instrumentation process in paper industry and nuclear industry.

Or

18. Distinguish the control panels and displays used in paper and nuclear industry.

19. Explain how the overall instrumentation process is different in pharmaceutical industry from other processing industries.

Or

20. Write short notes on : (i) Control systems ; (ii) Controllers and displays in pharmaceutical industry.

(5 × 12 = 60 marks)

