

Register No.:

230

April 2024

Time – Three hours
(Maximum Marks: 100)

- [N.B.]**
1. Answer all questions under Part-A. Each question carries 3 marks.
 2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART – A

1. List out the functional elements of Instruments.
2. Define pyrometer? State its applications.
3. Write the working principle of diaphragm gauge.
4. What is meant by absolute pressure? Write its unit.
5. What is the significance of level measurement in industry?
6. State the working principle of pitot tube.
7. Define set point and control variable.
8. How offset can be eliminated?
9. What are the modes of signal?
10. Write short notes of data logging.

[Turn over.....

PART – B

11. (a) Explain about the recording instruments with neat diagram.
(Or)
(b) Explain about the RTD temperature measurement.
12. (a) Explain the construction and operation of strain gauge pressure transducers.
(Or)
(b) Describe in detail the construction and working of C- type bourdon tube.
13. (a) With a neat diagram, explain the working principle of hair hygrometer.
(Or)
(b) Explain the working of Rotameter with a neat diagram.
14. (a) Explain the block diagram of feedback and feed forward control in process control.
(Or)
(b) Explain about ratio control system.
15. (a) Explain the computer control flow sheets using computer for batch reactor.
(Or)
(b) Explain about direct conversion of ADC.
