

Register No.:

926

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. What are Primary, Secondary and Tertiary measurements?
2. Mention the process variables.
3. Write about Encoder.
4. List the advantages of McLeod gauge.
5. Draw the wheatstone Bridge for RTD.
6. Write about Rotameter.
7. Write the methods of measurement of level.
8. List the types of strain gauges.
9. Compare open loop and closed loop system.
10. Compare hydraulic and pneumatic control system.

PART – B

11. (a) Write short notes on:
(i) Range Accuracy and Span Accuracy. (7)
(ii) Precision Hysteresis and dead zone. (7)
(Or)
- (b) Write short notes on:
(i) Piezo-resistive transducer. (5)
(ii) Thermo resistive Transducer. (5)
(iii) Operational errors. (4)
12. (a) Explain the working of Potentiometer with neat diagram.
(Or)
- (b) What is Ionisation Gauge? Discuss its working with sketch.
13. (a) Explain the construction and working principle of any one pressure thermometer with neat diagram.
(Or)
- (b) (i) Discuss the working of Ultrasonic flow meter with neat sketch. (7)
(ii) Discuss about the working Principle of vortex shedding flow meter. (7)
14. (a) Explain the construction and working principle of Eddy current dynamometer with neat sketch.
(Or)
- (b) Describe about the Selection and Installation of Strain Gauges.
15. (a) Explain the working principle of Servomotor Mechanism with neat sketch.
(Or)
- (b) What are controllers? Explain any two of the controller with neat sketch.
