138 Register No.:

April 2019

Time – Three hours
(Maximum Marks: 75)

[N.B: (1) Q.No. 8 in PART – A and Q.No. 16 in PART – B are compulsory. Answer any FOUR questions from the remaining in each PART – A and PART – B

(2) Answer division (a) or division (b) of each question in PART – C.

(3) Each question carries 2 marks in PART – A, 3 marks in Part – B and 10 marks in PART – C.]

PART – A

1. List the dynamic characteristics.
2. Define error.
3. Mention any two displacement measurement methc
4. Give examples for pressure measuring instruments.
5. How are temperature measurement methods classified?
6. State the working principle of turbine meter.
7. Write about electro dynamic microphone.
8. Brief about open loop system.

PART – B

9. Define active and passive transducer.
10. Explain bellows.
11. Write short notes on thermistor
12. Draw carbon microphone.
13. Compare hydraulic and pneumatic control system.
14. Explain automatic control
15. Discuss about mechanical tacnometer.
16. List flow measurement methods.

[Turn over...

PART – C

17. (a) Explain static characteristics of instruments.

(Or)

(b) Define transducer. How is it classified? Explain any one method.

18. (a) Draw and explain LVDT.

(Or)

(b) Describe ionisation gauge with suitable diagram.

19. (a) With a neat diagram, explain the working principle of RTD.

(Or)

(b) Explain electromagnetic flow meter.

20. (a) Discuss hair hygrometer with a sketch.

(Or)

(b) Explain anyone type of strain gauge.

21. (a) Draw and explain block diagram of automatic control system.

(Or)

(b) Explain PID controller.
