

6217
BOARD DIPLOMA EXAMINATIONS
SEPTEMBER/OCTOBER - 2020
DAEI – THIRD SEMESTER
PROCESS INSTRUMENTATION

Time: 3 hours

Max. Marks: 80

PART – A**3 X 10 = 30**

Instructions:

1. Answer *all* questions.
2. Each question carries **Three** Marks.
3. Answer should be brief and straight to the point and should not exceed five simple sentences.

1. Define the term Hysteresis.
2. Define Sensor.
3. Draw the diagram of moving coil type velocity transducer.
4. List the any three applications of Thermocouple.
5. Draw the diagram of C-shape Bourdon tube.
6. Draw the diagram of Hot wire anemometer.
7. List any three applications of Turbine flow meter.
8. List any three applications of Resistive type of level indicators.
9. State the necessity of Viscosity measurement.
10. Draw the diagram of electrolytic hygrometer.

[cont.,

PART – B

5 X 10 = 50

- Instructions:**
1. Answer any **Five** questions
 2. Each question carries **TEN** Marks.
 3. Answer should be comprehensive and Criteria for Valuation is the content but not the length of the answer.

11. a) List the basic requirements of transducer. 7M
b) Define the term Linearity. 3M
12. Draw and explain the principle of operation of Linear variable Reluctance transducer.
13. Explain the principle of operation of Liquid Filled thermometer with a sketch.
14. Draw and Explain the principle of operation of Pressure Multiplexer using dead weight tester.
15. Explain the principle of operation of LASER Anemometer with a neat diagram.
16. Explain the principle of operation of Capacitive Type Level Indicator with a diagram.
17. Explain the principle of operation of Falling ball viscometer with a diagram.
18. Explain the principle of operation of Pneumatic load cell with a diagram.