



C16-AEI-305

6217

BOARD DIPLOMA EXAMINATION, (C-16)

MARCH/APRIL—2021

DAEI - THIRD SEMESTER EXAMINATION

PROCESS INSTRUMENTATION

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed three simple sentences.

1. Define the term accuracy.
2. State the need of calibration.
3. List any three applications of LVDT.
4. Classify temperature transducers.
5. Draw the diagram of double capsule.
6. List any three applications of LASER anemometer.
7. List any three applications of rotameter.
8. List any three applications of nucleonic type level indicator.
9. State the necessity of density measurement.
10. Draw the diagram of hydraulic load cell.

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PART—B

10×5=50

- Instructions :** (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. Define transducer.
12. Explain the principle of operation of AC tachogenerator with diagram.
13. Explain the principle of operation of thermistor with a diagram and list its applications.
14. Explain the principle of operation of force balance pressure transducer.
15. Draw and explain the principle of operation of ultrasonic flowmeter.
16. Draw and explain the principle of operation of liquid level sight glass and list its applications.
17. Draw and explain the principle of operation of displacement type densitometer.
18. Draw and explain the principle of operation of condensation type hygrometer.

A.A.N.M & V.V.R.S.R POLYTECHNIC, GUDLAVALLERU, KRISHNA

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