

Q.P. Code :10761

[Time: 3 Hours]

[Marks:80]

Please check whether you have got the right question paper.

- N.B:**
1. Question no.1 is compulsory.
  2. From Q2 to Q6 solve any three.

- Q1. Attempt any four.** 20
- a. Draw Maxwell Bridge and list applications.
  - b. List different thermocouples and their typical range.
  - c. Short note on Q meter.
  - d. Define transfer. List different types of transducers.
  - e. Draw a neat and labeled diagram for LVDT.
- Q2.** 20
- a. Explain FET electronic voltmeter with neat diagram.
  - b. Explain single channel and multichannel data acquisition system with neat labeled separate block diagrams.
- Q3.** 20
- a. Explain following approaches of temperature measurements: RTD, Thermistors, and Thermocouples.
  - b. Draw block diagram of CRO. Also draw block diagram of DSO. No explanation needed. List applications of DSO.
- Q4.** 20
- a. Explain in detail Dead Weight Testing with neat labeled diagram.
  - b. Draw and explain Schering bridge.
- Q5.** 20
- a. Explain frequency and phase measurement with oscilloscope.
  - b. Explain in detail types of errors in measurement system.
- Q6** 20
- Short note on
- a. Strain Gauges
  - b. Electromagnetic flow meter
  - c. Rota meter
  - d. Lissajous Figures
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