

(3 Hours)

[ Total Marks : 80

- N.B. : (1) Question No.1 is Compulsory.  
(2) Attempt any **Three** questions from remaining five questions.

1. Solve All : 20
    - (a) Compare Maxwell bridge and Hey bridge for measurement of inductance.
    - (b) Write the applications of instrument systems.
    - (c) Write the specifications of CRO.
    - (d) Explain level measurement by float type method.
  
  2. (a) Discuss in detail static and dynamic characteristic of instruments. 10  
(b) Write short note on "Data logger". 10
  
  3. (a) Explain the Kelvin double bridge for measurement of unknown resistance. 10  
(b) Draw and explain the block diagram of DSO. 10
  
  4. (a) Explain in detail classification and selection criteria of transducer. 10  
(b) Write short note on " Dead Weight Tester". 10
  
  5. (a) Draw and explain the block diagram of digital multimeter. 10  
(b) Draw and explain the construction and working of magnetic flow meter. 10
  
  6. Write short notes on :- 20
    - (a) Monitoring instruments
    - (b) Resistance temperature detector
    - (c) Electronics voltmeter using transistors
    - (d) Capacitance sensor.
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