

Instructions:

1. Question No: 1 is compulsory.
2. Answer any four from the remaining six questions.

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1. Attempt any Four (20)
 - (a) Explain working of digital phase meter.
 - (b) Explain active and passive transducers with examples.
 - (c) What are the requirements of a good laboratory type signal generator?
 - (d) Explain the working of Q meters.
 - (e) Describe the method for measurement of capacitance at high frequencies using resonance method.
 - (f) Explain the block diagram of PLC.
 2. (a) With neat block diagram explain the general purpose oscilloscope. (10)
(b) What is SCADA? Explain its different components. (10)
 3. (a) Write short note on Function Generators. (10)
(b) Explain any two temperature transducers. (10)
 4. (a) With neat block diagram explain Digital storage Oscilloscope. (10)
(b) Explain Successive Approximation type digital voltmeter. (10)
 5. (a) Explain the working and characteristics of photoelectric transducers. (10)
(b) Differentiate between dual trace and dual beam type oscilloscope. (10)
 6. (a) With neat diagrams explain the working of LVDT. Also mention its advantages and disadvantages. (10)
(b) Explain Ramp type DVM. Mention its advantages and disadvantages. (10)
 7. Write short notes on any two. (20)
 - (a) Digital frequency meters.
 - (b) Generalized Data Acquisition System.
 - (c) Measurement of Effective resistance of a coil.