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Q.P. Code : 3998

(OLD COURSE)

(3 Hours)

[Total Marks : 100

- N.B. :**
- (1) Question No.1 is compulsory.
 - (2) Solve any **four** questions out of remaining six question.
 - (3) **Figures** to the **right** indicate **full** marks.
 - (4) Assume suitable data , if necessary.

1. Solve any **four**. 20
 - (a) Which are different parameters considered while selecting a transducer.
 - (b) Explain function of Vertical Amplifier in CRO.
 - (c) Explain with block diagram working of digital tachometer
 - (d) Define advantage and disadvantage of SCADA system.
 - (e) What are the requirements of a good laboratory type signal generator ?
2. (a) Explain digital frequency meter also. Draw waveform at various points. 10
 (b) With the help of block diagram explain working of dual beam oscilloscope. 10
3. (a) Explain construction and working of LVDT and hence write advantages 10
 and disadvantages of LVDT.
 (b) Discuss impedance measurement using Q meter. 10
4. (a) Draw block diagram of SCADA and explain function of each unit. 10
 (b) Describe in brief A.F. signal generator. 10
5. (a) Explain reactance variation method for high frequency measurement. 10
 (b) Explain use of CRO in tracing diode and transistor characteristics. 10
6. (a) Explain in detail working of chopper stabilized amplifier. 10
 (b) Explain cold junction and lead compensation for thermo couple. Also write 10
 application of thermocouple.
7. Write short note on (Any two) :- 20
 - (a) PLC
 - (b) Digital multimeter.