

- Q.25 How ultrasonic is used for the measurement of thickness.
- Q.26 Explain ultrasonic digitizer.
- Q.27 Write a short note on Photometric filtering.
- Q.28 Describe photo thyristor.
- Q.29 Explain Bridge T-Network.
- Q.30 Describe how capacitance is measured at high frequency.
- Q.31 Describe the quantities involved in vibration measurement.
- Q.32 Explain measurement of Resistance by Resistance vibration method.
- Q.33 What is photo-Electric effect.
- Q.34 Describe light modulating technique.
- Q.35 Explain Photo voltaic cell

#### SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Discuss construction and working of LVDT accelerometer.
- Q.37 Explain ultrasonic method of flow measurement.
- Q.38 Explain Parallel T-network in detail.

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**5th Sem / Branch : IC/EI**  
**Subject:-Advanced Measurement Technique**  
**(A.M.T)**

Time : 3Hrs.

M.M. : 100

#### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Seismic displacement transducer are not suitable for measuring
- Vibrating Velocities
  - Dynamic Velocities
  - Static Velocities
  - None of the above
- Q.2 What does the accelerometer measures?
- Mass
  - Acceleration
  - Velocity
  - Distance
- Q.3 Photovoltaic cell converts
- Thermal energy into electricity
  - Electromagnetic radiation directly into electricity
  - Solar radiation into thermal energy
  - Solar radiation into kinetic energy

- Q.4 What should be the biasing of the L.E.D?
- Forward bias
  - Reverse bias
  - Forward bias then Reverse bias
  - No biasing required
- Q.5 Phototransistor is a form of \_\_\_\_\_
- Unipolar
  - Bipolar
  - Tripolar
  - None of these
- Q.6 What are the advantages of ultrasonic flow meter?
- Suitable for liquids
  - Suitable for gases
  - Both a and b
  - None of the above
- Q.7 Unit of capacitor is \_\_\_\_\_
- Hertz
  - Farad
  - Henry
  - Ohm
- Q.8 LDR stands for \_\_\_\_\_
- Light dependant resonance
  - Linear dependent resistor
  - Light differential resistor
  - Light dependent resistor
- Q.9 Expand L.E.D
- Light emitting display
  - Light exit diode
  - Light emitting displacement
  - Light emitting diode

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- Q.10 A ultrasonic sensor uses \_\_\_\_\_ wave?
- EM
  - Sound
  - UV
  - All of the above

### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Define Transducer?
- Q.12 Write the unit of inductance?
- Q.13 Expand L.V.D.T
- Q.14 Draw symbol of L.E.D
- Q.15 What is light allenuation
- Q.16 Define sensitivity.
- Q.17 List one application of ultrasonic digitizers
- Q.18 Define Acceleration.
- Q.19 Define Vibration.
- Q.20 List one use of Parallel T-Network.

### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Describe functional elements of a Measuring system.
- Q.22 Explain Seismic Transducer.
- Q.23 Describe Sensitivity of selectivity measurement of Radio receiver.
- Q.24 Explain the working of Photo diode.

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