

- 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.

No. of Printed Pages : 4

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031552D

**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
- a) Vibrating Velocities
  - b) Dynamic Velocities
  - c) Static Velocities
  - d) None of the above
- Q.2 What does the accelerometer measures?
- a) Mass b) Acceleration
  - c) Velocity d) Distance
- Q.3 Photovoltaic cell converts
- a) Thermal energy into electricity
  - b) Electromagnetic radiation directly into electricity
  - c) Solar radiation into thermal energy
  - d) Solar radiation into kinetic energy

Q.4 What should be the biasing of the L.E.D?

- a) Forward bias
- b) Reverse bias
- c) Forward bias then Reverse bias
- d) No biasing required

Q.5 Phototransistor is a form of \_\_\_\_\_

- a) Unipolar                  b) Bipolar
- c) Tripolar                  d) None of these

Q.6 What are the advantages of ultrasonic flow meter?

- a) Suitable for liquids
- b) Suitable for gases
- c) Both a and b
- d) None of the above

Q.7 Unit of capacitor is \_\_\_\_\_

- a) Hertz                  b) Farad
- c) Henry                  d) Ohm

Q.8 LDR stands for \_\_\_\_\_

- a) Light dependant resonance
- b) Linear dependent resistor
- c) Light differential resistor
- d) Light dependent resistor

Q.9 Expand L.E.D

- a) Light emitting display
- b) Light exit diode
- c) Light emitting displacement
- d) Light emitting diode

Q.10 A ultrasonic sensor uses \_\_\_\_\_ wave?

- a) EM
- b) Sound
- c) UV
- d) 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.