

# Question Bank (K- scheme)

## Unit Test II

### Course: Electrical & Electronic Measurement

**Code: (313334)**  
**Semester: 3K**

**Abbreviation – EEM**  
**Program: EE**

#### **Unit IV- Transducers and Pressure Measurements (14Marks)**

##### **2 Marks Questions:**

- 1) Classify Transducers
- 2) Define Transducer.
- 3) What are types of strain gauges?
- 4) Give any two differences between analog and digital transducers.
- 5) Define Strain.
- 6) What is LVDT ?
- 7) Define Pressure and state its unit.
- 8) State types of Bourden Tubes.
- 9) State types of Diaphragms.

##### **4 Marks Questions:**

- 10) Explain working of flat Diaphragm.
- 11) Draw a labeled diagram of Bourden Tube Pressure Gauge.
- 12) Explain force measurement using load cell.
- 13) Explain working of LVDT.
- 14) With neat sketch explain un-bonded metal foil strain gauge.
- 15) Give advantages and disadvantages of LVDT.
- 16) What are desired characteristics of resistance strain gauge.
- 17) Explain working of Inductive transducers.
- 18) With neat sketch explain photovoltaic cell.

#### **UNIT V: Flow , Level & temperature Measurement ( 14 marks )**

##### **2 Marks Questions:**

- 19) Classify flow meters.
- 20) What are types of Electrical flow meter ?
- 21) Classify level measurement transducer.

- 22) Draw Variable head flow meter.
- 23) Draw well labeled diagram of variable area flow meter,
- 24) State working principle of thermistor.
- 25) What are possible RTD configuration.
- 26) Draw RTD characteristics.

**4 Marks Questions:**

- 27) Draw and explain Electromagnetic flow meter.
- 28) Draw well labeled diagrams of variable head and variable area flow meters.
- 29) Draw and explain turbine flow meter.
- 30) Draw and explain Ultrasonic flow meter.
- 31) Draw and explain Inductive transducer for level measurement.
- 32) Draw and explain Capacitive transducer for level measurement.
- 33) What is ultrasonic method of level measurement ?
- 34) Draw characteristics of thermistor and explain.
- 35) Draw RTD and explain.
- 36) What is thermocouple and what are its junctions ?

**UNIT III: Digital Measuring Instruments (5 Marks )**

**2 Marks Questions:**

- 37) Draw block diagram of digital frequency meter.
- 38) What are types of phase sequence indicator
- 39) What is CRO ? what are its applications ?
- 40) State two advantages of Digital Storage Oscilloscope.

**4 Marks Questions:**

- 41) Draw well labeled diagram of Weston frequency meter.
  - 42) Explain working of phase sequence indicator.
  - 43) Draw well labeled diagram of Cathode Ray Tube.
  - 44) Draw block diagram of Digital Storage Oscilloscope and explain.
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