

Name of subject: Industrial Measurements

Subject code: 17434

Semester: IV

Question Bank

Chapter 1:

3 Marks Question:

- 1) What is transducer ? Write one example of active & passive transducer
- 2) Define Primary & secondary transducer & give one example of each.
- 3) Classify each of the following transducers in two different categories:
 - i) LVDT
 - ii) Bourdon Tube
 - iii) Strain Gauge
- 4) Write the Advantages & Disadvantages of L.V.D.T
- 5) What is piezoelectric effect? Name two piezoelectric materials.
- 6) Write the parameter measured by:
 - i) LVDT
 - ii) Bellows
 - iii) Piezoelectric Transducer
 - iv) Linear & angular Potentiometer
 - v) Capsule
 - vi) Diaphragm

4 Marks Question:

- 1) Draw & Explain the block diagram of Instrumentation System
- 2) Write the selection Criteria of transducer (Any 8)
- 3) Explain the construction & working of LVDT.
- 4) Explain the construction & working of piezoelectric type transducer.
- 5) Explain the construction & working of capacitive transducer.

Chapter 2:

3 Marks Question:

- 1) Explain with neat diagram absolute pressure, Gauge pressure, Atmospheric Pressure & Vacuum Pressure
- 2) Write the Advantages & Disadvantages & applications of Bourdon tube
- 3) List the three different units of pressure

4 Marks Question:

- 1) Draw the diagram of C type Bourdon tube & explain its working
- 2) Explain different pressure measurement using U-tube Manometer
- 3) Explain the working of Dead Weight Tester with neat diagram
- 4) Explain how pressure can be measured by using Bourdon tube with LVDT
- 5) Explain how pressure can be measured by using Diaphragm with strain gauge
- 6) Draw & Explain the working of Bellows.
- 7) Draw & Explain the working of Diaphragm
- 8) Draw & Explain the working of Capsule
- 9) Explain the inclined type manometer for measurement of pressure

Chapter 3:

3 Marks Question:

- 1) Explain Reynolds no. with its formula for justifying Laminar or Turbulent Flow

4 Marks Question:

Define Laminar flow and Turbulent Flow

