DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Question Bank

Course: T.Y. B. Tech in Instrumentation Engineering

Sem: VI

Subject Name: Design of Sensor and Transducer

Subject Code: BTINE605

Unit-I

Q.1 Write short notes on Diaphragm performance and materials.

Q.2 Write short notes on Flat diaphragm.

Q.3 Explain in detail convex diaphragm.

Q.4 Write short notes on semiconductor diaphragm.

Q.5 Explain in detail rectangular diaphragm.

Q.6 Write short notes on corrugated diaphragm.

Unit-II

Q.1 Explain the Strain Gauge based load cells.

Q.2 Write short notes on torque sensors.

Q.3 Explain the Strain Gauge based force sensors.

Q.5 Write short notes on pressure sensors.

Unit-III

Q.1 Explain capacitance based displacement sensors.

Q.2 Explain capacitance based pressure sensors.

Q.3 Explain capacitance based level sensors.

Q.4 Write short notes on self and mutual inductance transducers for displacement measurement.

Unit-IV

Q.1 Explain design of capacitive proximity sensors.

Q.2 Explain design of Inductive proximity sensors.

Q.3 Explain the difference between capacitive and inductive proximity sensors.

Unit-V

Q.1 Write short notes on Accelerometer.

Q.2 Explain in detail Gyroscope.

Q.3 Explain in detail Hall Effect sensors.

Q.4 Write short notes on Electromagnetic sensors.

Q.5 Write short notes on Magneto elastic sensors.

Unit-VI

Q.1 Explain the characteristics of chemical sensors.

Q.2 Write short notes on direct chemical sensors.

Q.3 Write short notes on complex chemical sensors.