School of Computing Science and Engineering
Bachelor of Technology in Computer Science and Engineering
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem IV - G2UA420T - Sensors

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1) Define an input and output transducer?   K2 (2)

2) Differentiate between sensor and transducer   K1 (3)

3) Write a short note on Semiconductor Strain Gauges   K2 (4)

4) Describe the environmental parameter of Sensor   K2 (6)

5) Write a short note on Gas thermometric Sensors.   K3 (6)

6) Discuss bonded and unbonded strain gauges.   K3 (9)

7) Illustrate various ways of using capacitor as transducer. Discuss   K4 (8)
   construction and working.

8) Discuss the sensor based on change in inductance due variation in air   K4 (12)
   gap. Give details of principle, construction, working and applications.

OR

Discuss magneto-strictive type transducer (with sketch) for   K4 (12)
measurement of force. On what principle does this transducer work?
Explain with diagram.