

### **Question Bank**

**Subject: Mechatronics**

**Course: B.E (Mechanical Engineering)**

#### **PART-A( 2 Marks )**

1. What is meant by sequential controller?
2. What is the control variable and control unit in an automatic water level controller?
3. What is meant by the accuracy of a sensor?
4. What are the types of encoders?
5. What is the use of tachogenerator?
6. Distinguish between active and passive transducer?
7. What is a load cell?
8. Write note on optical sensor
9. Distinguish between transducer and sensor
10. What is a thermistor?
11. What is photoelectric effect?
12. Write note on thermodevices

#### **PART-B**

1. Explain the basic elements of a closed loop system
2. Explain the sequential control system with an example
3. Compare and contrast the control system for the domestic central heating system involving a bimetallic thermostat with a microprocessor based.
4. Write the advantages and disadvantage of closed loop system
5. Explain any five characteristics of a sensor
6. Write about the mechatronics based engine management system
7. Explain about the displacement sensors
8. Explain various flow transducers