

SECTION –A (OBJECTIVE TYPE QUESTIONS)
(10x1=10 Marks)

- A. Write one example of active & passive transducer.
- B. What are the dynamic characteristics of transducers?
- C. Write two advantages of capacitive transducer.
- D. What is reflex detection?
- E. How will you obtain a dynamic model for a robotic system?
- F. Write the basic equations of motion of dc motor used as an actuator to drive a load.
- G. What is image transformation.
- H. What types of sensors are used to measure high temperature.
- I. What is RFID?
- J. Write ant three applications of robots.

SECTION – B (ESSAY TYPE QUESTIONS)
(5×5 = 25 Marks)

- Q1. Discuss how digital to analog convertor works. Discuss it with a suitable example.
- Q2. Define Primary & secondary transducer & give one example of each.

Q3. Classify various types of photo sensors. Discuss any two with a neat sketch.

Q4. What is reflex detection? Also discuss its applications.

Q5. What are the colour sensors on which principle they are based?

Q6. Explain colour sensing algorithm.

Q7. What types of sensors used in flexible manufacturing system of partially visible object. Discuss them in detail.

Q8. For the parameter's accuracy, linearity and range, suggest the name of temperature transducer to measure human body temperature. Justify it.

*****END OF PAPER*****