

- a) Flapper nozzle system
 c) Viscometer
 (x) Displacement to pressure systems are used for measuring _____
 a) Displacement
 c) Acceleration
 (xi) Resistive transducers are _____
 a) Primary transducers
 c) Either primary or secondary
 (xii) Predict, which of the following is the correct relationship for sensitivity?
 a) Volt/watt
 c) Volt/amp
 (xiii) Semiconductor used in sensors will be _____
 a) Pure form
 c) Pure or doped form
 (xiv) Choose the following act as magneto-resistive material
 a) Bismuth
 c) Both bismuth and antimonide
 (xv) Pneumatic load cells are suitable for measuring _____
 a) Very low pressure
 c) Intermediate range of pressure
- b) Gyroscope
 d) None of the mentioned
 b) Velocity
 d) Force
 b) Secondary transducers
 d) None of the mentioned
 b) Watt/volts
 d) Volts
 b) Doped form
 d) None of the mentioned
 b) Antimonide
 d) None of the mentioned
 b) Very high pressure
 d) All of the mentioned

Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain different types of orifice plates used for measuring flow. (3)
3. Briefly explain types of level transducers. (3)
4. Define hysteresis of an instrument. (3)
5. Define thermal sensor. Classify various temperature sensors. (3)
6. Express the limitations of capacitive transducer. (3)

OR

Express the limitations of Inductive transducer. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

7. Explain with neat diagram the ferromagnetic plunger type inductive sensor. (5)
8. Draw and explain piezoelectric transducer. (5)
9. Explain any one of IC type temperature sensor with circuit diagram. (5)
10. Illustrate the advantages and disadvantages of the semiconductor type strain gauge. (5)
11. Derive the sensitivity of a Quarter Bridge arrangement of a strain gauge load cell. (5)
12. Explain Vapour filled thermometers. (5)

OR

Explain parallel plate capacitive transducers. (5)