



BRAINWARE UNIVERSITY

Term End Examination 2023
Programme – B.Tech.(ECE)-2019
Course Name – Sensors and Transducers
Course Code - OEC802B
(Semester VIII)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Which of the following is correct for flapper nozzle system?
- | | |
|--|----------------------------------|
| a) Used in hydraulic system only | b) Used in pneumatic system only |
| c) Used in both hydraulic and pneumatic system | d) None of the mentioned |
- (ii) Select the range of displacement of flapper required to change output pressure over the useful range is known as _____
- | | |
|-------------------------|---------------------|
| a) Cut-off displacement | b) Throttling range |
| c) Threshold value | d) Break value |
- (iii) Which of the following error is caused by a reversal of measured property?
- | | |
|-----------------------|-----------------------|
| a) Hysterisis | b) Noise |
| c) Digitization error | d) Quantization error |
- (iv) Which of the following is not an analog sensor?
- | | |
|-------------------|----------------------------|
| a) Potentiometer | b) Force-sensing resistors |
| c) Accelerometers | d) None of the mentioned |
- (v) _____ is used to prevent oscillation in moving system.
- | | |
|-----------------------|----------------|
| a) Oscillatory system | b) Controlling |
| c) Damping system | d) Deflecting |
- (vi) The point is not a characteristic of an ideal transducer
- | | |
|-----------------------|------------------|
| a) High dynamic range | b) Low linearity |
| c) High repeatability | d) Low noise |
- (vii) The active transducer is
- | | |
|-----------------|-----------------|
| a) Strain gauge | b) Thermistor |
| c) LVDT | d) Thermocouple |
- (viii) Select the following is correct for the tachometer system
- | | |
|-----------------------|------------------------|
| a) First order system | b) Second order system |
| c) Third order system | d) Third order system |

