

Time: 45 minutes

T.M: 15

1 x 3 = 3

1. Choose the correct answer:

(a) A transducer converts:-

- (i) mechanical energy into electrical energy (ii) one form of energy into another form of energy (iii) electrical energy to light energy (iv) None of these.

(b) Thermocouples are:-

- (i) passive transducer (ii) Active transducer (iii) Output transducer (iv) Both active and passive transducers.

(c) In CRO, the input signal is applied to:-

- (i) Vertical deflection system (ii) Horizontal deflection system (iii) Both vertical and horizontal deflections system (iv) None of these.

2. Answer the following:

2 x 3 = 6

(a) Define the terms - (i) Accuracy (ii) Sensitivity.

1 + 1 = 2

(b) Classify different types of errors.

2

(c) Explain briefly the different types of transducers.

2

3. Answer the following:

3 x 2 = 6

(a) Draw a generalized instrumentation scheme and label its parts.

(b) Describe briefly the working principle of LVDT.