

DIPLOMA OF VOCATION**Industrial Electronics****Subject: Transducers and Signal Conditioning****Subject Code: EDTS-210****Semester: Fourth****July 2022****Theory (External): 35 Marks****Time: 03 Hours****Instructions to the Students**

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 1 mark.
3. Section B comprises 8 essay type questions out of which students need to do any 5. Each question carries 5 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

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

- A) What is the use of thermistors? Write name of any one.
- B) Which type of transducers are used for high temperature measurement?
- C) What is passive transducer?
- D) Give one property of piezo-electric crystal.
- E) What is potentiometer?
- F) How the transducers are classified based on principle of transduction?
- G) Write the name of any one method of D/A converter.
- H) What is the use of signal conditioning?
- I) Why linearization is necessary?
- J) What is the principle of carbon microphone's working?

SECTION –B (ESSAY TYPE QUESTIONS)
(5x5=25 Marks)

- Q1 What is self-heating error of thermometer?
- Q2 Explain the working of Hot wire anemometer.
- Q3 What do you mean by Seismic pick up and which type of transducer is used for it?
- Q4 Explain the working of piezoelectric transducers.
- Q5 Explain the working of V to I converters.
- Q6 What is impedance matching? Explain.
- Q7 Explain the working of any two method of A/D converter.
- Q8 What is the use of sample and hold circuit?

==END OF PAPER==