

Roll No.

24439

B. Tech. (EEE) 7th Semester (Re-appear)

Examination – October, 2020

ADVANCED INSTRUMENTATION

Paper : EE-434-F

Time : 1.45 Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any **three** questions. All questions carry equal marks.

1. (a) What do you mean by Advanced Instrumentation ?
- (b) Discuss the phenomenon of Noise.
- (c) Explain the term signal conditioning in brief.
- (d) What are the advantages of Micro-controller based Instrumentation system ?

2. Draw and explain Block diagram of Generalised Instrumentation system in detail.
3. Explain the specification of Instrumentation system under steady state and transient state with their performance characteristics.
4. Discuss the construction and working principle of L. V. D. T and Explain how displacement can be measured with L. V. D. T ?
5. Explain the methods of measurement of velocity by Transducers.
6. Explain the circuit diagram and working of Blumlein bridge in detail.
7. Write short note on :
 - (a) A/D Converter
 - (b) D/A Converter
8. Discuss the Interfacing of 8051 with ADC.
9. Discuss the working of Dot matrix and LCD Display in detail.
