

Roll No.

3226

**B. Tech. 5th Semester (ECE)
(Open Elective – I)
Examination – December, 2022**

MEASUREMENTS AND INSTRUMENTATION

Paper : OEC-ECE-321-G

Time : Three Hours]

[Maximum Marks : 75

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 five questions in all, selecting one question from each Unit. Question No. 1 is compulsory. All questions carry equal marks.

1. (a) Write advantages of RVDT.
- (b) What do you mean by Data Loggers ?
- (c) Differentiate between active and passive Transducers.
- (d) Discuss about IC sensors.
- (e) Mention main component of CRT.
- (f) Write disadvantages of Schering bridge.

3226- T o e - (P-3)(Q-9)(22)

P. T. O.

UNIT - I

2. (a) Describe different Standards.
(b) Explain Photo electric transducers with neat diagram.
3. (a) Differentiate RTD and Thermocouple.
(b) Describe Piezo electric transducers.

UNIT - II

4. (a) Explain wave analyzers with neat sketch.
(b) Explain block diagram of Data acquisition systems.
5. (a) Explain Hay bridge. Also mention their advantages and disadvantages.
(b) What do you mean by isolation amplifier ? Explain.

UNIT - III

6. (a) Discuss Accuracy and resolution in DVM.
(b) Write short note on IEEE 488 / GPIB Buses.
7. (a) Explain frequency counter with neat diagram.
(b) Explain any one type of Millimeter.

3226- (P-3)(Q-9)(22) (2)

UNIT - IV

8. (a) Draw and explain block diagram of Virtual Instrumentation.
(b) Explain Dual trace CRO by drawing its block diagram.
9. Write short notes on :
 - (a) CRT
 - (b) Nano technology

3226- (P-3)(Q-9)(22) (3)