

This question paper contains 2 printed pages]

**NA—88—2023**

**FACULTY OF SCIENCE**

**B.Sc. (Third Year) (Sixth Semester) EXAMINATION**

**NOVEMBER/DECEMBER, 2023**

**(New/CBCS Pattern)**

**ELECTRONICS**

**Paper XV**

**(Electronic Instrumentation)**

**(Monday, 18-12-2023)**

**Time : 10.00 a.m. to 12.00 noon**

*Time—Two Hours*

*Maximum Marks—40*

*N.B. :— (i) Attempt All questions.*

*(ii) Illustrate your answers with suitably labelled diagrams wherever necessary.*

1. Define resistive transducer. With neat diagram explain working principle of potentiometer and resistance pressure transducer. 15

*Or*

(a) Discuss the static characteristics of an instrument. 8

(b) What do you mean by standard ? State the different types of standard. 7

2. What are photoelectric transducers ? Explain briefly working principle of photodiode and phototransistor. 15

P.T.O.

WT

( 2 )

NA—88—2023

Or

- (a) Draw the block diagram of digital pH meter and explain the basic working of it. 8
- (b) Draw the circuit diagram of I to V converter and explain it. 7
3. Write short notes on any *two* of the following : 10
- (a) Error and accuracy
- (b) Load cell
- (c) LVDT
- (d) Precision rectifier.

NA—88—2023

2