Seat No.

Total No. of Pages : 3

MAR_APR 2026 SUMMER EXAMINATION

1154 B.Tech. CBCS

Sub. Name: Transducers and Measurement

Sub. Code: 73249/77811

Day and Date: Tuesday ,19-05-2026 **Total Marks: 70**

Time: 10:30 AM To 01:00 PM

Instructions: **1. All questions are compulsory**
2. Figures to the right indicate full marks

26825

Q1) Solve following MCQ. **[14]**

i. The power needs of electrical transducers is _____
- A. Maximum
- B. Minimum
- C. Zero
- D. Infinite

ii. Following is (are) the type(s) of Light sensor(s)
- A. Photo sensor
- B. Photo transistors
- C. Photo conductors
- D. All of the above

iii. Change in resistance is measured using a _____
- A. Anderson's bridge
- B. Wheatstone's bridge
- C. Hay's bridge
- D. Maxwell's bridge

iv. What is a data acquisition system?
- A. system used for data processing, conversion and transmission
- B. accepts data as an input
- C. removes noise
- D. boosts the signal

v. Control grid is given _____
- A. positive voltage
- B. negative voltage
- C. neutral voltage
- D. zero voltage

vi. Closeness of measured value to true value is _____
- A. Accuracy

B. Precision
C. Correction
D. Uncertainty

vii. Digital multimeter is used for _____
A. measuring a.c. and d.c. current, voltage and resistance
B. measuring a.c. current and voltage
C. measuring d.c. current and resistance
D. measuring a.c. voltage and resistance

Q2) Attempt Any Two Questions **[14]**

a. Explain characteristic of transducer **[7]**

b. Explain in detail phototransistor and write its applications **[7]**

c. Write a short note on Digital resolver and Digital tachometer **[7]**

Q3) Attempt Any Two Questions **[14]**

a. Explain in detail chopper stabilized amplifier **[7]**

b. Explain in detail different types of sensors **[7]**

c. Explain in detail working of Q meter **[7]**

Q4) Attempt Any Two Questions **[14]**

a. Explain general specification of DVM **[7]**

b. Explain Frequency and phase measurement using Lissajous pattern. **[7]**

c. Write short note on Signal generator and function generator. **[7]**

Q5) Attempt Any Two Questions **[14]**

a. Explain working principal and application of LCD **[7]**

b. Explain operation of R-2R ladder type DAC **[7]**

c. Write short notes on(Any Two) **[7]**
a)CRO probes
b)Descourty's Bridge
c)Digital measurement of time
d)Dual beam CRO

265825

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -
This Question Paper may be distributed for following Subjects as common code.
सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

1] (1154) B.Tech. CBCS (73249) Transducers and Measurement Part 2 SEM 3

2] (101) Bachelor of Engineering (77811) Transducers and Measurement Part 2 SEM 3

26825