S. B. Roll. No.....

ELECTRONIC INSTRUMENTS AND MEASUREMENT
3rd Exam/ECE/4361/Jun'2022
(For 2018 Batch Onwards)

Duration: 3Hrs. **M.Marks:75**

SECTION-A

Q1. Do as directed. **15x1=15**

a. _____ is the heart of CRO.
b. ADC stands for _____.
c. The difference between the actual reading and measured value is known as _____.
d. A PMMC instrument produces no_____ due to hysteresis.
e. The sensitivity of an instrument should be as _____as possible.
f. Define Sensitivity.
g. Which instrument is most accurate (PMMC/Moving Iron /Electro-dynamometer)
h. Ammeter is connected in _____with the circuit.
i. Define Selectivity.
j. Define Precision
k. Define Limiting Error.
l. Full form of LVDT is _____.
m. Full form of DSO is _____.
n. _____and _____ are passive Transducers.
o. Define loading effect.

SECTION-B

Q2. Attempt any six questions. **6x5=30**

i. Explain the working principle of LVDT.
ii. Principle of operation of PMMC instruments.
iii. Explain Instrumentation Amplifier.
iv. Working principle of Digital Voltmeter.
v. Working principle of Function generator.
vi. Explain the working principle of Strain Gauge.
vii. Define Distortion factor meter.
viii. What are the limitations of Digital multimeter.

SECTION-C

Q3. Attempt any three questions. **3x10=30**

a. Explain the construction and working of CRT in detail.
b. With the help of block diagram explain the working principle of DSO.
c. Explain the principle of operation of Moving iron type instruments.
d. With the help of block diagram explain the working principle of Digital multimeter,
e. Compare Analog and Digital instruments.