

No. of Printed Pages : 4
Roll No.

221021

2nd Sem. / ECE

Subject : Electronic Instruments and Measurement

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Resistances can be measured with the help of

- a) Wattmeter b) Voltmeter
- c) Ammeter d) ohmmeter

Q.2 A moving iron instrument can be used for

- a) D.C only b) A.C only
- c) D.C. and AC both d) none of the above

Q.3 Sensitivity of a basic meter is measured in

- a) ohm meter b) Ohm/ Volt.
- c) ampere d) Volt/ ampere

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Q.4 A simple instrument used to detect logic state of a node in digital circuit is known as _____

- a) logic pulser b) logic analyser
- c) logic probe d) logic comparator

Q.5 The principle of Q-meter is based on

- a) parallel resonance b) series resonance
- c) both a and b d) none of the above

Q.6 Inductance is measured by which one of the following?

- a) Wheat stone bridge
- b) Schering bridge
- c) De Sauty's bridge
- d) Maxwell's bridge

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 The scale of moving iron instrument is uniform . (True/False)

Q.8 Ammeter is always connected in _____

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Q.9 In CRO, Vertical deflection plates are kept_____

Q.10 De Sauty's bridge is used for the measurement of_____

Q.11 Name any one absolute instrument.

Q.12 What is the full form of VOM meter?

SECTION-C

Note:Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Why precision is no guarantee to accuracy?

Q.14 What are different standards?

Q.15 Why a bridge circuit has high accuracy?

Q.16 Describe the working of a DSO.

Q.17 Explain the construction of a CRT with the help of diagram.

Q.18 What is the use of a Logic Pulser?

Q.19 Explain the working of Hay's bridge.

Q.20 What do you mean by the term Calibration?

Q.21 Draw the block diagram of a Digital Multimeter.

Q.22 Explain the term loading effect in measurement.

SECTION-D

Note:Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain the construction and working principle of PMMC type of instruments.

Q.24 Explain the construction and working of a function generator with the help of block diagram in detail.

Q.25 Draw the circuit diagram of Wheat stone bridge and explain how unknown resistance can be measured using it.