

**3rd Sem / Branch : Instrumentation & Control,
Medical Electronics**
Sub.: Measurement and Instrumentation

Time : 3Hrs.

M.M. : 60

SECTION-A

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

Q.1 Hay bridge is used for measuring
a) Inductance b) Capacitance
c) Resistance d) None of the above

Q.2 Multimeter is used to measure
a) AC Voltage b) DC Voltage
c) Resistance d) All of the above

Q.3 Resistance can be measured with help of
a) Wattmeter
b) Voltmeter
c) Ammeter
d) Ohmmeter and Resistance bridge

Q.4 CRO can be used for measuring
a) AC Voltage only b) DC Voltage only
c) Frequency d) Any of above

Q.5 A potentiometer may be used for
a) Measurement of Resistance
b) Measurement of current
c) Calibration of ammeter and voltmeter
d) All of the above

Q.6 The internal resistance of an ammeter should be
a) Very Small b) Medium
c) High d) Infinity

SECTION-B

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

Q.7 What is DSO?

Q.8 Define single phase system.

Q.9 Ammetre is used to measure _____.

Q.10 Write any one name of measurement of capacitance.

Q.11 What is resistance?

Q.12 Write the full form of PMMC.

SECTION-C

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

Q.13 What is the major application of CRO.

Q.14 Explain any one method of resistance measurement.

Q.15 How does electrostatic type instrument work.

Q.16 List atleast four difference between single phase and three phase system.

Q.17 What are the various forcing technique.

Q.18 Write a short note on 3-phase system.

Q.19 Explain potentiometer method for resistance measurement.

Q.20 Write a short note on delay sweep.

Q.21 What is energy meter?

Q.22 Explain time base operation in CRO.

SECTION-D

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

Q.23 Explain wheatstone bridge in detail

Q.24 Explain working principle of digital frequency meter.

Q.25 Write and explain working principle of moving iron instrument.