

- Q.4 What is the need of measuring quality factor.
Explain Q-meter.
- Q.5 Write construction & principle of working of energy meter.
- Q.6 Explain how current and voltage is measured by multimeter.
- Q.7 Write short note any two
- a) Megger
 - b) D'Arsonval Galvanometer
 - c) LCR Bridge.

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No. of Printed Pages : 4

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Roll No.

3rd Sem. / IC

Subject : Test & Measuring Instruments

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1
- a) Give one example of absolute instrument.
 - b) Define measurement
 - c) Expand PMMC
 - d) Name any two method for resistance measurement.
 - e) Name the bridge which measures inductance.
 - f) Which damping makes the instrument sluggish.
 - g) CRO can not measure directly _____
 - h) Write the unit of voltage sensitively.
 - i) The range of an ammeter can be extended by using_____.

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- j) Flux is the unit of _____
- k) Synchroscope is an instruments used to check the condition of _____
- l) Which type of controlling tongue is provided in PF meter .
- m) The value of power factor lies between _____
- n) The control grid is made of _____ material.
- o) In a CRO input- is applied at _____ deflection plate.
- p) Define flyback on retrace
- q) Define sweep.
- r) Write any two use of spectrum analyzer.

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

- Q.2
- i) What is the need of multiple time base in CRO.
 - ii) State the function of delay line in dual trace CRO.
 - iii) Discuss 2- wattmeter method.

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- iv) What is flicker. Explain
- v) Explain phase sequence indicator
- vi) Describe in brief syndro-scope
- vii) What is creeping. How it can be avoided.
- viii) State four application of spectrum analyzer.
- ix) Explain which types of damping is suitable in PMMC instrument and why .
- x) Give the classification of electrical instruments.
- xi) What is the use of shunt. Explain
- xii) Explain ohmmeter
- xiii) What is the utility of dimensions.
- xiv) Differentiate between ammeter and voltmeter.
- xv) What are the advantages of digital voltmeter over conventional voltmeter

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Describe in detail various control used in CRO.

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