

- Q.30 Draw and explain multimeter with their application
 Q.31 Explain the block diagram of CRO. Discuss their advantages and disadvantages.
 Q.32 Explain thermocouple type meters.
 Q.33 Discuss block diagram of function generator.
 Q.34 Discuss PMCC meter with diagram.
 Q.35 Describe Maxwell bridge.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
 Q.36 Explain working principle, construction and applications Digital Frequency Meter.
 Q.37 Explain construction & working principles of moving iron meter.
 Q.38 Draw & explain block diagram of D.S.O.

No. of Printed Pages : 4 181533/121533/031533
 Roll No.

3rd Sem / IC

Subject:- Test and Measuring Instruments

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Wheatstone bridge is used for measurement of _____
 a) Voltage b) Resistance
 c) Current d) Inductance
 Q.2 Stroboscope is used to measure _____
 a) energy b) power
 c) frequency d) mass
 Q.3 Unit of power is _____
 a) Joule b) Watt
 c) Volt d) Farad
 Q.4 Function Generator is used in _____ voltage.
 a) AC b) DC
 c) AC & DC d) none of these
 Q.5 _____ is a Null type instrument.
 a) PMMC b) D.C Potentiometer
 c) Both (a) & (b) d) None of these

- Q.6 In a Q-meter, the value of shunt resistance connected across the oscillator is typically of the order of _____
 a) W b) mW
 c) mW d) kW
- Q.7 In electrodynamometer wattmeter fixed coil is also called _____.
 a) Current Coil b) Pressure Coil
 c) Both a & b d) None of these
- Q.8 _____ is the main part of CRT
 a) Electron gun assembly
 b) Glass Envelope
 c) Both (a) & (b)
 d) None of these
- Q.9 Wagner earth devices are used for _____
 a) A.C. bridge b) D.C. bridge
 c) Both (a) & (b) d) None of these
- Q.10 A transistor has _____.
 a) One PN Junction b) Two PN Junction
 c) Three PN Junction d) None of these

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Dimension of length is _____
- Q.12 Ohm meters are used for measurement of resistance.
 (True/False)

- Q.13 _____ is used for power measurement.
- Q.14 Transistor is tested by _____.
- Q.15 Digital frequency meter measures _____
- Q.16 Define Energy.
- Q.17 Graticule is a grid of line that serves as a scale for time & amplitude measurement. (True/False)
- Q.18 What is the function of Stroboscopes?
- Q.19 Voltmeter is an example of secondary instruments.
 (True/False)
- Q.20 Name any one method of resistance measurement.
- SECTION-C**
- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Describe megger for measurement of high resistance.
- Q.22 Write a short note on classification of instrumentation system.
- Q.23 Discuss stroboscope frequency measurement.
- Q.24 Describe power measurement by 2-watt meter method.
- Q.25 Explain single phase energy meter.
- Q.26 What is Q-meter?
- Q.27 Write a short note on importance of measurement.
- Q.28 Write a short note on digital frequency meter.
- Q.29 Draw diagram of wagner earth devices.