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4th Sem / Branch : Elect.,Power Station Engg.
Elect. & Eltx. Engg.
Subject:- Elect. Meas. Instr. & Instrumentation
/ Elect. &Eltx. Measuring Inst.

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 The essential requirement of measuring instruments is (CO1)

a) deflecting torque b) controlling torque
c) damping torque d) all of three

Q.2 Moving iron instruments are (CO2)

a) Permanent magnet type
b) Attraction and repulson type
c) Attraction type
d) All of three

Q.3 Induction type energy meters can be used to measure (CO2)

a) A.C. Power b) D.C. Power
c) Electrical Energy d) All of three

Q.4 Unit of power is (CO2)

a) Watt b) Ampere
c) Volt d) All of three

Q.5 The extend the range of voltmeter, a resistance is connected to it in (CO3)

a) Series
b) Parallel
c) Series-Parallel
d) No Resistance is connected

Q.6 Themistor is used to measure (CO5)

a) Flow b) Pressure
c) Stress d) Temperature

Q.7 Power in a three phase unbalanced system can be measured by using: (CO6)

a) Single wattmeter method
b) By two wattmeter method
c) Both a & b
d) None of these

Q.8 The scale of PMMC type instruments is (CO1)

a) Uniform
b) Non-uniform
c) Cramped at the lower ends
d) Crowded in the middle

Q.9 LVDT has_____Secondary (CO5)

a) 1 b) 2
c) 4 d) None of these

Q.10 Current transformer is (CO4)

a) Step up b) Step Down
c) Both a & b d) None of these

SECTION-B

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

Q.11 Define deflecting torque. (CO1)

Q.12 In a three phase star connected system Vphase= _____V ine (CO6)

Q.13 The energy meters are called_____instruments (CO2)

Q.14 Define LCR meter. (CO6)

Q.15 What is the use of clamp on meter? (CO6)

Q.16 Write full form of CT. (CO4)

Q.17 On which principle PMMC instrument work. (CO2)

Q.18 Creeping in energy meters can be prevented by providing____ (CO2)

Q.19 CRT stands for..... (CO6)

Q.20 Active power in a three phase is..... (CO6)

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Explain the indicating and Integrating instruments. (CO1)

Q.22 Explain the different errors in Moving coil instruments. (CO1)

Q.23 Explain the principle of thermocouple (CO7)

Q.24 Explain the working of digital multimeter. (CO2)

Q.25 Explain the application of LCR meter. (CO6)

Q.26 Explain the block diagram of CRO (CO6)

Q.27 Differentiate between primary and secondary transducers. (CO5)

Q.28 Explain the MDI. (CO6)

Q.29 Describe the working principle of synchroscope. (CO6)

Q.30 Differentiate between voltmeter and ammeter. (CO2)

Q.31 Explain working of Megger? (CO6)

Q.32 Write short note on Potential transformer. (CO4)

Q.33 Write the advantages of poor power factor. (CO6)

Q.34 Explain the working of liquid level thermometer. (CO7)

Q.35 Explain the working of Dynamometer type wattmeter. (CO2)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Explain in detail two wattmeter methods to measure power in three phase circuit (Balanced load) (CO6)

Q.37 Explain the working principle and construction of PMMC instrument. (CO1)

Q.38 Write short note on (CO6)

1) Errors in measurement

2) Earth tester