Q.24 Differentiate between energy meter and wattmeter. (CO-4)
Q.25 Explain phase error in an energymeter. (CO-1)
Q.26 Define controlling torque. Discuss any one method of providing this torque. (CO-1)
Q.27 Explain the working of PT (Potential Transformer) (CO-5)
Q.28 Draw and explain the block diagram of digital multimeter. (CO-6)
Q.29 Describe the working and construction of resistance thermometer (CO-7)
Q.30 Explain the construction and working of a LVDT. (CO-6)
Q.31 Describe the different methods of control used in electrical indicating instrument. (CO-1)
Q.32 What do you understand by errors in measurement? Mention various types of errors. (CO-1)
Q.33 Explain the application of CRO. (CO-6)
Q.34 Explain working of Earth tester. (CO-5)
Q.35 Draw the three wattmeter method of measure power in three phase circuit. (CO-8)

SECTION-D

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

Q.36 Draw and explain block diagram of CRO? (CO-6)
Q.37 Explain the various errors with remedies that takes place in induction type energy meter. (CO-4)
Q.38 Explain principle, construction and working of dynamometer type wattmeter. (CO-8)

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3rd Sem. / Elect. Power Stat, Engg, Elect. & Eltx. Engg.

Subject : Electrical measurements & Measuring Instruments

Time : 3 Hrs. M.M. : 100

SECTION-A

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

Q.1 Clamp on meter is used for measurement of (CO-5)
a) Large AC current b) Large DC current
c) None d) Both A & B

Q.2 The range of voltmeter can be increased by connecting of (CO-2)
a) Low resistance b) High resistance
c) Both (a) & (b) d) None of the above

Q.3 Tow holes in the disc of energy meter are drilled atthe opposite sides of the spindle to (CO-4)
a) Improve its ventilation
b) Eliminate creeping at no load
c) Increase its deflecting torque
d) Increase its braking torque

Q.4 Systematic error are: (CO-1)
a) Instrumental errors
b) Environmental errors
c) Observational errors
d) All of the above

Q.5 Wattmeter cannot be designed on the principle of (CO-3)

a) Electrostatic instrument
b) Thermocouple instrument
c) Moving iron instrument
d) Electrodynamic instrument

Q.6 Megger is used to measure (CO-5)

a) Breakdown voltage of insulation
b) Earth resistance
c) Insulation resistance
d) None of the above

Q.7 The pointer of measuring instrument moved on the scale due to (CO-1)

a) Deflecting torque b) Controlling Torque
c) Damping Torque d) All of these

Q.8 Moving iron instrument are (CO-2)

a) Permanent magnet type
b) Attraction and repulsion type
c) Attraction type
d) All of these

Q.9 Induction type energy meter are free from _____. (CO-4)

a) Phase error b) Frequency error
c) Creeping error d) Temperature error

Q.10 Unit of power factor is (CO-8)

a) Watt b) Ampere
c) Volt d) None of three

SECTION-B

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

Q.11 LVDT stands for_____. (CO-8)

Q.12 Name any one transducer that can be used to measure pressure. (CO-8)

Q.13 Creeping error of energy meter can be stopped by drilling two holes in the _____. (CO-4)

Q.14 An Ammeter has _____ internal resistance. (CO-2)

Q.15 Moving coil instrument have _____ scale. (CO-2)

Q.16 A voltmeter should have ____resistance. (CO-2)

Q.17 CRO stands for _____. (CO-8)

Q.18 Three phase active power = _____. (CO-6)

Q.19 Wattmeter is an instrument which measure _____. (CO-6)

Q.20 Platinum has a _____ temperature coefficient of resistance. (CO-7)

SECTION-C

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

Q.21 Compare star and delta systems of three phase connections. (CO-8)

Q.22 What is thermocouple? Explain some applications of thermocouple. (CO-7)

Q.23 What is measurement and measuring instrument. (CO-1)