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Roll No. 180942/170942/127542/  
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Sem. - 4th

Branch : Electrical Engg.

Subject : EMII

Time : 3 Hrs.

M.M. : 100

### SECTION-A

**Note:** Multiple Choice Questions. All questions are Compulsory. (10x1=10)

Q.1 \_\_\_\_\_ device prevents the oscillation of the moving system and enable the pointer to reach its final position quickly. (CO-1)

- a. Deflecting
- b. Controlling
- c. Damping
- d. None of these

Q.2 Two holes in the disc of energy meter are drilled at the opposite sides of the spindle to (CO-2)

- a. Improve its ventilation
- b. Eliminate creeping at no load
- c. Increase its deflecting torque
- d. Increase its breaking torque

Q.3 A dynamometer wattmeter can be used for (CO-6)

- a. Both D.C. and A.C.
- b. D. C. only
- d. A.C. only
- d. None of these

Q.4 For the measurement of Insulation Resistance the instrument used is (CO-6)

- a. Ohm meter
- b. Multimeter
- c. Megger
- d. LVDT

Q.5 Innerwall of a cathode ray tube is coated with (CO-2)

- a. Black Coat
- b. Conducting Powder
- c. Aquadag
- d. Phosphorous

Q.6 The extend the range of Voltmeter, a resistance is connected to it in (CO-3)

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

Q.7 Thermistor is used to measure (CO-5)

- a. Flow
- b. Pressure
- c. Stress
- d. Temperature

Q.8 Power in a three phase Unbalanced system can be measured by using: (CO-6)

- a. Single Wattmeter method
- b. By two wattmeter method
- c. Both (a) and (b)
- d. None of these

Q.9 The scale of PMMC type instruments is (CO-1)

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

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- Q.10 LVDT is a/an (CO-5)  
 a. Eddy current transducer b. Inductive Transducer  
 c. Resistance transducer d. None of these

### SECTION-B

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

- Q.11 A megger consists of a voltage source and a voltmeter (T/F) (CO-2)  
 Q.12 A tangent galvanometer is an example of ..... instrument. (CO-1)  
 Q.13 An Ammeter is always connected in series. (T/F) (CO-2)  
 Q.14 Current coil of the Dynamometer type wattmeter is made of Thick Conductor (T/F) (CO-2)  
 Q.15 MDI is used to indicate ..... (CO-2)  
 Q.16 The secondary of a C.T. is never left open circuited (T/F) (CO-4)  
 Q.17 CRT stands for ..... (CO-2)  
 Q.18 Active power in a three phase is ..... (CO-6)  
 Q.19 Platinum has is ..... temperature coefficient of resistance. (CO-5)  
 Q.20 Bourden tubes are used to measure..... (CO-5)

### SECTION-C

**Note:** Short Answer type Question. Attempt any twelve questions out of fifteen Questions. (12x5=60)

- Q.21 Explain the indicating and integrating instruments. (CO-1)  
 Q.22 Explain the different errors occurs in Moving coil instruments. (CO-1)

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- Q.23 Explain the principle of thermocouple. (CO-5)  
 Q.24 Describe the measurement of displacement with LVDT. (CO-7)  
 Q.25 Explain the construction and working of P.T. (CO-4)  
 Q.26 Explain the application of LCR meter. (CO-6)  
 Q.27 Draw the block diagram of CRO (CO-2)  
 Q.28 Draw the circuit for measurement of power in a 3 phase system by using two wattmeter method. (CO-2)  
 Q.29 Define and classify the transducers. (CO-5)  
 Q.30 Explain the working of liquid type thermometer. (CO-7)  
 Q.31 Describe the various errors occurs in induction type energy meter. (CO-5)  
 Q.32 Draw and explain the construction of frequency meter. (CO-6)  
 Q.33 Give the applications of tong tester. (CO-4)  
 Q.34 Draw the block diagram of digital Energy meter. (CO-6)  
 Q.35 Differentiate voltmeter and ammeter. (CO-3)

### SECTION-D

**Note:** Long Answer Type Questions. Attempt any Two Questions out of three Questions. (2x10=20)

- Q.36 Explain the working principle and construction of a PMMC instrument. (CO-2)  
 Q.37 Explain the working principle and construction of a Dynamometer type wattmeter. (CO-2)  
 Q.38 Explain the essentials of indicating instruments. (CO-1)

(Note: Course outcome/CO is for office use only)

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