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Roll No. .....

1st Sem / ECE/ Instrumentation & Control engg. / Automation & Robotics / Medical electronics/ ECE (For Speech and Hearing Impaired)

Subject : Fundamentals of Electrical Engneering / Fundamentals of Electrical Engg

Time : 3 Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Unit of Power is

a) Volt b) Joule

c) Farad d) Watt

Q.2 Unit of Current is

a) Ampere b) Ohm.

c) Watt. d) Volt.

Q.3 Minimum value of power factor is

a) -1 b) 0

c) -2 d) -3

Q.4 Power consumed by pure capacitor is equal to

a) Infinite b) 0

c) 1 d) 200

Q.5 Unit of M.M.F is

a) Ampere b) Ampere Turns

c) Volt d) Watt

Q.6 At time of series Resonance the value of current is

a) Maximum b) zero

c) One d) Minimum

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Power is measured by_____

Q.8 As the length of conductor increases, it's resistance Increases/ Decreases.

Q.9 Unit of Capacitance is_____

Q.10 Phase difference between voltage and current in pure inductor is _____

Q.11 Resistors of 6Wand 3Ware connected in series their total resistance is equal to_____.

Q.12 Reciprocal of Resistance is_____.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Define and explain Thevenin theorem.

Q.14 Define and explain KCL.

Q.15 Define and explain Ohm's law.

Q.16 Define & explain Frequency, Amplitude.

Q.17 Define & explain R.M.S. value of A.C.

Q.18 Explain difference between A.C and D.C

Q.19 Draw and explain Impedance triangle for R-L series circuit.

Q.20 Explain power factor and it's significance.

Q.21 Explain series and parallel combination of Inductors.

Q.22 Explain the concept of self Inductance.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain Voltage and current source, symbol & Characteristics of ideal and practical sources.

Q.24 Explain construction, working principle and applications of lead Acid Batteries.

Q.25 Explain Star to Delta and Delta to Star conversion.