

No. of Printed Pages : 4
Roll No.

220921

**2nd Sem / Electrical
Subject : Electrical Networks**

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

- Q.1 The unit of Inductance is _____
a) henry b) Ohm
c) Volt d) Ampere
- Q.2 The frequency of DC is _____ Hz.
a) 50 b) 0
c) 100 d) 20
- Q.3 The minimum value of Power factor is
a) 0 b) 1
c) 2 d) 3
- Q.4 The Phase difference between voltage and current
is _____ in pure inductive circuit
a) 0° b) 90°
c) 45° d) 180°

Q.5 The unit of Power is _____

- a) Watt b) Volt
c) Ampere d) Joule

Q.6 Voltage is measured by _____

- a) Ammeter b) Voltmeter
c) Wattmeter d) Ohm meter

SECTION-B

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

- Q.7 Define maximum Power Transfer Theorem
- Q.8 Fared is the unit of _____
- Q.9 Define frequency.
- Q.10 Define Active Network.
- Q.11 Define angular velocity.
- Q.12 Define unbalanced local.

SECTION-C

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

- Q.13 Explain Thevenin theorem.
- Q.14 Explain generation of alternating current
- Q.15 Explain about farm factor and peak-factor.

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- Q.16 Explain component method of addition of two alternating quantities
- Q.17 Discuss causes of low power factor and improvement of power factor
- Q.18 Explain star connection of three phase circuit
- Q.19 Explain vector method of solving parallel A.C. Circuit.
- Q.20 Explain the concept of transient and Harmonies in A.C. circuits.
- Q.21 Explain concept of balanced and unbalanced load
- Q.22 Explain the circuit with pure Inductance fed by pure A.C. Supply

SECTION-D

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

- Q.23 Define and Explain Newton Theorem
- Q.24 Explain the resonance in parallel in A.C circuits
- Q.25 Discuss the relationships between line voltage, phase voltage, line current Phase current in star and Delta connections.

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