UNIT 1 2 MARKS QUESTIONS

Q 1 Explain MESH and LOOP .

Q 2 Explain NODE and JUNCTION.

Q 3 Explain active and passive element.

Q 4 Explain unilateral and bilateral element.

Q 5 Explain ideal and practical, current source and voltage source.

Q 6 What are the basic elements of an electrical network?

Q 7 State KVL and KCL .

Q 8 Differentiate between EMF and potential difference.

Q 9 Why linearity is important.

Q 10 Explain linear and non linear element.

Q 11 Explain lumped and distributive network.

Unit 2 , 2 MARKS QUESTION

Q 1 What are the value of power factor for

I) pure resististive circuit

ii) pure inductive circuit

iii) pure capacitive circuit

define it.

Q 2 what is the average power of pure Inductive and pure capacity circuit.

Q 3 Define the term "Dynamic Impedance" in AC circuit.

Q 4 Define power factor and quality factor

Q 5 Why series resonance circuit is known as acceptor circuit and parallel resonant circuit is known as rejector circuit.

Q 6 What is the relationship between line and phase, voltage and current for a e phase star and delta connection balance system.

Q 7 What do you mean by active power, reactive power and Apparent power.

Q 8 What do you mean by form factor and peak factor.

Q 9 What do you mean by average and RMS value.

Q 10 What are the causes of low power factor and how can we improve it.

UNIT-3 - 2- Marks Questions

Q.1 Explain (i) Reluctance (ii) Permeability (iii) Magnetic field Density (iv) Magnetic field Strength.

Q.2 What happens if D.C supply is given to the Transformer.

Q.3 What do you mean by Voltage Regulation of Transformer.

Q.4 Why Transformer are rated in KVA not in KW?

A.4 Iron loss on depends on voltage & Copper loss depends on current of a transformer, Hence, total transformer heat loss depends on Volt-Ampere (VA) & independent of phase angle among voltage & current.

Q.5 State different losses in Transformer.

Q.6 Give the expression for the load current, when the transformer operates at its maximum efficiency.

Q.7 Compare Core type & Shell type Transformer.

Q.8 Explain Magnetic Leakage & Fringing.

Q.9 Compare Electric & Magnetic Circuits.

Q.10 Write different types of Magnetic Material.

UNIT-4 , 2-Mark Questions

Q.1 Give classification of D.C. Machines.

Q.2 What do you mean by Back EMF.

Q.3 What is generated EMF in D.C. Generator.

Q.4 What will happens, if the field winding of a running D.C. shunt motor suddenly opens/short?

A.4 $T \propto \phi I_a$

$T \propto \frac{1}{N}$

(*) If motor is short circuited than, $I_a = 0$, $T = 0$.
Motor will stop rotating.

(*) If motor is at open
ϕ will decrease, $\therefore$ N increases to maintain constant E_b.
$\therefore E_b \propto \uparrow N \phi \downarrow$
$\therefore$ Speed will dangerously increase.

Q.5 What is the function of Brushes in D.C. Machine)

Q.6 How can we change the direction of rotation of D.C. Motor?

Q.7 What is the role of commutator in D.C. Machine)

Q.8 Why D.C. series motor is never started on No-Load.

Q.9 Write applications of synchronous motor.

Q.10 Can Induction Motor runs at synchronous speed? Justify your answer.

Q.11 Why condenser is used in a single phase Induction Motor?

Q.12 Enlist the various methods of starting of a 1-ϕ Induction Motor?

Q.13 Write applications of single-phase induction motor.

Q.14 Give the expression of speed in terms of poles & freq. of supply

Q.15 What is the function of slip rings in a 3-ϕ Induction Motor.

Q.16 What is called synchronous speed in AC Machines.

UNIT-5 2 Marks Questions

Q.1 Write full forms of (i) SFU, (ii) MCB, (iii) MCCB, (iv) ACB (v) ELCB.

Q.2 What is the difference between Primary & Secondary Batteries

Q.3 What is the necessity of Earthing?

Q.4 Why Earth pin is made thicker and bigger than Line & neutral?

Q.5 What are the factors that affect the battery capacity?

Q.6 What do you mean by Busbar?