

Topics covered in the class before
[lock down]

① Single Phase transformer

- Principle and construction of Tr.
- EMF eqⁿ and problems
- Ideal transformer.
- Phasor diagram of ideal transformer
(No load and loaded transformer)
- Phasor diagram of loaded Tr.
In case of Res. Inductive, capacitive, and resistive.
- Referred load and problems
- Efficiency and condition for max efficiency, All day efficiency (problems)
- Voltage regulation & problems
- few Home Assignments (given)
- Testing (Polarity test, No load / Load test / Back to Back test)



② Auto transformer (Covered)

- Construction
- Advantages, disadvantages and applications
- Copper / material saving is auto transformer as compared to conventional type
- Small problems.

③ D.C. Machines (Covered)

- Construction and Principle of D.C. Generator
- Construction and Principle of D.C. Motor
- EMF eq $E_g = \frac{\Phi ZNP}{60A}$ (Problems)
- Lap and Wave Winding.
- Circuit diagram of Self-excited Separately excited D.C. Generator

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Few topics of DC Machine (not covered and to be covered before Exam) ↓

- Types of D.C. Generator

(1) Separately excited

(2) Self excited

(3)

- Losses in the D.C. Machine

- Conditions for Maximum Efficiency

[few topics of Induction Machine
to be covered before Exam]

- Construction and Principle
- What is slip
- Small problems on slip
- Types of Induction Machine
(Slip ring and Squirrel cage)