SYLLABUS

1. DC circuit analysis
2. Magnetic circuit analysis.
3. Single phase AC circuit analysis.
4. Three phase AC circuit analysis.
5. Power system components.

DC Circuit Analysis

ELECTRIC CIRCUIT

An interconnection of simple electrical devices with at least one closed path where current may flow.

- Source · Elements · Wires.
- To prevent overload, fuse or circuit breaker.

CIRCUIT ELEMENTS

- Active elements — elements which is ~~with~~ its own energy source.
- Passive elements — elements which is not its own energy source.
- Linear — With linear V-I relationship. eg resistor.
- Non-Linear — With non linear V-I relationship eg diode
- Unilateral — current flow in one direction. eg diode
- Bilateral — current flow in both direction eg resistor
- Lumped — lumped elements are simplified version of distributed elements.
- Distributed.