

## Lecture 51

### 1. What is a fuse ? Discuss the advantages and disadvantages of a fuse.

A Fuse or an Electric Fuse is an Electrical / Electronic device that protects the circuit from different electrical faults like over current and overload

The principle of a fuse is based on the heating effect of the electric current. A simple fuse consists of a small conductive material with low resistance and it is placed in series with the circuit.

#### Advantages

- It is the cheapest form of protection available.
- It needs no maintenance.
- It interrupts enormous short circuit currents without noise, flame, gas or smoke.

#### Disadvantages

- Considerable time is lost in rewiring or replacing a fuse after operation