

Q1. What is a fuse? Discuss the advantages and disadvantages of a fuse.

Answer:

Fuse is the simplest current interrupting device for protection against excessive currents.

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.
- The minimum time of operation can be made much smaller than that with the circuit breakers.
- Its inverse time-current characteristics enables its use for overload protection.

DISADVANTAGES

- Considerable time is lost in rewiring or replacing a fuse after operation.
- The current-time characteristics of a fuse cannot always be correlated with that of the protected device.