

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.