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**SUBJECT:- PHYSICS**

**CLASS:- XTH**

**DATE:- 24/04/XXI**

**SUBJECT TEACHER:- MR. NEEL NIRANJAN**

**CHAPTER 1. (ELECTRICITY) (BASED ON NCERT PATTERN)**

**Q1.** Let the resistance of an electrical component remains constant while the potential difference across the two ends of the component decreases to half of its former value. What change will occur in the current through it?

**Ans.** Amount of current will be halved.

**Q2.** Why are coils of electric toasters and electric irons made of an alloy rather than a pure metal?

**Ans.** The coils of such heating appliances are made up of an alloy rather than a pure metal because:

- (a) The resistivity of an alloy is much higher than that of a pure metal.
- (b) An alloy does not undergo oxidation easily even at high temperature when it is even red hot.

**Q3.** (a) Which among iron and mercury is a better conductor?

- (b) Which material is the best conductor?

**Ans.** (a) Iron

- (b) Silver

**Q4.** What are the advantages of connecting electrical devices in parallel with the battery instead of connecting them in series?

**Ans.** Advantages of parallel connection are:

- (a) In parallel circuit, if one electric appliance stop working due to some defect, then all other appliances keep working normally.
- (b) In parallel circuit, each electrical appliance has its own switch due to which they can be turned on or off without affecting other appliances.
- (c) Each electrical appliance get the same voltage (220 V) as that of the power supply line.
- (d) In parallel connection of electrical appliances, the overall resistance of the circuit is reduced due to which the current from the power supply is high.