

## Physics - 10th Class Physics English Medium Chapter 14 Preparation

Q1. Define electric current.give its formula.

**Ans 1:** The rate of flow of electric charge through any cross sectional area is called current.

Formula:  $I = Q/t$

unit: Its S.I. unit is Ampere

Q2. Define electric power.

**Ans 1:** The amount of energy supplied by current in unit time is known as electric power.

Units: Its unit is watt.

$P = \text{energy} / \text{time}$ .

Unit is joule

Q3. Define specific resistance.

**Ans 1:** The resistance of one meter cube of a substance is equal to its specific resistance.It unit is Ohm meter .

Q4. Define kilo watt hour.

**Ans 1:** The amount of energy delivered by power of one kilo watt in one hour is called kilo watt hour.

1 kilo watt = 3.6 MJ

Q5. Why does not diamond conduct electricity?

**Ans 1:** Diamond does not conduct electricity. Because it has no free electrons.

Q6. Can current flow in a circuit without potential difference?

**Ans 1:** No, current cannot flow without the presence of a potential difference.

Q7. Define resistance.

**Ans 1:** The property of a substance which offers opposition to the flow of current through it is called its resistance. Its unit is Ohm

Q8. Why a bird can sit harmlessly on high tension wires/

**Ans 1:** Birds can sit harmlessly on tension wires. There is one potential but no potential difference which is necessary to flow the current. That is why the birds can sit on high tension wires safely.

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Q9. Define conventional current.

**Ans 1:** Current flowing from positive to negative terminal of a battery due to the flow of positive charges is called conventional current.

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Q10. What is difference between cell and battery?

**Ans 1:** Cell: It is the source of e.m.f to flow the charges. Cell is a specific name of source of e.m.f in which chemical energy is converted into electrical energy.

**Ans 2:** Battery: 1. It is the source of battery is more general name of source of e.m.f in which any kind of energy is converted into electrical potential energy.

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