Physics - 12th Class Physics Chapter 2 Short Questions Preparation

Q1. What are non ohmic devices?Give two examples.

Ans 1: Those devices which don't obey the Ohm's law are called non-ohmic devices.Their current-voltage graphic is not a straight line.For example ,filament bulb and semiconductor diodes.

Q2. What are the difficulties in testing weather the filament of lighted bulb obeys ohm's law?

Ans 1: In case of light bulb,the temperature of the filament increase with the passage of current through it.Hence the Ohms law can't be applied to filament bulb.

Q3. Name any four source of current.

Ans 1: Source of current are

1. Cells
2. Electric generators
3. Thermocouples
4. Solar cells

Q4. Define temperature coefficient of resistivity.

Ans 1: The temperature of coefficient of resistivity is defined as fractional change in resistivity per kelvin rise in temperature.Its unit is K^{-1}.

Q5. What is the conventional current? How does it differs from electric current?

Ans 1: The current flow due to positive charges from a point at higher potential to a point at lower potential is called conventional current.It is due to positive charges while electric current is due to negative charges i.e electrons.

Q6. Why does no current pass through Galvanometer in a balanced wheat stone bridge although the keys in the circuit are closed ?

Ans 1: No current pass through the galvanometer when wheat stone bridge is balanced.Because at this stage ,both the terminals of the galvanometer are at the same potential.Hence no current will flow through it.

Q7. Differentiate between conventional and non-conventional current.

Ans 1: Conventional Current: The current flow die to positive charges from a point at higher potential to a point at lower potential is called conventional current.

Ans 2: Non-Conventional Current: The amount of electric charge that flow through a cross section of a conductor per unit time is known as electric current.It is also known as non-conventional current.

Q8. What is meant by tolerance?

Ans 1: Tolerance means the possible variation from the marked value.

Q9. Write about any two sources of Current.

Ans 1:

1. Electric generators convert mechanical energy into the electrical energy.
2. Solar cells convert sunlight directly into electrical energy.
3. Thermocouples convert heat energy into electrical energy.

Q10. Define Electromotive force and Terminal potential difference.

Ans 1: Electromotive force:The energy supplied to a unit charge in moving it from negative to positive electrode inside the source is called electromotive force.

Ans 2: Terminal potential difference:The potential difference across the terminal of a cell or battery when current is being drawn from it is called terminal potential difference.The potential difference across the conductor is zero when no current flows through it.
