Physics - 10th Class Physics English Medium Chapter 14 Preparation

Q1. Differentiate between e.m.f and potential difference.

Ans 1: Potential difference.
1. Potential difference is smaller than e.m.f
2. Potential difference depends upon resistance.
3. Potential difference is result.

Ans 2: E.M.F.
1. E.M.F. is greater than potential difference.
2. EMF does not depends upon potential difference.
3. EMF is the cause.

Q2. What is galvanometer?

Ans 1: It is a instrument which is used to indicate the presence of current in the circuit. It is very sensitive. Its resistance is very low. It is always connected in series in the circuit.

Q3. 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

---

Q4. Why a bird can sit harmlessly on high tension wires/

Ans 1: Birds cna 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.

Q5. Can current flow in a circuit without potential difference?

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

Q6. 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.

Q7. Difference between A.C and D.C current.

Ans 1: A.C:
1. The current which changes its direction of flow again and again, is known as alternating current or A.C.
2. Current produced from A.C generator.

Ans 2: D.C;
1. The current which does not change its direction of flow is known as direct current or D.C.
2. current produced form cell or battery.

Q8. State Ohm's law.

Ans 1: the amount of current 1 passing though a conductor is directly proportional to teh potential difference V applied across its ends provided the temperature and the physical state of the conductor, dues not change. V=IR
Limitations: Ohm's law is applicable only in case of metallic conductors when their temperature and physical state do not change.

Q9. Define unit of elctric current.

Ans 1: Unit of current is Ampere and defined as.
If one coulomb charge pass through an area in one second then current would be one Ampere. 1 Ampere = Cs-1

Q10. Why does not diamond conduct electricity?

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