



Worksheet-1

CH : EFFECT OF CURRENT

A. Multiple choice questions

Q1. Which of the following materials is a good conductor of electricity?

a). Wood b). Plastic c). Glass d) copper

Q2. What is the unit of electric current?

a). Ampere b). Volt c) ohm d) joule

Q3. Which device is used to measure the potential difference between the two points in an electric circuit?

a) Ammeter b) voltmeter c) galvanometer d) rheostat

Q4. Which law states that the current flowing through a conductor is directly proportional to the potential difference across its end?

a) ohm's law b) kirchoff's law c) faraday's law d) coulomb's law

Q5. Which type of circuit has only one path for the current to flow ?

a) series circuit b) parallel circuit c) combination circuit d) open circuit

Q6 Which of the following material is used to make the filament of an electric bulb?

a) copper b) aluminum c) tungsten d) iron

Q7 which of the following material is good insulator of electricity?

a) copper b) aluminum c) glass d) silver

B. Short answer type questions

Q8. What is meant by conductors and insulators? Give two examples of conductors and insulators.

Q9. What do you understand by the term electric potential at a point? What is the unit of electric potential?

Q10. Calculate the resistance of an electric bulb which allows a 10A current when connected to a 220V power source?

Q11. Draw a schematic diagram of a circuit consisting of 3V battery, 5 ohm, 3ohm and 1ohm resistors, an ammeter and a plug key, all connected in series.

Q12. Define electric resistance of a conductor?

Q13. Why does the cord of an electric heater not glow while the heating element does?

C. Long answer questions

Q14. a) states ohm's law.

b) plot a graph between V and I.

c) Explain the verification of ohm's law and also derive ohm's law.

Q15. What are the advantages of connecting electrical devices in parallel with the battery instead of connecting them in series?