

CLASS VII – SCIENCE – CHAPTER 10

ELECTRIC CURRENT AND ITS EFFECTS

Name:

Date:

Q01. Electric current is the flow of

- (a). Proton (b). Electron (c). Neutron (d). Positron

Q02. Which of the following materials is a conductor?

- (a). Silver (b). Plastic (c). Cloth (d). Rubber

Q03. A device which prevents or allow the current to flow through it

- (a). Motor (b). Conductor (c). Switch (d). Terminal

Q04. When two or more cells are joined together it forms a

- (a). Dynamo (b). Transistor (c). Battery (d). Insulator

Q05. Filament of electric bulb is made up of

- (a). Nichrome (b). Silver (c). Copper (d). Tungsten

Q06. Electric current is measured by a device

- (a). Voltmeter (b). Galvanometer (c). Ammeter (d). Odometer

Q07. Speed of car is 90 km/h. speed in m/s is

- (a). 15 km/h (b). 20 km/h (c). 25 km/h (d). 30 km/h

Q08. To and fro movement is called

- (a). Movement (b). Vibration (c). Oscillation (d). Speed

Q09. Speed time graph of a uniform motion is

- (a). Curved line (b). Straight line (c). Parabolic (d). Hyperbolic

Q10. Fuse wire is made up of alloys of

- (a). High melting pt. (b). Low melting pt. (c). High boiling pt. (d). Low boiling pt.

Q11. Coils of heating devices are made up of

- (a). Tungsten (b). Copper (c). Mercury (d). Nichrome

Q12. Wire carrying current produce

- (a). Magnetic field (b). Chemical effect (c). Heating effect (d). All of these

Q13. Conductor having very high resistance is

- (a). Good conductor (b). Insulator (c). Semi-conductor (d). Resistor

Q14. Electromagnet is based on

- (a). Heating effect of electric current
- (b). Magnetic effect of electric current
- (c). Chemical effect of electric current
- (d). Electro-chemical effect of electric current

Q15. MCB in electric circuit stand for

- (a). Minimum current breaker
- (b). Maximum current breaker
- (c). Miniature circuit breaker
- (d). Molar current breaker

Q02. Fill in the blanks.

- (a). A group of two or more cell is called a _____.
- (b). A device that breaks the circuit is called a _____.
- (c). In electric circuit the electrons flow from _____ terminal to the _____ terminal.
- (d). Metals are _____ conductor.
- (e). A device which converts electric energy into light energy is _____.
- (f). _____ is the best conductor of electricity.
- (g). A _____ is used to protect appliances from damage due to excessive current.
- (h). A short occurs when a _____ comes in direct contact with neutral wire.
- (i). Live wire is covered with _____ coloured insulation.
- (j). Connecting many appliances with single circuit may lead to _____.

Q03. Write T for true and F for false statements.

- (a). Electromagnet is used in electric fan.
- (b). When current flows through the conductor magnetic field is produced.
- (c). Galvanometer is used to measure voltage.
- (d). Chemical effect of electric current is used for electroplating.
- (e). Coil of heating devices are made up of good conductor.
- (f). Electromagnet is used in electric heater.
- (g). Fuse works on the principle of heating effect of electricity.
- (h). Bulb filament has very high resistance.
- (i). Copper is a semiconductor
- (j). Earth wire has green insulation.

Q01. Match the following:

A. Column A

- (a). Switch
- (b). Electric cell
- (c). Rubber
- (d). Copper
- (e). Electric heater

Column B

- i. Heating effect
- ii. Insulator
- iii. Produce electricity
- iv. Close and open the circuit.
- v. Conductor

B. Column A

- (a). Current
- (b). Potential difference
- (c). Resistance
- (d). Power
- (e). Energy

Column B

- i. Watt
- ii. Joule
- iii. Ampere
- iv. Ohm
- v. Volt

C. Column A

- (a). Battery
- (b). Cell
- (c). Switch
- (d). Galvanometer
- (e). Wire

Column B

- i. Used to join circuit
- ii. Used to detect current
- iii. Combination of cells
- iv. Used to create potential difference
- v. Used to close the circuit.

D. Column A

- (a). Tungsten
- (b). Nichrome
- (c). Mercury
- (d). Silver
- (e). Rubber

Column B

- i. best conductor
- ii. insulator
- iii. coils of heater
- iv. filament of bulb
- v. poor conductor

Q04. Why do we use nichrome in an electric heater?

Q05. What is a fuse? Write its function?

Q06. Write difference between a cell and a battery?

Q07. What is electromagnetic effect of electric current?

Q08. What is electric current? How its flows?

Q09. Write difference between electromagnet and permanent magnet?

Q10. What is short-circuiting? How it occurs?

Q11. What is electromagnetic induction? Write its application.

Q12. Write 3 application of electromagnet.

Q13. What is electromagnet? Write its two applications.

Q14. What is electric bell? Name its main components.

Q15. What is difference between open and closed circuit?

Q16. Give one word for the following:

- (a). Path of electric circuit
- (b). A device that create potential difference.
- (c). Coming together of live and neutral wire in a circuit.
- (d). A safety device that protects appliances from overloading and short circuit.
- (e). Magnet produced by electricity.

Q16. Name the following

- (a). Device used to measure the amount of current.
- (b). A piece of thin wire of high resistance, used in electric bulb.
- (c). A device which offers resistance to an electric current.
- (d). A number of cells joined together.
- (e). Safety device used to protect us from electric shocks.