Chapter-4

Worksheet-1

Section 1

Q1. What is a circuit diagram?

Q2. Why should we buy electric appliances with the ISI mark?

Q3. Define a battery. Explain the arrangement of cells in a battery.

Q4. When does the current flow throughout the circuit? Explain.

Q5. Why are wires of different materials and different lengths and thicknesses used?

Q6. What type of wire is used for making electric fuses?

Q7. What is an electromagnet?

Q8. Explain the working of an electric bell with diagram.

Q9. When does an electric short circuit occur? What harm can it do?

Q10. What do you mean by overloading of an electric circuit? State two measures to avoid overloading.

Section 2

Q11. Which of the following does NOT contain a heating element?

a) Electric Iron
b) Electric Heater
c) Electric Oven
d) Electric Bell

Q12. Identify the element that is used for making the filament in bulbs.

a) Silver
b) Copper
c) Aluminum
d) Tungsten

Q13. Where can the key or switch be placed in the circuit?

a) Left Side of the battery
b) Right side of the battery
c) Can be placed anywhere in the circuit
d) Near the positive terminal of the bulb.

Q14. The coil of wire contained in an electric heater is known as

a) Component
b) Element
c) Circuit
d) Spring

Q15. The amount of heat produced in a wire depends on

a) material
b) length
c) thickness
d) all of these

Q16. Choose the statement which is not correct in the case of an electric fuse.

a) Fuses are inserted in electric circuits of all buildings.
b) There is a maximum limit on the current which can safely flow through the electric circuits.
c) There is a minimum limit on the current which can safely flow in the electric circuits.
d) If a proper fuse is inserted in a circuit it will blow off if current exceeds the safe limit.

Q17. When the strength of the current flowing through a coil is increased, which of the following statements is true for it?

a) Strength of the magnetic field decreases,
b) Strength of the magnetic field increases,
c) Amount of heat generated due to resistance decreases,
d) Strength of the magnetic field remains constant,

Q18. The magnetic field around a current carrying coil

a) Last for three hours
b) Last as long as the current flows through it
c) Last till its half-life period
d) Is permanent

Q19. Which of the following is not a circuit element?

a) Battery
b) Voltmeter

c) Potential Difference
d) Resistor

Q20. A fuse wire is made up of which alloy?

a) Nichrome
b) Tin-lead
c) Manganin
d) Constantan