Chapter-4

Worksheet-2

Section 1

- Q1. Define good conductors and poor conductors or insulators.
- Q2. Show with the help of a diagram that lemon juice and vinegar are good conductors of electricity.
- Q3. What is an LED? Why is it preferred to other type of bulbs?
- Q4. Explain the conductivity of water.
- Q5. Give an example of chemical effect of the electric current.
- Q6. What happens when electric current is passed through the copper sulphate solution?
- Q7. How does a bulb glow in liquid? Explain.
- Q8. On what factors thickness of the electroplated items depend?
- Q9. With the help of a suitable diagram, explain electrolytic refining of copper.
- Q10. What are the advantages and disadvantages of electroplating?

Section 2

- Q11. Why do we add little dilute sulphuric acid to copper sulphate solution during electroplating?
 - a) To increase acidity
 - b) To increase conductivity
 - c) So that the colour becomes more prominent
 - d) To burn copper sulphate

Q12. A coating of is deposited on iron to protect it from corrosion and formation of rust
a) Copperb) Aluminiumc) Zincd) Silver
Q13. Chromium plating is done on many objects such as car parts, bath taps, kitchen gas stove etc. Why?
a) It does not corrode and prevent scratchesb) It looks beautifulc) It costs Lessd) Articles can be sold at higher prices.
Q14. Tin cans, used for storing food, are made by electroplating tin onto iron. Why?
a) Tin gives a shiny appearanceb) To make the vessel cheapc) Tin is less reactive than iron.d) To make the vessel lighter
Q15. In which one of the following situations does a conventional electric current flow due north?
a) Protons in a beam are moving due southb) A water molecule is moving due northc) Electron in a beam are moving due southd) None of these

- Q16. When electricity is passes through calcium nitrate solution in water, what is likely to be farmed and why?
 - a) Hydrogen because it is more reactive than calcium.
 - b) Calcium because it is more reactive than Hydrogen.
 - c) Hydrogen because it is less reactive than calcium.
 - d) Calcium because it is less reactive than Hydrogen.
- Q17. Which of the following statements is incorrect?
 - a) Anode is an electrode connected to the positive terminal of the battery.
 - b) Pure water is poor conductor of electricity.
 - c) Electrolysis is used in the refining of impure metals.
 - d) Ions can have only a positive charge.
- Q18. Which of the following cells use(s) electric current to produce a chemical reaction?
 - a) Electrolytic
 - b) Solar cell
 - c) Dry cell
 - d) Both dry cell and electrolytic cell
- Q19. Why is the switch for any electrical appliance in ac circuit always connected to the live wire?
 - a) No current flows in the neutral wire.
 - b) There will be a short circuit if the switch is in the Earth lead.
 - c) The device can be switched off easily if the switch is in the neutral lead.

d) The device can be isolated (mode safe) if the switch is in the live lead.

Q20. Which of the following is correct?

- a) Water can be used for extinguishing fires caused due to electrical faults.
- b) Carbon is a non-metal so it cannot be used in electrolytic cell.
- c) A liquid conducts electricity because of the presence of ions.
- d) Pure water forms ions to conduct electricity