Chapter 14

MULTIPLE CHOICE QUESTIONS

1.	d	2.	а	3.	d	4.	a
5.	d	6.	с	7.	d		

VERY SHORT ANSWER QUESTIONS

8.	(a) Cathode	(c) Conductor
	(b) Electroplating	(d) Chromium

9. A coating of zinc is provided to protect iron from corrosion and rust.

10. No

11. Heating effect of electric current.

SHORT ANSWER QUESTIONS

- 12. Addition of another cell increased the current through the bulb sufficiently to make it glow.
- 13. The current through liquid B could be weak and therefore unable to make the bulb glow. However, it was strong enough for the LED to glow.
- 14. The spoon should be connected to the negative terminal of the battery. The other electrode should be made of silver.
- 15. Tin is less reactive than iron. Tin coating prevents food from coming in contact with iron and thus prevents it from getting spoiled.
- 16. Diagram A shows the correct observation.

LONG ANSWER QUESTIONS

- 17. No, Yes, No, Yes
- 18. Bubbles of gas may be formed on the electrodes.

- Deposits of metal may be seen on electrodes.
- Change in the colour of the solution may take place.
- The solution may get heated. (Any three)
- 19. Yes, copper from the copper sulphate solution will be deposited on the carbon rod. Copper from the copper plate will be dissolved into the copper sulphate solution for electroplating.
- 20. (i) plate A –Pure copper(ii) plate B –Impure copper(iii) the solution –Copper sulphate

Copper from impure copper plate is transferred to the pure copper plate by the process of electroplating.

- 21. Yes, air is a poor conductor of electricity. No, under certain conditions, such as during lightning, air may conduct electricity.
- 22. If the water is distilled water and lemon juice is not added, no current will pass through the circuit. If the water taken is salty, then a feeble current will pass through the circuit and bubbles will be seen on the negative electrode.
- 23. (i) It indicates the presence of current in the circuit.
 - (ii) The bulb did not glow because the current was not sufficient to make it glow.
 - (iii) Deflection in the magnetic compass will increase.
 - (iv) Deflection in the compass will increase further.



Whenever current flows through the circuit the megnetic compass needle shows deflection due to magnetic effect of current.