

CH-11 CHEMICAL EFFECT OF ELECTRIC CURRENTI SHORT ANSWER TYPE QUESTIONS:

1. Name three liquids, which when tested in the manner shown in figure given alongside, may cause deflection in the magnetic needle.

[Diagram Ref book]

Ans: Sodium hydroxide solution, Sulphuric acid solution, Copper sulphate solution.

II HIGHER ORDER THINKING SKILLS

1. What is the charge carrier in mercury?

Ans: The positive ions are the charge carriers in mercury.

2. Can a plastic/wooden object be coated with a metal by electroplating? Explain.

Ans: No, plastic/wooden object cannot be electroplated because wood and plastic are bad conductors of electricity. During electroplating if the cathode is made of plastic or wood, there won't be conduction of ions as the electricity cannot be passed through plastic or wood.

3. Most bathroom fittings and car/cycle parts are chromium plated. Why are not these parts made from chromium itself?

Ans: These parts are not made from chromium

itself because chromium is brittle and cannot be drawn into sheets and wires. Moreover it would be too expensive to make all these parts from chromium.

4 Why is direct current used in electroplating?

Ans Direct current for electroplating means it pulls metal off the negative electrode and deposits it on the positive electrode. It has to go only one way to work. If we use AC or alternating current, any metal it pulls off the negative electrode would get redeposited back on that electrode in 1/60th of a second because that negative electrode switches back and forth between negative and positive electrodes 60 times a second. So, no deposition of the metal would take place. In an AC source the polarity continuously reverses, and as such there would be no steady anode or cathode.

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