

MM – 30

Time – 1hr

1. Which of the following liquids is a good conductor of electricity? 1
  - a) Distilled water
  - b) Lemon juice
  - c) Kerosene
  - d) Alcohol
2. An electric current can bring about a chemical change in a conducting liquid. T/F. 1
3. The instrument used to detect the flow of electric current through a liquid is called a \_\_\_\_\_. 1
4. Assertion (A): Tap water conducts electricity. 1  
Reason (R): Tap water contains dissolved salts and minerals.
  - a) Both A and R are true, and R is the correct explanation of A.
  - b) Both A and R are true, but R is not the correct explanation of A.
  - c) A is true, but R is false.
  - d) A is false, but R is true.
5. Case Study: 3  
Sana connected a bulb to a circuit using copper wires and placed the free ends in lemon juice. She noticed the bulb glowed dimly.
  - a) What does the glowing of the bulb indicate?
  - b) Why does the bulb glow dimly?
  - c) Suggest any way Sana can increase the brightness of the bulb.
6. Draw a labelled diagram of an electric circuit used to test the conductivity of liquids. 2
7. Why is it dangerous to touch electrical appliances with wet hands? 1
8. Name two effects of electric current. 2
9. What is electroplating? Give one use of electroplating in daily life. 2
10. Which of the following will not conduct electricity? 1
  - a) Salt solution
  - b) Vinegar
  - c) Sugar solution
  - d) Hydrochloric acid
11. Rahul wants to test whether milk conducts electricity. He connects the circuit and observes the bulb does not glow. Give two possible reasons. 2
12. What is meant by chemical effect of electric current? Explain with one example. 2

13. A steel spoon is to be electroplated with silver. Which terminal of the battery should the silver rod be connected to and why? 2
14. Complete the following: 2
- a) \_\_\_\_\_ is used in electroplating artificial jewellery.
- b) Electroplating helps in preventing \_\_\_\_\_ of metals.
15. Why should we not use water from the tap for testing the conductivity of distilled water? 1
16. What precautions should be taken while setting up a circuit to test conductivity of a liquid? Mention any two. 3
17. Define good and poor conductors of electricity with one example each from liquids. 2
18. Explain why the bulb does not glow when the terminals are dipped in distilled water. 1