

**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.  
 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:  
 Sana connected a bulb to a circuit using copper wires and placed the free ends in lemon juice. She noticed the bulb glowed dimly. 3  
 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

- \_\_\_\_\_ is used in electroplating artificial jewellery.
- 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

