परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
कार्यपत्रक / Worksheet (2025-26)

कक्षा /Class: VII **शिषर् /Subject: Science** **माह/ Month: July अंक/Marks: 40**

दिया गया पाठ्यक्रम/Portion covered: Electricity - Circuits and their components worksheet

द्रिद्यार्थी का नाम/Name of the student: _____

अनुक्रमोंक /Roll No._____कक्षा/अनुभाग Class /Sec.:_____द्रिनोंक /Date: _____

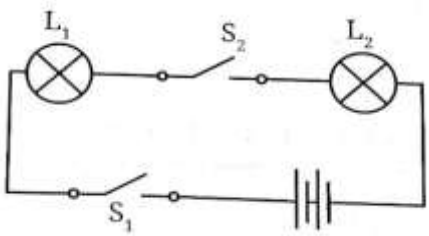
I. Choose the correct answer:

1. Which is the second tallest dam in India?
   a) Tehri dam
   b) Bhakra Nangal dam
   c) Hirakud dam
   d) Indira Sagar dam
2. Identify the portable source of electricity.
   a) Torch light
   b) Lamp
   c) Electric cell
   d) LED
3. The filament in incandescent lamp is made up of .....
   a) Titanium
   b) Copper
   c) Iron
   d) Tungsten
4. Here are few international organizations. Pick the odd one.
   a) International Electrotechnical Commission
   b) American National Standards Institute
   c) Institute of Electrical and Electronics Engineers
   d) International Science Council
5. Which device completes or breaks the circuit?
   a) Battery
   b) Switch
   c) Wires
   d) Lamp
6. Electricity from power plants that comes to the wall socket is known as .....
   a) Alternating Current
   b) Direct Current
   c) Neither a) nor b)
   d) Either a) or b)
7. Across which river Bhakra Nangal dam is constructed ?
   a) Ganga
   b) Bhagirathi
   c) Sutlej
   d) Yamuna
8. Identify the conductor of electricity.
   a) Graphite
   b) Stick
   c) Glass scale
   d) Cardboard
9. Which type of electrical wire is used in overhead power lines?
   a) Non Metallic Sheathed wires
   b) Aluminium wires
   c) Copper wires
   d) None of these
10. Choose the incorrect statement.
    a) A switch is the source of electric current in a circuit.
    b) A switch helps to complete or break the circuit.
    c) A switch helps us to use electricity as per our requirement.
    d) When the switch is in 'OFF' position, there is an air gap between its terminals.

II. Choose the correct answer from options given below for the statements.
(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

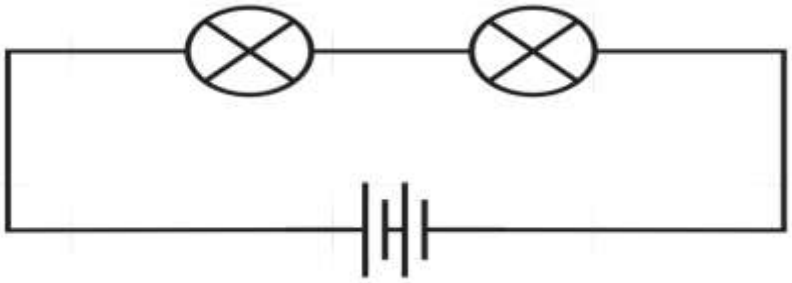
11. Assertion (A) : Copper is widely used for making electrical wires.
    Reason (R): Copper is comparatively lower in cost and abundant supply.
12. Assertion (A): Electric current passing through our body may cause severe injury or even death.
    Reason (R): Our body is a poor conductor of electricity. .
13. Assertion (A): In symbol of an LED, the triangle points the direction in which the current flows.
    Reason(R): The two arrows indicate that light is emitted by an LED.
14. Assertion (A): The glowing thin wire is called the filament of the lamp.
    Reason (R): The filament should have low melting point.

III. Read the following circuit and answer the question carefully.



15. If S2 is in 'ON' position, S1 is in 'OFF' position, which lamp(s) will glow?
    a) L1 c) Both L1 and L2
    b) L2 d) Neither L1 nor L2
16. If S2 is in 'OFF' position, S1 is in 'ON' position, which lamp(s) will glow?
    a) L1 c) Both L1 and L2
    b) L2 d) Neither L1 nor L2
17. If S1 and S2 both are in 'ON' position, which lamp(s) will glow?
    a) L1 c) Both L1 and L2
    b) L2 d) Neither L1 nor L2
18. If both S1 and S2 are in 'OFF' position, which lamp(s) will glow?
    a) L1 c) Both L1 and L2
    b) L2 d) Neither L1 nor L2

IV. Short answer type questions -I
19. Draw a circuit diagram for simple torch using symbols for electric components.
20. Why are electric wires covered with plastic or rubber?
21. How does the switch turn 'ON' or 'OFF' the torchlight?
22. If the filament of one of the lamp is broken, will the other glow?



23. Define electric circuit.

V. Short answer type questions- II

24. Vidhya has made the circuit using battery, incandescent bulb and self made switch. Even after closing the circuit, the lamp does not glow. What can be the possible reason? List as many as possible reasons you can for this faulty operation. What will you do to find out why the lamp did not glow?

25. Differentiate conductors and insulators with proper example.

26. Is there any difference between electricity from an electric cell and that from a wall socket? If so explain it.

27. Give a brief note on incandescent bulb.