

YOUR SCHOOL NAME

CHAPTER TEST

DO NOT OPEN THIS BOOKLET UNTIL ASK TO DO SO

Total Questions: 50 | Time: 1 hr.

Name Test Code

Roll No Section Contact Number

Guideline for the candidate

1. You will get addition 5 minutes to fill up information about your self on the OMR sheet, before the Exam starts
2. Write your **Name**, **Class**, **Section**, and **Roll Number** and **Mobile Number** clearly on the **OMR sheet** and do not forget to sign it.
3. The Question Paper comprises TWO sections:

Science Section (45 Questions), and **Achiever section** (5 Questions)

Each Question in Achiever Section Carries 3 marks, Where as all other Question carry one mark each

4. All Questions are compulsory. There is no negative marking. Use of calculator is not permitted.
5. There is only one correct answer. Choose only ONE option for answer
6. To mark your choice of answer by darkening the circles on the OMR sheet, use **HB Pencil/ Black ball point pen** only.
7. Return the OMR sheet to the invigilator at the end of the exam.
8. Please fill in your personal details in the space provided on this page before attempting the paper.

Students signature..... Invigilator Signatures;

CHAPTER TEST (FOUNDATION)

Topic: Electricity and Circuits

Subject: Science (PHYSICS)

F-SC-06-CT- 09

1. Which one of the following appliances at your home does not run on electric current?
(1) Mixer grinder (2) Television
(3) Gas burner (4) Air conditioner
2. Open circuit is circuit in which
(1) Switch is absent
(2) Current is not flowing
(3) Bulb is not present
(4) Current is flowing
3. Paheli is running short of connecting wires. To complete an electric circuit, she may use a
(1) rubber pipe. (2) glass bangle.
(3) thick thread. (4) steel spoon.
4. The flow of the current is always from _____.
(1) Negative to Negative
(2) positive to negative
(3) positive to positive
(4) negative to positive
5. The insulating material on electric wires can be _____.
(1) aluminium (2) enamel
(3) copper (4) plastic
6. In which one of the following cases bulb will glow if following materials are placed in the circuit?
(1) Metal spoon
(2) Thin plastic sheet
(3) Plastic comb
(4) Plastic clip
7. Which one of the following is a good conductor of electricity?
(1) Oil (2) Juice
(3) Air (4) Mercury
8. Two like charges
(1) attract each other
(2) first attract then repel
(3) repel each other
(4) first repel then attract
9. The metallic cap provided at the one end of a dry cell is
(1) negative terminal
(2) positive terminal
(3) switch
(4) spring
10. Combination of two or more cell in series is called
(1) Transistor (2) Dynamo
(3) Insulator (4) Battery
11. Closed and continues path of electric current is called
(1) Insulator (2) Circuit
(3) Connector (4) Resistance
12. In an electric circuit, key or switch can be placed
(1) Between bulb and battery
(2) Between bulb and ammeter
(3) Between battery and ammeter
(4) Anywhere in the circuit
13. Which of the following is best conductor of electricity?
(1) Sea water (2) Ordinary water
(3) Hot water (4) Distilled water
14. Electricity will not flow through a circuit if the
(1) Connector is covered with plastic
(2) There is a key in the circuit
(3) Circuit is complete
(4) Circuit is incomplete
15. Which one of the following device prevents damages to electrical circuits?
(1) Insulators (2) Resistors
(3) Battery (4) Fuses
16. Tungsten is used for the manufacturing of the filament of an electric bulb because
(1) it is economical.
(2) it has a very high melting point.
(3) it is a good conductor.
(4) it is malleable.
17. Inside the torch two or more cells are placed with

- . (1) Negative - negative - positive - positive
(2) Positive - positive - negative - negative
(3) Positive - negative - positive - negative
(4) Negative - positive - positive - negative
18. Which of these does not allow the current to pass through it?
(1) Brass rod (2) Copper rod
(3) Bakelite rod (4) Iron rod
19. Which of the following is not an insulator?
(1) Plastic (2) Rubber
(3) Graphite (4) Glass
20. In bulbs, the electrical energy is converted into
(1) Light energy (2) Sound energy
(3) Mechanical energy (4) Heat energy
21. _____ is a safety wire which protects us from electric shocks and electric fire.
(1) Neutral wire (2) Live wire
(3) Earth wire (4) Universal wire
22. Which of the following is a conductor?
(1) Tungsten (2) Wood
(3) Plastic (4) Glass
23. In electrical bulbs, light is produced due to glowing of the
(1) Bulb case
(2) Thick wire supporting the filament
(3) Gases inside it
(4) Filament
24. When a bulb gets fused, its
(1) Filament is broken
(2) Glass case is broken
(3) Filament holder is broken
(4) Connector is broken
25. In camera, radio and torch we use
(1) Liquid cell (2) Air cell
(3) Dry cells (4) Voltaic cell
26. Filament of electric bulb is made up of
(1) Aluminum (2) Iron
(3) Tungsten (4) Copper
27. An electric circuit provides a complete path for the
(1) Neutron to flow
(2) Heat to flow
(3) Proton to flow
(4) Current to flow
28. The substance that easily allow the current to pass through it is called a
(1) Conductor
(2) Poor conductor
(3) Insulator
(4) Non – conductor
29. Brightness of glowing bulb depends on
(1) Company of bulb
(2) Amount of current passing
(3) Direction of current
(4) Bulb case
30. To control the flow of current in a circuit, we use a _____.
(1) terminal (2) switch
(3) button cell (4) plug
31. A device that prevents or allows the current to flow through it is called a
(1) Terminal (2) Conductor
(3) Motor (4) Switch
32. Which term refers to the push that moves electrons through a circuit?
(1) Voltage (2) Current
(3) Resistance (4) Charge
33. Coming together of live wire and fuse wire in a circuit is called
(1) Short circuit (2) Overloading
(3) Circuit breaker (4) Earthling
34. What happens to a circuit when the switch is off?
(1) Electricity flows continuously.
(2) There is a gap in the circuit.
(3) The circuit is complete.
(4) Electricity flows for short duration.
35. Which of the following cannot be used to make handle of a tool used for electrical repairing?
(1) Glass (2) Plastic
(3) Wood (4) Tin
36. Filament of a torch bulb is
(1) two thick wires.
(2) a thin wire.
(3) a metal case.
(4) metal tip at the centre of the base.

37. Which of the following does not provide voltage in a circuit?
 (1) Dry cell (2) Wet cell
 (3) Wires (4) Electric generator
38. If we touch a bare (uncovered) current – carrying wire, we get a shock. This happens because
 (1) our body is a conductor of electricity
 (2) transfer of electrons from one body to another
 (3) our body is a source of electricity
 (4) our body is an insulator of electricity
39. What is the electrode called which is joined at - ve pole of the battery?
 (1) Anode (2) Electroplate
 (3) Ion (4) Cathode
40. When you rub the back of a plastic pen in your hair and bring it near a small piece of paper it attracts paper due to
 (1) electrostatic force
 (2) gravity
 (3) friction
 (4) magnetic force
41. In an electric circuit, components are represented by using
 (1) Symbols of components
 (2) Colour of components
 (3) Rough sketch of components
 (4) Actual drawing of components
42. If the two terminals of cell are connected directly with a wire, then
 (1) the current in the wire will be quite small.
 (2) no current will flow in the wire.
 (3) more electric energy will be stored in the cell.
 (4) the chemicals gets used up very fast.
42. Which of the following is a bad conductor of electric current?
 (1) Nichrome (2) Graphite
 (3) Diamond (4) Iron
44. An electric cell has _____ terminals.
 (1) 2 (2) 3 (3) 4 (4) 1
45. An electric cell produces electricity from the
 (1) Kinetic energy stored in it.

- (2) Mechanical energy stored in it.
 (3) Chemical stored in it.
 (4) Charge stored in it.

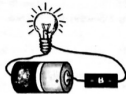
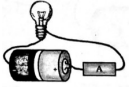
Achiever Section

46. The given figure shows a light bulb connected to a cell. Which of the following shows the energy changes that take place when a bulb glows?



- (1) Electrical energy → chemical energy → light energy → heat energy
 (2) Chemical energy → electrical energy → light energy → heat energy
 (3) Chemical energy → electrical energy → heat energy → light energy
 (4) Electrical energy → chemical energy → heat energy → light energy
47. Some circuit components have been indicated below:
- 1.
 - 2.
 - 3.
 - 4.
- Out of these the indicators of electric cell, electric battery and switch **Off** position are respectively:
- (1) (i), (iii) and (iv)
 (2) (i), (ii) and (iv)
 (3) (i), (iv) and (iii)
 (4) (i), (iii) and (ii)
48. Which one of the following groups contain only conductors?
 (1) Cotton, silver and tungsten
 (2) Graphite, copper and iron
 (3) Graphite, diamond and silver
 (4) Plastic, silver and copper
49. Which of the following consists of conductor, insulator and conductor respectively.
 (1) Silver, gold and steel
 (2) Wood, plastic and water
 (3) Silver, rubber and iron
 (4) Copper, steel and wood

50. Look at the two electric circuits using materials A and B as shown below. What can you conclude from the circuits given below?



- (1) A is insulator, B is conductor
- (2) Both A and B are insulator
- (3) A is conductor, B is insulator
- (4) Both A and B are conductor

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