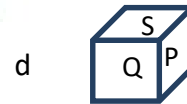
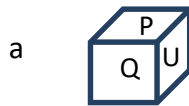
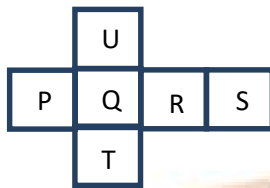


SAMPLE PAPER 3

REASONING

1. The given sheet of a paper is folded to form a cube. Select a figure from the options that is similar to the cube formed by folding the sheet.



2. Select an alphabet which can fit in the blank, if a certain rule is followed row wise

9	L	3
7	O	8
5		9

- a. M
b. Q
c. N
d. P

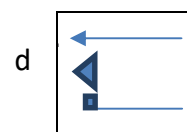
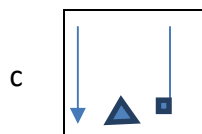
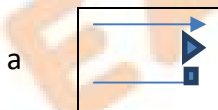


3. Kavita is at a point 'X' facing east. She turns left and walks 20 metres. She turns right from there and walks 10 metres. from there she turns towards South and walk for 5 metres and then finally takes a turn towards West and walks another 10 meters before stopping. In which direction is she from the point 'X'
- East
 - North
 - West
 - South

4. If x denotes +, ÷ denotes -, - denotes x, and + denotes ÷, then

$$8x7-8+40\div2=$$

- $7\frac{2}{5}$
 - 1
 - $8\frac{3}{5}$
 - 44
5. Find the odd one out.



SCIENCE

6. Outside a showroom, four chairs made of different material were kept out in the sun, for display.

Chair 'A' was made up of wood



Chair 'B' is made up of PVC



Chair 'C' is made up of marble



Chair 'D' is made up of cardboard



Which of the above chairs will become unbearably hot, making it difficult to sit on

- a. A
- b. B
- c. C
- d. D



7. The filament of the bulb shown below is made up of:



- a. Tin
- b. Titanium
- c. Antimony
- d. Tungsten

8. When the temperature of a gas increases, the speed of the molecules will also increase due to the

- a. Increase in the potential energy
- b. increase in the kinetic energy
- c. increase both in potential and kinetic energy
- d. alignment of molecules increase

9. In an electric circuit, electron flows from the _____ of the battery.

Fill in the blank using the correct option from below:

- a. Positive terminal.
- b. Negative terminal.
- c. Either of the terminals.
- d. depends on the material of the wire used in the circuit

10. During the physics class, the teacher explained about the construction, functioning and importance of the fuse and fuse wires. Zuheb noted down the following points

- i. the fuse wire should be flexible
- ii. the fuse wire should have high melting point
- iii. the fuse wire can withstand large currents
- iv. the fuse is used to protect the appliances



Which of the above points were wrongly noted

- a. i and iii
- b. i and ii
- c. ii and iii
- d. i and iv

11. The full form of CFL and LED is

- a. Compact Fluorescent Lamp, Light Emitting Device
- b. Compact Fluorescent Lamp, Light Emitting Diode
- c. CircuitForming Light, Light Emitting Device
- d. Circuit Forming Light,Light Emitting Diode

12. 'The heat energy cannot be transferred from a body at a lower temperature to a body at higher temperature without the addition of energy.'

Which law of thermodynamics is the above

- a. Zeroth law
- b. First law
- c. second law
- d. third law

13. Which of the following appliances do not work on the heating effect of current

- a. Induction cooker
- b. Coffee machine
- c. French press
- d. Immersion rod



14. Double layered walls of a room provides good insulation.

Given below are some materials which can be filled in between the walls

- i. Saw dust
- ii. Metallic scrap
- iii. Plastic scrap
- iv. Polystyrene

Which of the above materials, when filled, compactly, will increase the insulation further:

- a. i, iii and iv
- b. i and iv
- c. i and iii
- d. ii, iii and iv

15. Solder is an alloy of tin and lead. It is used for making strong connections in an electric circuit board. It's melting point is usually:

- a. Higher than copper.
- b. Lower than copper.
- c. Same as copper.
- d. Higher than the circuit board material.

ACHIEVER'S SECTION

Answer questions **16 and 17** on the information given below:



Sameer's father bought a traditional solar cooker. The solar cooker had a mirror, facing inside, at the lid. Sameer's mother understood the concept.



16. Sameer's mother made the following comments.

- i. It cannot be used for frying
- ii. the nutrients in the food will get destroyed
- iii. it cannot be used during the night
- iv. it needs special training to use it.

Which of the above statements are incorrect

- a. ii and iv
- b. i and iv
- c. iii and iv
- d. i and ii

17. The purpose of the mirror 'X' is

- a. Mirror surfaces are easy to clean situation.
- b. To refract the sunrays
- c. To reflect the sunrays.
- d. To absorb heat

18. **Assertion** -The boiling point of water is 373.15K.

Reason-0K is known as absolute zero.

- a. A and R both are correct, and R is the correct explanation of A.
- b. A and R both are correct, but R is not the correct explanation of A.
- c. A is correct but R is wrong.
- d. A and R both are wrong.

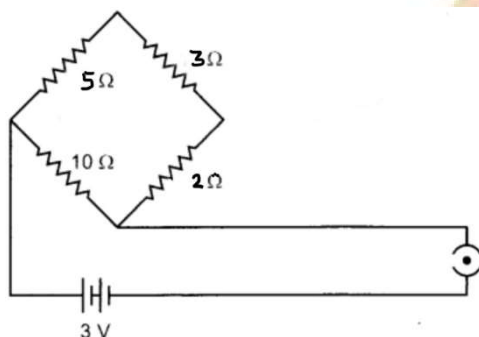


19. **Assertion** - The insulation of wires should be checked regularly for any wear and tear.

Reason- The direct contact of earth and live wire can cause short circuit.

- a. A and R both are correct, and R is the correct explanation of A.
- b. A and R both are correct, but R is not the correct explanation of A.
- c. A is correct but R is wrong.
- d. A and R both are wrong.

20.



In the above diagram which all resistors are in series:

- a. There are two series of resistors 2&3 and 5&10.
- b. There are two series of resistors 10&2 and 5&3.
- c. Only one series of resistors 2,3, &5
- d. Only one series of resistors 2,3,5, &10



Answer Key

1.(a)	2.(c)	3.(b)	4.(a)	5.(c)	6.(c)	7.(d)	8.(b)	9.(b)	10.(c)	11.(b)	12.(c)	13.(c)	14.(a)	15.(b)
16.(a)	17.(c)	18.(b)	19.(a)	20.(c)										

LEARN TEST

