



DELHI PUBLIC SCHOOL FIROZABAD

(UNDER THE AEGIS OF DELHI PUBLIC SCHOOL SOCIETY EAST OF KAILASH NEWDELHI)

(A SENIOR SECONDARY SCHOOL)

AFFILIATED TO CBSE, AFFILIATION NO. 2133064 SCHOOL NO: 61225



JANUARY WORKSHEET NO.2

Class – 10th

Subject - **Science**

Name: _____

Roll no: _____

Date: 18.01.22

1. What is meant by electric current? Name and define its SI unit. In conductor, electrons are flowing from B to A.
 - a. What is the direction of conventional current? Give justification for your answer.
 - b. A steady current of 1 ampere flows through a conductor. Calculate the number of electrons that flows through any section of the conductor in 1 second.
2. What is meant by electrical resistivity of a material? Write its S.I. unit.
3. State Ohm's law. Write the necessary conditions for its validity.
4. Define electric power. Express it in terms of potential difference V and resistance R.
 - a. An electrical fuse is rated at 2 A. What is meant by this statement?
 - b. An electric iron of 1 kW is operated at 220 V. Find which of the following fuses that respectively rated at 1 A, 3 A and 5 A can be used in it.
5. State the difference between the wire used in the element of an electric heater and in a fuse wire.
6. An electric bulb of resistance 200 Ω draws a current of 1 A. Calculate the
 - a. power of the bulb and
 - b. the energy consumed by burning it for 5 h.
7. What are autosomes and sex chromosomes?
8. What is monohybrid cross give example.
9. Who is known as father of genetics?
10. Write the laws of genetics.
11. What are dominant genes?
12. Draw Punnett square to show dihybrid cross.
13. What is the scientific name of pea?
14. Write the names and draw structures of first three members of homologous series of alkenes.
15. Why there is a gradation in physical properties in a homologous series?
16. Define catenation.
17. What is the reason for formation of strong bonds by carbon?
18. How many covalent bonds are there in a molecule of pentane?
19. Differentiate between graphite and diamond on the basis of their structure.
20. Identify the functional group present in CH_3CHO .