

A. Fill in the blanks

[12]

1. _____ is the only element with no neutrons inside the nucleus.
2. The latin name of potassium is _____
3. Water is made up of _____ and _____
4. The maximum number of electrons in each shell of an atom is calculated using the formula _____
5. _____ is a component of red blood cells which carry oxygen to various part of the body.
6. A _____ is a short representation of the name of an element.
7. Copper shows _____ valency.
8. An electron has _____ charge.
9. Mn is the symbol of _____.
10. The chemical name of marble is _____
11. The mass of neutron is approximately equal to the mass of _____

B. Name the following

[10]

1. Two non metals which are lusturous.
2. The elements present in common salt.
3. The subatomic particles present inside the nucleus
4. Two bivalent elements .
5. Two liquid elements.

c. State whether True or False . Correct if the statement is wrong [8]

1. Valency of carbon is three.
2. All metals except zinc is malleable
3. 2H represent 2 molecules of hydrogen.
4. Formula of methane is NH_3 .
5. A molecular formula represents one molecule of an element or a compound
6. The shell 'K' closest to the nucleus has the maximum amount of energy.
7. Silver shows the valency 2 and 4.
8. The formula of chloride is Cl^- .

D. Define the following [10]

1. Metalloids
2. Valency
3. Impure substance
4. Atomicity
5. radical

E. Give reasons [15]

1. An atom is electrically neutral .
2. Orbits are also known as energy levels
3. Water is considered as a compound not as a mixture.
4. Neon which is a noble gas does not combine with any other atoms .
5. The chemical properties of an element are determined by the valence
Electrons.

F. Answer the following questions.

1. Give the symbolic representation of Sodium atom. Its atomic number is 11 and mass number is 23 . [2]
2. Write down the electronic configuration of Sodium atom. [1]
3. Draw the structure of Sodium atom. [2]

G. Give the symbols and latin names of the following elements. [6]

1. Copper 2. Gold 3. Iron 4. Lead 5. Tin 6. Antimony

H. Write the formulae and valencies of the following radicals. [6]

1. Sulphate 2. Phosphate 3. Sulphide 4. Hydroxide 5. Carbonate
6. Bromide.

I. Atomic number of potassium is 19 and Chlorine is 17.

1. Name the bond formed between Potassium and Chlorine. [1]

2. Show the formation of bond between Potassium and Chlorine diagrammatically. [3]

3. Define chemical bond. [2]

4. Write two ways in which atoms combine to form a molecule. [2]