

HARRIERS SMART ACADEMY

CHEMISTRY

MOCK TEST- I

F.M.-40marks

1. Answer the following questions regarding MENDELEEV'S modified Periodic Table:

- How many periods are there ?
- How many groups are there?
- Which group of elements was missing from MENDELEEV's Table?
- In which vertical column hydrogen is placed? {0.5+0.5+0.5+0.5=2}

2. An element Z has atomic number 16. Answer the following questions on Z:

- State the period and group to which Z belongs?
- Is Z a metal or a non-metal?
- State the formula between Z and HYDROGEN.
- What kind of compound is this? {1+1+1+1=4}

3. Answer the following questions regarding group 17:

- What are halogens?
- Which group and subgroup are they placed in?
- What is their valency?
- Why are they called HALOGENS? {1+1+1+1=4}

4. State the factors which influence the atomic size of the elements in a periodic table?
{3}

5. Answer the following questions:

- a. Name the second last element of the period 3.
- b. How many elements are there in the second period?
- c. Name the element which has the highest electron affinity.
- d. Name the element which has the highest electron negativity.
- e. Name the element which may be placed on group 1 but is not a metal. {1+1+1+1+1=5}
6. State why are noble gases unreactive while atoms of elements other than noble gas are chemically reactive. {3}
7. What is meant by the term "ELECTROVALENCY"? State why sodium has electrovalency +1 and chlorine has electrovalency -1. {2+2=4}
8. What do you know by the term "covalent compound"? Name two covalent compounds showing clearly the bonds between two participating atoms. Why do covalent compounds have low melting and boiling point? {2+1+2=5}
9. Explain with the help of atomic structural diagram, electron dot diagram and ionic equation for the formation of the following:
- a. Sodium Chloride b. Magnesium Chloride {3+3=6}
10. By drawing the dot diagram, show the lone pair effect leading to the formation of hydronium ion from water and hydrogen ion. {2}
11. What is REDOX reaction? Show with an example. {2}