DELHI PUBLIC SCHOOL, JAMMU PREBOARD-1 ASSIGNMENT SESSION (2017-18)

Subject-Chemistry

Class:- 10th

Topics:-Chemical equations and Reaction; Acids, Bases and Salts; Metals and Non-metals; Periodic Classification of elements.

- Q1. Why does the colour of copper sulphate solution change when an iron nail is dipped in it?
- Q2. Identify the substances that are oxidized and the substances that are reduced in the following reactions.

i)MnO₂ + 4HCl
$$\longrightarrow$$
 MnCl₂ + 2H₂O +Cl₂

ii)
$$Fe_2O_3 + 2AI \longrightarrow AI_2O_3 + 2Fe$$

- Q3. What is the difference between Displacement and Double displacement reactions? Write equations for these reactions.
- Q4. Why does dry HCl gas not change the colour of the dry litmus paper?
- Q5. while diluting an acid, why is it recommended that the acid should be added to water and not water to the acid?
- Q6. Name the sodium compound which is used for softening hard water.
- Q7. What will happen if a solution of sodium hydrogen carbonate is heated? Give the equation of the reaction involved.
- Q8. What would you observe when Zinc is added to a solution of iron(II)sulphate? Write the chemical reaction that takes place.
- Q9. What chemical process is used for obtaining a metal from it's oxide?
- Q10. State three ways to prevent the Rusting of Iron.
- Q11. What are amphoteric oxides? Give two examples of amphoteric oxides.
- Q12. What were the criteria used by Mendeleev in creating his Periodic Table?
- Q13. Name two elements you would expect to show chemical reactions similar to Magnesium. What is the basis for your choice?
- Q14. In the Modern Periodic Table, which are the metals among the first ten elements?
- Q15. Compare and contrast the arrangement of elements in Mendeleev's Periodic Table and the Modern Periodic Table.