**Aarambh classes**

**Class VIII**

**Chemistry test**

**Chemical reactions**

**Time : 1 hour M.Marks: 30**

1. **Fill in the blanks:**
2. \_\_\_\_\_\_\_\_\_\_\_\_is the product of the displacement reaction of sodium with cold water.
3. The reaction of coke with steam to give water gas is an example of an \_\_\_\_\_\_\_\_\_\_reaction.
4. \_\_\_\_\_\_\_\_\_\_is the catalyst used in the catalytic reaction involving the reactants nitrogen and hydrogen.
5. The element molybdenum used in the reaction of nitrogen with hydrogen at elevated temperatures is an example of a \_\_\_\_\_\_\_\_\_\_.
6. The neutral gas obtained on thermal decomposition of potassium nitrate is \_\_\_\_\_\_\_\_\_\_.
7. De composition of silver salts in the presence of sunlight is an example of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. A neutral oxide which does not react with an acid or base to give salt and water is \_\_\_\_\_\_\_.
9. Direct combination reaction of phosphorous pentoxide with water gives \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. The metal which reacts with steam and the reaction is reversible is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
11. The product formed during direct combination reaction of carbondioxide and water is \_\_\_\_\_\_\_.
12. **Give a balanced equation for each of the following type of reactions:**

(i)A thermal decomposition reaction in which a compound decomposes to give two new compounds.

(ii) A catalytic ,reversible,exothermic reaction.

(iii)A displacement reaction in which a metal above hydrogen in the reactivity series displaces another metal from the solution of its compound.

(iv)A reaction of direct combination i.e synthesis in which two gases combine to give another gas –which turns lime water milky.

(v)A thermal decomposition reaction in which a metallic nitrate decomposes to give a basic oxide.

**C. Answer the following questions:**

(i)State what is a chemical reaction.State the external indication (colour change,heat evolution,etc.) seen during:

(a)Addition of dilute acid to an active metal

(b) Addition of dilute hydrochloric acid to silver nitrate .

(c)Addition of water to quicklime .

(d)Thermal decomposition of mercury (II)oxide.

(ii) certain thermal decomposition reactions ,result in formation of oxides.Give balanced equations for the thermal decompositionof the following,which result in the formation of ametallic oxide.(a)Lime stone (b)calcium nitrate (c) Lead carbonate (d) Calcium hydroxide.

(iii)Give two examples each of the following oxides –(a)Acidic oxides (b) basic oxides (c) Amphoteric oxides (d)Neutral oxides.State which of the following oxides (i)React with water to give abase (ii)React with a base to give salt and water (iii)React with acids and bases to give salt and water.

(iv)Give one example each of (a) A peroxide (b)A mixed oxide (c)A dioxide