**Assignment STD -9 (16-05-2020)**

**Chapter No- 2 (Chemical changes and reactions)**

**Type – 1**

**Define the following terms with suitable example :-**

a) Chemical reaction b) Effervescence c) Precipitate d) Catalyst e) Promoters

f) Hydrolysis g) Neutralisation reaction h) Precipitation reaction

i) Photochemical reaction j) Synthesis reaction k) Displacement reaction

l) Double decomposition reaction

**Type – 2**

**Difference between the following terms:-**

a)Thermal decomposition and thermal dissociation. b)Exothermic reaction and endothermic reaction.

c) + ve catalyst and – ve catalyst d) Catalyst and promoters e) Effervescence and Precipitates. f) Photochemical reaction and Electrochemical reaction.

g) Displacement reaction and decompositionreaction.

h) Double decomposition reaction and synthesis reaction.

**Type – 3**

**Give reasons:-**

1. Iron (III) chloride is acidic while sodium carbonate is basic.
2. Silver nitrate solution is kept in coloured bottles.
3. Molybdenum is used in the manufacture of Ammonia.
4. Blue solution of copper sulphate changes to green when a piece of Iron is added to this solution.
5. Decomposition reaction may be called opposite of combination reaction.

**Type – 4**

**Give the answers of the following questions:-**

1. Define activity series of metal and give its two characteristics properties.
2. State the four conditions necessary for a chemical change.
3. Mention any four characteristics of a chemical change.
4. Explain the digestion of food by our body is an example of a decomposition reaction.
5. Give any three application of neutralization reaction.

**Type – 5**

**Complete and balance the following reactions:-**

1. Pb (NO3)2+ KI$\rightarrow $
2. NH3 + O2$→$
3. AgNO3$→$
4. K3PO4 + H2O $\rightarrow $
5. NaHCO3 + Hcl $\rightarrow $
6. Cu (OH)2$→$
7. N2O4$\genfrac{}{}{0pt}{}{heat}{\genfrac{}{}{0pt}{}{ ⇌ }{cool}}$

**Type – 6**

**What do you observe when:-**

1. Chlorine water is exposed to sunlight.
2. H2S gas is passed through copper sulphate solution.
3. Ammonium dichromate is strongly heated.
4. Ferrous sulphate solution is added with sodium hydroxide.
5. Iron reacts with copper sulphate solution.

**Type – 7**

**Give one word answers**

1. A carbonate that doesn’t decompose on heating.
2. A nitrate which produces as the only gas.
3. A nitrate that produces brown gas on heating.
4. A metal hydroxide which is stable to heat.
5. A metal hydroxide which is stable to heat but soluble in water.
6. An example of biochemical decomposition reaction.
7. A chemical reaction that proceeds by absorption of sound energy. (Give the balanced chemical equation)
8. An example of +ve catalyst.
9. An example of -ve catalyst.
10. A promoter which is used for the manufacture of ammonia.

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