

## Page 1

**\*\*Answer 1A)** If  $\text{XCl}_2$  then X should be a metal with valency 2**\*\***

Therefore

(1) Sulphate formula:  $\text{XSO}_4$

(2) Hydroxide formula:  $\text{X(OH)}_2$

**\*\*Answer 1B)**  $\text{XN}$  is nitride X is a valency 3 metal as nitrogen has valency 3**\*\***

Therefore Sulphate's formula would be  $\text{X}_2(\text{SO}_4)_3$  and Hydroxide formula would be  $\text{X(OH)}_3$

**\*\*Answer 1C)** valency of Nitrogen in:**\*\***

1)  $\text{NO}$ : +2

2)  $\text{N}_2\text{O}$ : +1

3)  $\text{NO}_2$ : +4

**\*\*Answer 2B)** The eight metals showing variable valency**\*\***

1) Iron (Fe): +2, +3,

2) Copper (Cu): +1, +2

3) Mercury (Hg): +1, +2

4) Tin (Sn): +2, +4

5) Lead (Pb): +2, +4

6) Gold (Au): +1, +3

7) Chromium (Cr): +2, +3, +6

8) Manganese (Mn): +2, +3, +4, +6, +7

**\*\*Answer 2C)** Examples of Chemical Equations:**\*\***

## Page 2

(a) One product :  $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$

(b) Two Products :  $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2 +$

(C) Three Products :  $4\text{HNO}_3 \rightarrow 2\text{H}_2\text{O} + 4\text{NO}_2 + \text{O}_2$

(d) Four Products :  $2\text{KClO}_3 \rightarrow 2\text{KCl} + 2\text{O}_2 + \text{O}_2 +$

Answer 2D