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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)  $\text{XN}_2$  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) 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,+4,+6

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

Answer 2C) Examples of Chemical Equations :

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**\*\*(a)\*\***

\* One product:  $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$

**(b)**

\* Two products:  $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2 + \Delta$

**(c)**

\* Three products:  $4\text{HNO}_3 \rightarrow 2\text{H}_2\text{O} + 4\text{NO}_2 + \text{O}_2$

**(d)**

\* Four products:  $2\text{KClO}_3 \rightarrow 2\text{KCl} + 3\text{O}_2 + \Delta$

Answer: 2D