

76.(B) $\text{KCl} \cdot \text{MgCl}_2 \cdot 6\text{H}_2\text{O}$ is carnallite.

77. [A-r] [B-q, r, s] [C-p, s] [D-p, q]

Ca → exist in its carbonate form

Zn → exist in its sulphide, carbonate & oxide forms

Cr → exist in its native form; oxide form

Ag → exist in its native form; sulphide form

78. [A-r] [B-s] [C-t] [D-q] [E-p]

Al → Na_3AlF_6

Cu → $\text{CuCO}_3 \cdot \text{Cu(OH)}_2$ [Malachite]

Mg → $\text{KCl} \cdot \text{MgCl}_2 \cdot 6\text{H}_2\text{O}$ [Carnallite]

Zn → ZnCO_3 [Calamine]

Hg → HgS [Cinnabar]

79.(B) → All ores are minerals but all minerals are not ores.

→ Impurity + flux = slag

→ Zone refining is done to obtain highly pure metals

→ Carnallite is an use of K and Mg

80.(B) KCl (sylvine); Malachite ($2\text{CuCO}_3 \cdot \text{Cu(OH)}_2$); Cinnabar (HgS); Flourspar (CaF_2).

81.(D) Copper pyrite [Cu_2S]; Fool's gold [FeS_2]

82.(B) $\text{ZnS} + \text{PbS} \xrightarrow{+4\text{NaCN}} \text{Na}_2[\text{Zn(CN)}_4](\text{aq}) + \text{PbS(s)} + \text{Na}_2\text{S(aq.)}$

83.(D) $\text{Ag(s)} \xrightarrow[\text{(impure)}]{\begin{matrix} (1) \text{NaCN} \\ (2) \text{O}_2(\text{g}) \end{matrix}} [\text{Ag(CN)}_2]^{-1}(\text{aq})$

84.(B) Leaching is used for concentration of various ores of Ag, Al and Au.

85.(D) Hot air has no use in the froth-floatation process