Date Planned : __ / __ / __	Daily Tutorial Sheet-6	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-2	Exact Duration :_____

76. The formula of carnallite is :

(A) $KCl \cdot MgCl_2 \cdot 2H_2O$ **(B)** $KCl \cdot MgCl_2 \cdot 6H_2O$

(C) $K_2O \cdot Al_2O_3 \cdot 6H_2O$ **(D)** $Na_2B_4O_7 \cdot 10H_2O$

77. Match the Column :

Column-I (Metal)		Column-II (Existance in Nature)	
(A)	Ca	**(p)**	Native state
(B)	Zn	**(q)**	Sulphide
(C)	Cr	**(r)**	Carbonate
(D)	Ag	**(s)**	Oxide

78. Match the Column :

Column-I		Column-II	
(A)	Al	**(p)**	Cinnabar
(B)	Cu	**(q)**	Calamine
(C)	Mg	**(r)**	Cryolite
(D)	Zn	**(s)**	Malachite
(E)	Hg	**(t)**	Carnallite

79. Give the correct order of initials T or F for following statements. Use T if statement is true and F if it is false.

(i) Every mineral is an ore but every ore is not a mineral

(ii) Slag is product formed during extraction of metal by combination of flux and impurities.

(iii) Highly pure metals can be obtained by zone refining.

(iv) Carnallite is an ore of magnesium and sodium.

(A) TTTF **(B)** FTTF **(C)** FTTT **(D)** TFTF

80. Find the incorrectly matched pair?

	Column-I (ores)		Column-II (metals)
(A)	Sylvine	**(1)**	Potassium
(B)	Malachite	**(2)**	Magnesium
(C)	Cinnabar	**(3)**	Mercury
(D)	Fluorite (Flourspar)	**(4)**	Calcium

81. Froth floatation process used for the concentration of :

(A) Cinnabar **(B)** Copper pyrite

(C) Fool's gold **(D)** All of the above

82. When ZnS and PbS minerals are present together, then NaCN is added to separate them in the froth floatation process as a depressant, because :

(A) $Pb(CN)_2$ is precipitated while no effect on ZnS

(B) ZnS forms soluble complex $Na_2[Zn(CN)_4]$

(C) PbS forms soluble complex $Na_2[Pb(CN)_4]$

(D) They cannot be separated by adding NaCN

83. Leaching of Ag is carried out by heating it with a dilute solution of :

(A) NaCN only **(B)** HCl

(C) NaOH **(D)** NaCN in presence of O_2

84. Leaching is commercially carried out in the concentration of :

(A) Galena **(B)** Argentite **(C)** Copper pyrites **(D)** Tin stone

85. Which of the following is of no use in the forth-floatation for concentration of ores :

(A) Eucalyptus oil **(B)** Sodium ethyl xanthate

(C) $CuSO_4(aq)$ **(D)** Heating + Air