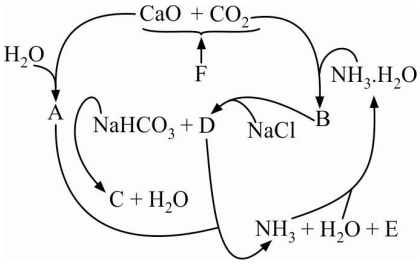
Date Planned : __ / __ / __	Daily Tutorial Sheet-8	Expected Duration : 30 Min
Actual Date of Attempt : __ / __ / __	Level-2	Exact Duration :_____

***96.** The Ammonia-Soda Process is depicted by the following scheme.



Which of the following is (are) true ?

(A) $A + C \longrightarrow F$

(B) bleaching powder contains A and E in some amount

(C) B and D are both basic

(D) $E + C \longrightarrow F$

97. In which of the following alloys Mg is not present ?

(A) Elektron **(B)** Magnalium **(C)** Duraluminium **(D)** Aluminium bronze

98. $CaCl_2$ is preferred over NaCl for clearing ice on roads particularly in very cold countries. This is because:

(A) $CaCl_2$ is less soluble in H_2O than NaCl

(B) $CaCl_2$ is hygroscopic but NaCl is not

(C) Eutectic mixture of $CaCl_2/H_2O$ freezes at $-55°C$ while that of $NaCl/H_2O$ freezes at $-18°C$

(D) NaCl makes the road slippery but $CaCl_2$ does not

***99.** Choose incorrect statement :

(A) $BeCO_3$ is kept in the atmosphere of CO_2 since, it is least thermally stable

(B) Be dissolved in alkali forming $[Be(OH)_4]^{2-}$

(C) BeF_2 forms complex ion with NaF in which Be goes with cation

(D) BeF_2 forms complex ion with NaF in which Be goes with anion

Paragraph for Q.100-102

Alkali metals burn in air to form oxides, peroxides and superoxides. Lithium burns in moist air to form normal oxide as the major product. Some lithium nitride is also formed if nitrogen is present. Sodium loses lustre and forms both normal oxide and peroxide, the peroxide being the major product. Rest of all alkali metals form peroxides. All metals can be forced to form oxides, peroxides and superoxides by dissolving in liquid ammonia and bubbling appropriate amount of O_2. Answer the next three questions :

100. Which of the following oxides is the strongest oxidising agent :

(A) Li_2O **(B)** Na_2O_2 **(C)** KO_2 **(D)** Na_2O

***101.** Which among the following oxides turn red litmus paper blue :

(A) Li_2O **(B)** Na_2O_2 **(C)** KO_2 **(D)** Na_2O

102. Pure sodium oxide is formed by heating a mixture of :

(A) Na_2O_2 and Na **(B)** $NaNO_3$ and Na

(C) $NaNO_2$ and NaN_3 **(D)** $NaNO_3$ and NaN_3

103. The correct formula of hydrolith is :

(A) BaH_2 **(B)** CaH_2 **(C)** NaH **(D)** SrH_2

104. MATCH THE COLUMN :

	Column - I (Compound)		**Column - II** (Molecules of hydration)
(A)	$CaCl_2$	**(p)**	$5H_2O$
(B)	Na_2CO_3	**(q)**	$6H_2O$
(C)	Na_2SO_4	**(r)**	$7H_2O$
(D)	$MgSO_4$	**(s)**	$10H_2O$

105. MATCH THE COLUMN :

	Column - I (Compound)		**Column - II** (Extraction process)
(A)	$CaCl_2$	**(p)**	Dow's Process
(B)	$MgCl_2$	**(q)**	Solvay's Process
(C)	NaOH	**(r)**	Electrolysis of brine
(D)	$NaHCO_3$	**(s)**	Leblanc Process
(E)	Cl_2		