Level - 2	**DTS-8**

96.(ABD) A = $Ca(OH)_2$, B = NH_4HCO_3, D = NH_4Cl, C = Na_2CO_3, E = $CaCl_2$, F = $CaCO_3$

$Ca(OH)_2[A] + Na_2CO_3[C] \longrightarrow CaCO_3[F] + 2NaOH$

$CaCl_2[E] + Na_2CO_3[C] \longrightarrow CaCO_3[F] + 2NaCl$

97.(D)

Alloys	Composition
Magnalium	Al - 95%, Mg - 5%
Duralumin	Al - 95%, Cu - 4%, Mg - 0.5%, Mn - 0.5%
Aluminium bronze	Cu - 90%, Al - 9.5%, Sn - 0.5%
Elektron	Mg ~ 94%, Zn ~ 0.5%, Rare earth ~ 4%, Zr ~ 1%

98.(C) Due to much lower freezing point of eutectic mixture of $CaCl_2 / H_2O$

99.(C) $BeF_2 + NaF \longrightarrow Na_2[BeF_4]$

Here Be goes with anion

100.(C) Superoxides are the strongest oxidising agents.

101.(ABCD)

All are basic oxides

102.(C) $NaNO_2 + NaN_3 \longrightarrow \underset{\text{(Pure sodium oxide)}}{Na_2O} + N_2$

103.(B) Hydrolith-A salt like Binary compound (CaH_2) used as a reducing agent and source of hydrogen.

104. **[A-q] [B-s] [C-r, s] [D-r]**

$CaCl_2 \cdot 6H_2O$

$Na_2CO_3 \cdot 10H_2O$ - Washing soda

$Na_2SO_4 \cdot 7H_2O$ and $Na_2SO_4 \cdot 10H_2O$ (Glauber's salt)

$MgSO_4 \cdot 7H_2O$ (Epsom salt)

105. **[A-q] [B-p] [C-r] [D-q] [E-r, s]**

NaOH is prepared by electrolysis of Brine i.e. NaCl.

$CaCl_2$ is used in solvay process in the preparation of washing soda.

$MgCl_2$ is prepared by Dow's process.

Chlorine is produced at anode in electrolysis of Brine.