16.(C) $\overset{+7}{Mn}O_4^- \xrightarrow{n=1} \overset{+6}{Mn}O_4^{2-}$

$\xrightarrow{n=5} Mn^{2+}$

$\xrightarrow{n=3} \overset{+4}{Mn}O_2$

$\xrightarrow{n=4} \overset{+3}{M}n_2O_3$

17.(BD) $NaNO_2$ and Na_2O_2 because one of the element is in intermediate oxidation state.

18.(A) $Ba(H_2PO_2)_2 \longrightarrow Ba^{2+} + 2H_2PO_2^-$

For $H_2PO_2^- \Rightarrow +2+x-4=-1 \quad \Rightarrow \quad x=+1$

19.(B) Mn^{2+}, $\overset{+4}{Mn}O_2$, $K\overset{+7}{Mn}O_4$, $K_2\overset{+6}{Mn}O_4$

20.(A) $Li^0 \longrightarrow Li^+$ [RA] ; $H_2^0 \longrightarrow H^-$ [OA]

21.(A) $\overset{+1}{K_2}\overset{+7}{Mn}O_4^{-2}$, $\overset{+1}{K_2}\overset{+3}{Cr_2}O_7^{-2}$

22.(D) Increase is O.N ≡ oxidation and Decrease is O.N ≡ Reduction.

$H^- \longrightarrow H^0$ (Oxidation)

23.(B) $\overset{+4}{N_2}O_4^{-2}$ $\overset{+1}{NH_2}OH$ $\overset{-3}{N}H_3^{+1}$

24.(D) $Cl^- \longrightarrow \overset{+7}{Cl}O_4^-$ (n = 8)

25.(C) $\overset{+6}{Cr_2}O_7^{2-} \longrightarrow Cr^{3+}$ (In others, it is + 6 on both sides).

26.(C) $Na_2CO_3 \xrightarrow{H_2O} NaOH + CO_2$ & $Br_2 + NaOH \longrightarrow NaBr + NaBrO_3$

On balancing and simplifying the equation : $3Br_2 \xrightarrow{+6OH^-} 5Br^- + BrO_3^- + 3H_2O$

27.(B) $MnO_4^- \xrightarrow{n=5} Mn^{2+}$ $\qquad$ $M^{x+} \xrightarrow{n=(5-x)} \overset{+5}{M}O_3^-$

$\therefore$ g meq of MnO_4^- = gmeq of M^{x+}

$1\times5 = 2.5\times(5-x) \quad \Rightarrow \quad x=3$

28.(D) $Cr_2O_7^{2-} + 6I^- + 14H^+ \longrightarrow 2Cr^{3+} + 7H_2O + 3I_2$

29.(A) $\overset{+5}{N}O_3^- + 8e^- \longrightarrow \overset{-3}{N}H_3$

30.(B) $5H_2O + S_2O_3^{2-} \longrightarrow 2SO_4^{2-} + 8e^- + 10H^+ \quad \Rightarrow$ n factor of $S_2O_3^{2-} = 8$