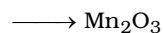
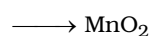
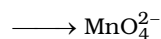
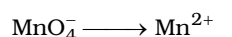


Date Planned : __ / __ / __	Daily Tutorial Sheet-2	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-1	Exact Duration : _____

16. MnO_4^- is a good oxidising agent in different medium changing to :



Change in oxidation number respectively are :

(A) 1, 3, 4, 5 (B) 5, 4, 3, 2 (C) 5, 1, 3, 4 (D) 2, 6, 4, 3

*17. Which of the following acts as an oxidizing as well as reducing agent ? ▶

(A) Na_2O (B) Na_2O_2 (C) NaNO_3 (D) NaNO_2

18. What is the oxidation state of P in $\text{Ba}(\text{H}_2\text{PO}_2)_2$? ▶

(A) +1 (B) +2 (C) +3 (D) -1

19. Arrange the following in order of an increase in oxidation number: ▶

I. Mn^{2+} II. MnO_2 III. KMnO_4 IV. K_2MnO_4

The correct choice is :

(A) I > II > III > IV (B) I < II < IV < III (C) II < III < I < IV (D) III > I > IV > II

20. In which of the following reactions, hydrogen is acting as an oxidising agent? ▶

(A) With Li to form LiH (B) With I_2 to give HI
 (C) With S to give H_2S (D) None of the above

21. Between two compounds, KMnO_4 and $\text{K}_2\text{Cr}_2\text{O}_7$, the highest oxidation state is of the element.

(A) Mn (B) K (C) O (D) Cr

22. Which conversion is an oxidation? ▶

(A) $\text{SO}_4^{2-} \longrightarrow \text{SO}_3^{2-}$ (B) $\text{Cu}^{2+} \longrightarrow \text{Cu}$
 (C) $\text{H}^+ \longrightarrow \text{H}$ (D) $\text{H}^- \longrightarrow \text{H}$

23. Oxidation number of nitrogen is highest in :

(A) N_3H (B) N_2O_4 (C) NH_4OH (D) NH_3

24. In a reaction KCl is converted into KClO_4 . Change in oxidation number is : ▶

(A) 3 (B) 5 (C) 7 (D) 8

25. In which case, oxidation number of Cr has been affected ? ▶

(A) $2\text{CrO}_4^{2-} + 2\text{H}^+ \longrightarrow \text{Cr}_2\text{O}_7^{2-} + \text{H}_2\text{O}$ (B) $\text{Cr}_2\text{O}_7^{2-} + 2\text{OH}^- \longrightarrow 2\text{CrO}_4^{2-} + \text{H}_2\text{O}$
 (C) $(\text{NH}_4)_2\text{Cr}_2\text{O}_7 \longrightarrow \text{N}_2 + \text{Cr}_2\text{O}_3 + 4\text{H}_2\text{O}$ (D) $\text{CrO}_2\text{Cl}_2 + 2\text{OH}^- \longrightarrow \text{CrO}_4^{2-} + 2\text{HCl}$

26. Reaction of Br_2 with Na_2CO_3 in aqueous solution gives sodium bromide and sodium bromate with evolution of CO_2 gas. The number of sodium bromide molecules formed in the balanced chemical equation is : ▶
- (A) 1 (B) 3 (C) 5 (D) 7
27. In the given typical redox reaction : $\text{M}^{\text{x}+} + \text{MnO}_4^- \longrightarrow \text{MO}_3^- + \text{Mn}^{2+} + \frac{1}{2}\text{O}_2$, If one mole of MnO_4^- oxidises 2.5 moles of $\text{M}^{\text{x}+}$, then the value of x is : ▶
- (A) 5 (B) 3 (C) 4 (D) 2
28. One mole of acidified $\text{K}_2\text{Cr}_2\text{O}_7$ on reaction with excess KI will liberate ... mole(s) of I_2 .
- (A) 6 (B) 1 (C) 7 (D) 3
29. Maximum number of moles of electrons taken up by one mole of NO_3^- when it is reduced to : ▶
- (A) NH_3 (B) NH_2OH (C) NO (D) NO_2
30. In the reaction $\text{Na}_2\text{S}_2\text{O}_3 + 4\text{Cl}_2 + 5\text{H}_2\text{O} \longrightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{SO}_4 + 8\text{HCl}$. The equivalent weight of $\text{Na}_2\text{S}_2\text{O}_3$ will be : (M = molecular weight of $\text{Na}_2\text{S}_2\text{O}_3$) ▶
- (A) $\frac{M}{4}$ (B) $\frac{M}{8}$ (C) $\frac{M}{1}$ (D) $\frac{M}{2}$