CHEMISTRY
Redox Reactions

21. (1)

22. (1)

(0 to 5)

$x + 3(-2) = -1$

$x = -1 + 6 = +5$

$\overset{0}{Br_2} \rightarrow \overset{+5}{Br}O_5^-$

(0, +5)

23. (1)

N_3H

$3x + = 0$

$3x = -1$

$x = -\frac{1}{3}$

24. (3)

$(+1)3 + [x + 6(-1)] = 0$

$3 + [x - 6] = 0$

$x = +6 - 3 = +3$

25. (4)

PH_4^+	PO_2^{3-}
$x + (4 + 1) = +1$	$x + 2(-2) = -3$
$x = -3$	$x = +1$
PO_4^{3-}	PO_3^{3-}
$x + 4(-2) = -3$	$x + 3(-2) = -3$
$x = +5$	$x = +3$

26. (2)

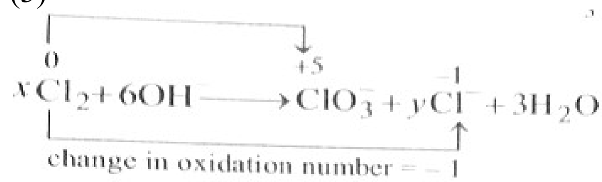
Types of Redox Reactions, Balancing of Redox Reactions

27. (2)

28. (2)

Decomposition of calcium carbonate is not a redox reaction.

29. (3)



On balancing the equation, we get

$3Cl_2 + 6OH^- \rightarrow ClO_3^- + 5Cl^- + 3H_2O$

30. (4)

Highest oxidation number of any transition element is the sum of (n – 1) d-electrons and ns electrons. Hence, large the number of electrons in the 3d-orbitals, higher is the maximum oxidation number.