YAKEEN NEET 2.0

2026

Redox Reaction

Physical Chemistry | Lecture -03

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Topics to be covered

1. Revision of Last Class
2. Types of Redox Reactions & Questions based on it
3. n factor calculation
4. MEDICS Test no 3
5. Magarmach Practice Questions (MPQ) & Home work from modules

Rules to Attend Class

1. Always sit in a peaceful environment with headphone and be ready with your copy and pen.
2. Never ever attend a class from in between or don't join a live class in the middle of the chapter.
3. Make sure to revise the last class before attending the next class & always complete your Magarmach Practice Questions.
4. Never ever engage in chat whether live or recorded on the topic which is not being discussed in current class as by doing so u can be blocked by the admin team or your subscription can be cancelled.

Rules to Attend Class

5. Try to make maximum notes during the class if something is left then u can use the notes pdf after the class to complete the remaining class.
6. Always ask your doubts in doubt section to get answer from faculty. Before asking any doubt please check whether same doubt has been asked by someone or not.

There is one big flaw in your Preparation that's name is Backlog ? What do we say to Backlog ?
NOT TODAY !!!

6/10

↓

Moderate or Tough

MEDICS

Mastery
Checks your grasp over NEET-level concepts

Evaluation
Judging both knowledge and test-smartness

Decision Making
Testing your speed + accuracy under pressure

Intuition
Some answers need gut + logic – can you spot the trick?

Concepts
It's all about strong basics – no shortcuts here

Strategy
The MEDICS test – built for those who heal, hustle, and hope.

QUESTION

1.806×10^{24} water molecules initially at 277 K and 1 atm are changed to 377 K and 1 atm. Thus, increase in volume is

A. 11.2 L

B. 27.631 L

C. 67.2 L

D. 91.816 L

$H_2O(l) \longrightarrow H_2O(g)$ ↑ Vol. high

1.806×10^{24}

$T_1 = 277\ K$

$P_1 = 1\ atm$

Vol. negligible

$PV = nRT$

$T_2 = 377\ K$

$P_2 = 1\ atm$

$n = \frac{1.806 \times 10^{24}}{6.02 \times 10^{23}}$

$R = \frac{1}{12}\ L\ atm\ K^{-1}\ mol^{-1}$

$P_2V = nRT_2$

$1 \times V = 3 \times \frac{1}{12} \times 377$

QUESTION

$CaCO_3 \xrightarrow{\Delta} CaO + CO_2(g)$

$W_{CaCO_3} = \frac{50}{100} \times 10 = 5\ g.$

$n = \frac{5}{100} = 0.05$

0.05×22.4

Consider the following cases:

I. 10 g of $CaCO_3$ of 50% impurity gave 2.24 L CO_2 at STP.

II. 8.7 g of pyrolusite sample (MnO_2 80% pure) on reaction with concentrated HCl displaced 1.792 L Cl_2 at STP.

III. Mixture of 1 mole of Na_2CO_3 and 1 mole of $NaHCO_3$ on heating gave 11.2 L CO_2 at STP.

Select correct cases

(A) I, II

(B) I, II, III

(C) I, III

(D) II, III

$55 + 32 = 87$

$$1\,MnO_2 + 4\,HCl \longrightarrow MnCl_2 + 1\,Cl_2 + 2H_2O$$

$$W_{MnO_2} = \frac{8\cancel{4}}{10\cancel{4}} \times 8.7$$

$$= 6.96\,g$$

$$V_{Cl_2} = 0.08 \times 22.4\,L$$

$$\begin{array}{r} 87 \\ \times\ 8 \\ \hline 696 \end{array}$$

$$n = \frac{8 \times 8.7}{100 \times 8.7}$$

$$= 0.08$$

QUESTION

100 mL of 1 M HCl is mixed with x mL of 2M HCl giving a solution of 1.67M HCl. Thus, x is

A. 100 mL

B. 200 mL

C. 300 mL

D. 400 mL

HCl + HCl = HCl

$M_1 = 1M$ $M_2 = 2M$ $M_3 = 1.67M$

$V_1 = 100ml$ $V_2 = x ml$ $V_3 = (100+x) ml$

$100 \times 1 \times 1 + x \times 2 \times 1 = (100+x) \times 1.67 \times 1$

$100 + 2x = 167 + 1.67x$

$2x - 1.67x = 0.33x = 67$

$x \approx \frac{67}{33} \times 100 = 200ml$

QUESTION

$M = \frac{n}{V(L)}$

What volume of 0.50 M $BaCl_2$ will contain 3.0 mol of chloride ion?

$V = ?$ $\quad Cl^-$

A 1.02 L

B 3.50 L

C 3.0 L

D 4.0 L

$1\,BaCl_2 \rightarrow 1\,Ba^{2+} + 2\,Cl^-$

$1 \longleftrightarrow 2$ mols

$3 \times \frac{1}{2} \longleftrightarrow 3$ mol

$1.5 \text{ moles} = 0.5 \times V$

$V = \frac{1.5}{0.5} = 3$

QUESTION

What volume of 96.0% H_2SO_4 solution (density 1.83 g mL^{-1}) is required to prepare 2.00 L of 3.00 M H_2SO_4 solution.

A. 335 mL

B. 600 mL

C. 450 mL

D. 402 mL

$M_1 = \frac{96 \times 1.83 \times 10}{98} \approx 18M$ | $M_2 = 3M$, $V_2 = 2L$

$V_1 = ?$

$M_1V_1 = M_2V_2$

$V_1 = \frac{3 \times 2}{18} = \frac{1}{3} L = 333 mL$

QUESTION

$Na_2CO_3 \cdot 10H_2O$

2.86 g of washing soda $Na_2CO_3 . xH_2O$ was completely neutralised by 200 mL of 0.1 N H_2SO_4.

$n_f = 2$

$$Na_2CO_3 + H_2SO_4 \longrightarrow Na_2SO_4 + H_2O + CO_2$$

Thus, x is

(A) 4

(B) 5

(C) 10 ✓

(D) 2

$$\frac{2.86 \times 2}{(106+18x)} = \frac{200}{1000} \times 0.1$$

$$572 = 212 + 36x$$

$$360 = 36x$$

$$x = \frac{360}{36} = 10$$

QUESTION

50 mL of 0.2 M NaOH and 50 mL of 0.4 M HCl react to form NaCl ?

A 0.585 g

B 5.85 g

C 1.17 g

D 0.117 g

$NaOH + HCl \longrightarrow NaCl + H_2O$

$50 \times 0.2 \times 1$ $\quad 50 \times 0.4 \times 1$

$10 \quad 20$

$NaCl$

$E_{NaCl} = \frac{58.5}{1}$

milli g·eq

$10 = \text{milli g eq. NaCl}$

$\frac{10}{1000} = \text{g eq NaCl} = \frac{W_{NaCl}}{58.5}$

$\frac{58.5}{100} = W_{NaCl} = 0.585\,g$

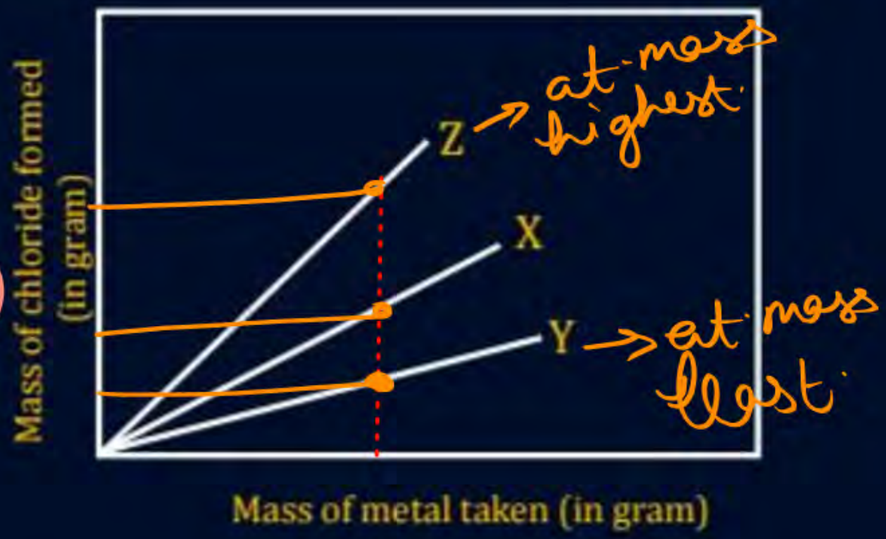
QUESTION

2nd grp metals → M

$M + Cl_2 \rightarrow MCl_2$

Alkaline earth metals X, Y, Z on reaction with Cl_2 form chloride. Graph between amount of metal taken (along X-axis) and amount of chloride formed (along Y-axis) is of the type.

Thus, atomic masses of metals X, Y and Z are in order



Mass of $MCl_2(g)$

Z → at. mass highest

Y → at. mass least

Mass M (in g)

(A) $X < Y < Z$

(B) $Y < X < Z$

(C) $Z < X < Y$

(D) $Z < Y < X$

Be
Mg
Ca
Sr
Ba
Ra

at. mass ↑

QUESTION

An oxide of nitrogen contains 30.4% nitrogen. Its dimer can be written as

A N_2O_2

B N_2O_4

C N_2O

D NO_2

$N_{30.4}$ $O_{59.6}$

$\frac{30.4}{14}$ $\frac{59.6}{16}$

$N_{2.17}$ $O_{3.725}$

$\frac{2.17}{2.17}$ $\frac{3.725}{2.17}$

$N_1O_{1.71}$

NO_2

QUESTION

A sample of pure compound contains 2.04 g of sodium, 2.65×10^{22} atoms of carbon and 0.132 mol of oxygen atom. Thus, its empirical formula is

(A) Na_2CO_3

(B) $Na_2C_2O_4$

(C) $Na_2(CO)_2$

(D) None of these

$Na_{\frac{2.04}{23}}\ C_{\frac{2.65\times10^{22}}{6.02\times10^{23}}}\ O_{0.132}$

$Na_{\frac{0.088}{0.044}}\ C_{\frac{0.044}{0.044}}\ O_{\frac{0.132}{0.044}}$

Na_2CO_3

Redox reaction → Lec-1, 2, 3 → Revise → MEDICS test 4

↓

Easy & moderate

Revision of Last class

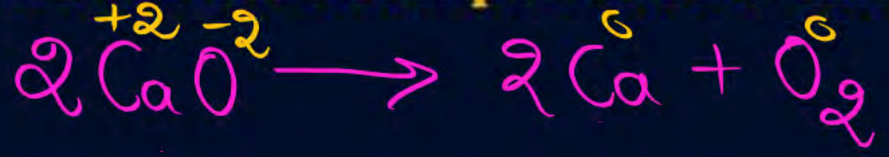
Types of Redox Reactions

Types of Redox Reactions

- **Combination Reaction:** A reaction in which two atoms or molecules combine together to form a third molecule is called is called a combination reaction.

  For Ex.: A + B ⟶ C.

- **Decomposition Reaction:** A reaction in which a molecules breaks down to form two or more components is called a decomposition reaction.



Types of Redox Reactions

- **Displacement Reactions:** A reaction in which an atom or ion in a compound is replacement an atom or ion of some other element, is called a displacement reaction.

$Zn + 2HCl \rightarrow ZnCl_2 + H_2(g)$ (Non-metal displacement)

$Mg + ZnSO_4 \rightarrow MgSO_4 + Zn$ (Metal displacement rxn)

- **Disproportionation Reactions:** Redox reaction in which same substance is oxidised as well as reduced.

$\overset{-1}{2H_2O_2} \rightarrow \overset{-2}{2H_2O} + \overset{0}{1O_2}$

red^n

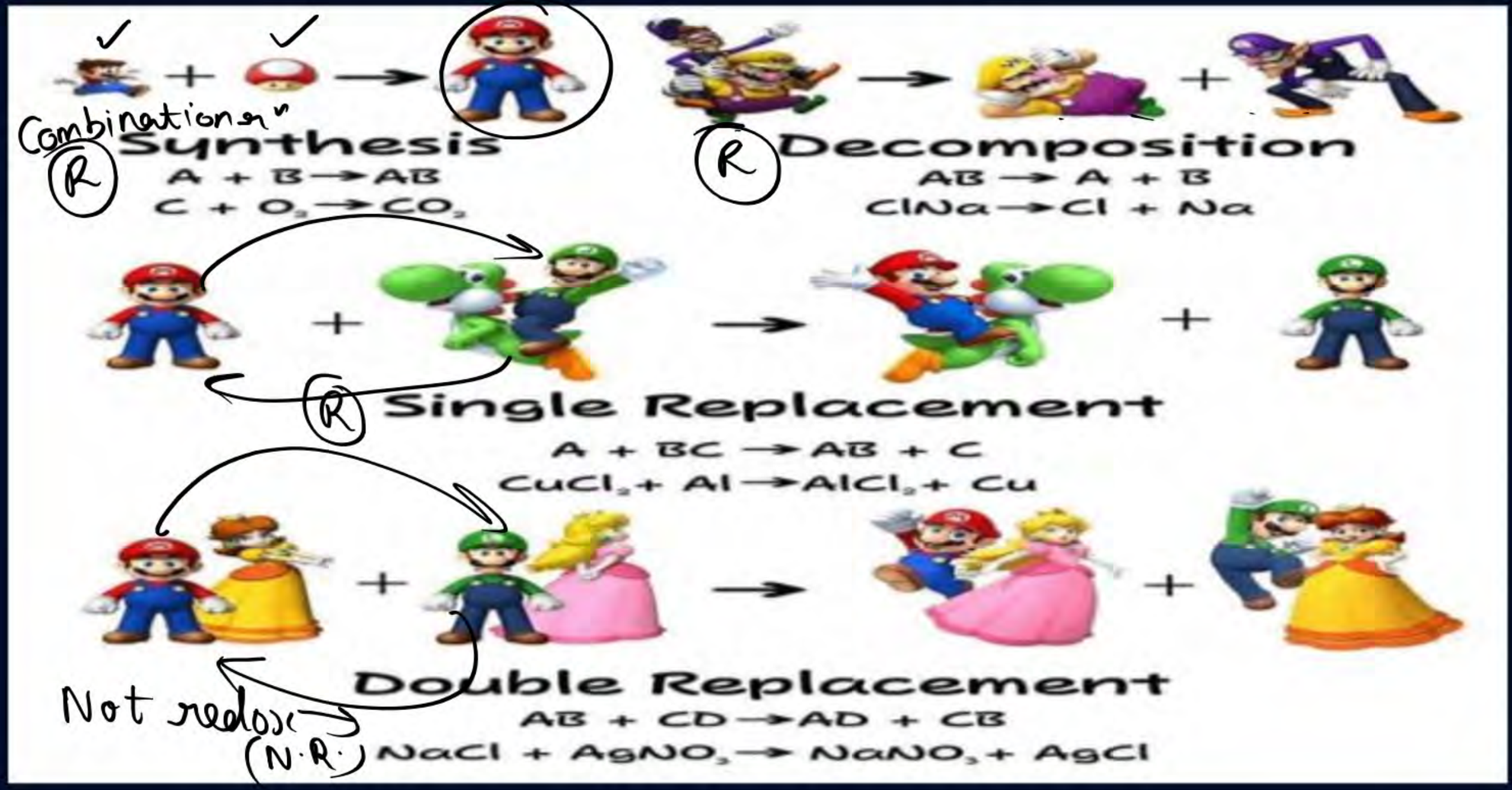
oxid^n.

MIT

Double displacement r^n is never redox r^n.

$$AB + CD \longrightarrow BC + AD$$

#MIT for Types of Redox Reaction



QUESTION – (NCERT: PL-242, | JEE Main Jan. 28, 2025 (I))

Match the List-I with List-II

	List-I (Redox Reaction)		List-II (Type of Redox reaction)
A.	$CH_{4(G)} + 2O_{2(g)} \xrightarrow{\Delta} CO_{2(g)} + 2H_2O_{(l)}$ (II)	(I)	Disproportionation reaction
B.	$2NaH_{(s)} \xrightarrow{\Delta} 2Na_{(s)} + H_{2(g)}$ (III)	(II)	Combination reaction
C.	$V_2O_{5(s)} + 5Ca_{(s)} \xrightarrow{\Delta} 2V_{(s)} + 5CaO_{(s)}$ (IV)	(III)	Decomposition reaction
D.	$2H_2O_{2(aq)} \xrightarrow{\Delta} 2H_2O_{(l)} + O_{2(g)}$ (I)	(IV)	Displacement reaction

Choose the correct answer from the option given below:

(A) (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

(B) (A)-(II), (B)-(III), (C)-(I), (D)-(IV)

(C) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

(D) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

QUESTION – (6th April 1st Shift 2023)

Which of the following options are correct for the reaction

$$2[Au(CN)_2]^-_{(aq)} + Zn_{(s)} \rightarrow 2Au_{(s)} + [Zn(CN)_4]^{2-}_{(aq)}$$

(A) Redox reaction

(B) Displacement reaction

(C) Decomposition reaction

(D) Combination reaction

Choose the correct answer from the options given below:

A. A and B only

B. A only

C. A and D only

D. C and D only

(JEE Mains)

QUESTION – (25th July 2nd Shift 2021)

Identify the process in which change in the oxidation state is five.

A $C_2O_4^{2-} \rightarrow 2CO_2$ (+3 → +4) 2 Change

B $Cr_2O_7^{2-} \rightarrow 2Cr^{3+}$ (+6 → +3) 6))

C $CrO_4^{2-} \rightarrow Cr^{3+}$ (+6) 3))

D $MnO_4^- \rightarrow Mn^{2+}$ (+7) 5 Change

JEE Mains

QUESTION – (7th Jan 1st Shift 2020)

Oxidation number of potassium in K_2O, K_2O_2 and KO_2 respectively, is

(A) +1, +1 and +1

(B) 2, 1 and $+\frac{1}{2}$

(C) +1, +2 and +4

(D) +1, +4 and +2

+1 +1 +1

KO_2

$2x + 1 = 0$

$2x = -1$

$x = \frac{-1}{2}$

JEE Mains.

QUESTION – (7th Jan 2nd Shift 2020)

The redox reaction among the following is

(A) combination of dinitrogen with dioxygen at 2000 K

$$N_2^0 + O_2^0 \xrightarrow{2000\,K} 2N^{+2}O^{-2}$$

(B) formation of ozone from atmospheric oxygen in the presence of sunlight

$$3O_2^0 \rightleftharpoons 2O_3^0$$

(C) reaction of H_2SO_4 with NaOH

$$2NaOH + H_2SO_4 \rightarrow Na_2SO_4 + 2H_2O$$

(D) reaction of $[Co(H_2O)_6]Cl_3$ with $AgNO_3$.

$$[Co(H_2O)_6]Cl_3 + 3AgNO_3 \rightarrow [Co(H_2O)_6](NO_3)_3 + 3AgCl\downarrow$$

white p.ppt.

QUESTION – (Online 2017)

Which of the following reactions is an example of a redox reaction?

A $\overset{+6\ -1}{XeF_6} + \overset{+1\ -1}{H_2O} \rightarrow \overset{+6\ -2\ -1}{XeOF_4} + \overset{+1\ -1}{2HF}$

B $\overset{+6\ -1}{XeF_6} + \overset{+1\ -2}{2H_2O} \rightarrow \overset{+6\ -2\ -1}{XeO_2F_2} + \overset{+1\ -1}{4HF}$

C $\overset{+4\ -1}{XeF_4} + \overset{+1\ -1}{O_2F_2} \rightarrow \overset{+6\ -1}{XeF_6} + \overset{0}{O_2}$

D $\overset{+2\ -1}{XeF_2} + \overset{+5\ -1}{PF_5} \rightarrow \overset{+2\ -1}{[XeF]^+}\ \overset{+5\ -1}{PF_6^-}$

JEE Mains.

QUESTION – (Online 2017)

In which of the following reactions, hydrogen peroxide acts as an oxidizing agent?

A $\overset{0}{I_2} + \overset{-1}{H_2O_2} + 2OH^- \rightarrow 2I^- + 2H_2O + O_2$

B $\overset{+2}{Pb}\overset{-2}{S} + 4\overset{-1}{H_2O_2} \rightarrow \overset{+2}{Pb}\overset{+6}{S}O_4 + 4H_2O$

C $2\overset{+7}{Mn}O_4^- + 3\overset{-1}{H_2O_2} \rightarrow 2\overset{+4}{Mn}O_2 + 3O_2 + 2H_2O + 2OH^-$

D $H\overset{+1}{O}Cl + H_2O_2 \rightarrow H_3O^+ + Cl^- + O_2$

QUESTION – (2006)

Which of the following chemical reactions depicts the oxidising behaviour of H_2SO_4?

(A) $2HI + H_2SO_4 \rightarrow I_2 + SO_2 + 2H_2O$

(B) $Ca(OH)_2 + H_2SO_4 \rightarrow CaSO_4 + 2H_2O$

(C) $NaCl + H_2SO_4 \rightarrow NaHSO_4 + HCl$

(D) $2PCl_5 + H_2SO_4 \rightarrow 2POCl_3 + 2HCl + SO_2Cl_2$

QUESTION – (NCERT: PL-239 | NV, JEE Main April 06, 2023 (I)

In ammonium-phosphomolybdate, the oxidation state of Mo is _____

H.W.

$(NH_4)_3 P \underline{Mo_{12}} O_{40} \cdot x H_2O$

QUESTION – (NCERT: PL-239 | NV, JEE Main April 15, 2023 (I)

In Chromyl chloride, the oxidation state of chromium is (+) 6

CrO_2Cl_2

$x - 4 - 2 = 0$

$x = +6$

QUESTION – (AIEEE 2002)

Which of the following is a redox reaction?

A. $NaCl + KNO_3 \longrightarrow NaNO_3 + KCl$

B. $CaC_2O_4 + 2HCl \longrightarrow CaCl_2 + H_2C_2O_4$

C. $Ca(OH)_2 + 2NH_4Cl \longrightarrow CaCl_2 + 2NH_3 + 2H_2O$

D. $2K[Ag(CN)_2] + Zn \longrightarrow 2Ag + K_2[Zn(CN)_4]$

n factor calculation

$A_x B_y$

① Eq. mass $= \frac{\text{Gr. M.M.}}{n_f}$

② n_f = no. of $\bar{e}$ lost (Oxid^n) or no. of $\bar{e}$ gained (Red^n)

③ O.N. Change $\Rightarrow$ Usi ka n-factor nikalenge

④ n_f = atoms per molecule whose O.N. changed $\times$ |Initial O.N. − Final O.N.|

#MIT

(a) Case - I

$$\overset{+p}{A_x}\overset{+q}{B_y} \longrightarrow \overset{+r}{A_Z}\overset{+q}{B_w}$$

$$n_f = x\,|p - r|$$

Q1 $\overset{+7}{Mn}\overset{-2}{O_4^-} \longrightarrow \overset{+2}{Mn}\overset{-2}{O}$

$$n_f = 1\,|7 - 2| = 5$$

Q2 $\overset{+6}{Cr_2}\overset{-2}{O_7}^{2-} \longrightarrow Cr^{3+}$

$$n_f = 2\,|6 - 3| = 6$$

Q3 $\overset{0}{I_2} \longrightarrow I^{-1}$

$$n_f = 2\,|0 - (-1)| = 2$$

Q4 $\overset{+4}{S}O_2 \longrightarrow \overset{+6}{S}O_4^{2-}$

$$n_f = 1\,|4 - 6| = 2$$

Q $\overset{+1}{Na_2}\overset{+2}{S_2}\overset{-2}{O_3} \longrightarrow \overset{+1}{Na_2}\overset{+2.5}{S_4}\overset{-2}{O_6}$

$n_f = 2|2 - 2.5| = 1$

#mIT

(b) Case – II

(i) kisi element ke kuch atoms ka O.N Change hoga

$\longrightarrow$ ~~~~~~~~~~~~~~~~~~~~ nahin hoga

(ii) Balance redox r^n.

(iii) $n_f = \dfrac{\text{no. of atoms undergoing Change in O.N.} \times |\text{Initial O.N.} - \text{Final O.N.}|}{\text{Total no. of atoms}}$

Q $\overset{+1\ +7\ -2}{2KMnO_4} + 16\ \overset{+1\ -1}{HCl} \longrightarrow 2\overset{+1\ -1}{KCl} + 2\overset{+2\ -1}{MnCl_2} + 5\overset{0}{Cl_2} + 8\overset{+1\ -2}{H_2O}$

$5Cl_2$

$n_f = |1|7-2|| = 5$

$$n_f = \frac{10\,|-1-0|}{16} = \frac{10}{16} = \frac{5}{8}$$

$n_f < 1 \Rightarrow$ eq. mass $>$ Gr. M. M

Q.

$$\overset{+1\ +6\ -2}{K_2Cr_2O_7} + 14\,\overset{+1\ -1}{HCl} \longrightarrow \overset{+1\ -1}{2KCl} + 2\overset{+3\ -1}{CrCl_3} + 3\overset{0}{Cl_2} + 7\overset{+1\ -2}{H_2O}$$

$$n_f = \frac{6\,|-1-0|}{14} = \frac{3}{7}$$

$$n_f = 2\,|6-3| = 6$$

mIT

Case - 3 :-

in a molecule > 1 type of atoms all are oxidised or reduced

n_f Total = $\sum_{\text{add}} n_f$ of all whose O.N. changed

$$\overset{+p}{A_x}\overset{+q}{B_y} \longrightarrow \overset{+r}{A_z}\overset{+s}{B_w}$$

$$n_f \text{ Total} = x|p-r| + y|q-s|$$

Q1 $\overset{+2}{Fe}\overset{+3}{C_2}\overset{-2}{O_4} \longrightarrow Fe^{3+} + \overset{+4}{C}\overset{-2}{O_2}$

$$n_f \text{ Total} = 1|2-3| + 2|3-4| = 1+2 = 3$$

Q 2 $\quad Fe(NO_2)_2 \longrightarrow Fe(NO_3)_3$

$n_f = 1 \,|2-3| + 2\,|3-5|$

$= 1 + 4 = 5$

Home work from modules

Prarambh → Q 8 to 9 13, 38 to 43

Prabal → Q 1, 3, 4, 5, 6, 7, 8, 12, 14, 19, 20

PYQ → 1, 4, 5, 6, 7, 8, 10

Magarmach Practice Questions (MPQ)

QUESTION – (26th June 2nd Shift 2022)

Which one of the following is an example of disproportionation reaction?

(A) $3MnO_4^{2-} + 4H^+ \rightarrow 2MnO_4^- + MnO_2 + 2H_2O$

(B) $MnO_4^- + 4H^+ 4e^- \rightarrow MnO_2 + 2H_2O$

(C) $10I^- + 2MnO_4^- + 16H^+ \rightarrow 2Mn^{2+} + 8H_2O + 5I_2$

(D) $8MnO_4^- + 3S_2O_3^{2-} + H_2O \rightarrow 8MnO_2 + 6SO_4^{2-} + 2OH^-$

QUESTION – (26th July 1st Shift 2022)

Which of the given reactions is not an example of disproportionation reaction?

(A) $2H_2O_2 \rightarrow 2H_2O + O_2$

(B) $2NO_2 + H_2O \rightarrow HNO_3$

(C) $MnO_4^- + 4H^+ + 3e^- \rightarrow MnO_2 + 2H_2O$

(D) $3MnO_4^{2-} + 4H^+ \rightarrow 2MnO_4^- + MnO_2 + 2H_2O$

QUESTION – (2002)

Which of the following is a redox reaction?

(A) $NaCl + KNO_3 \rightarrow NaNO_3 + KCl$

(B) $CaC_2O_4 + 2HCl \rightarrow CaCl_2 + H_2C_2O_4$

(C) $Mg(OH)_2 + 2NH_4Cl \rightarrow MgCl_2 + 2NH_4OH$

(D) $Zn + 2AgCN \rightarrow 2Ag + Zn(CN)_2$

QUESTION – (NCERT: PL-239 | NV, JEE Main Jan. 27, 2024 (II)

1 mole of PbS in oxidized by "X" moles of O_3 to et "Y" moles of O_2. X + Y =

QUESTION – (NCERT: PL-242, 243 | JEE Main April 6, 2024 (II))

Match List-I with List-II

List-I (Reaction)		List-II (Type of Redox reaction)	
A.	$N_2(g) + O_2(g) \rightarrow 2NO(g)$	(I)	Decomposition
B.	$2Pb(NO_3)_2(s) \rightarrow 2PbO(s) + 4NO_2(g) + O_2(g)$	(II)	Displacement
C.	$2Na(s) + 2H_2O(l) \rightarrow 2NaOH(aq.) + H_2(g)$	(III)	Disproportionation
D.	$2NO_2(g) + 2OH(aq.) \rightarrow NO_2^-(aq.) + NO_3^-(aq.) + H_2O(l)$	(IV)	combination

Choose the correct answer from the options give below:

A (A)-(I), (B)-(II), (C)-(III), (D)-(IV)

B (A)-(III), (B)-(II), (C)-(I), (D)-(IV)

C (A)-(II), (B)-(III), (C)-(IV), (D)-(I)

D (A)-(IV), (B)-(I), (C)-(II), (D)-(III)

QUESTION – (NCERT: PL-239 | NV, JEE Main Sep. 02, 2020 (I)

The oxidation states of iron atom in compound (A), (B) and (C), respectively, are *x*, *y* and *z*. The sum of *x*, *y* and z is

$Na_4[Fe(CN)_5(NOS)]$	$Na_4[FeO_4]$	$[Fe_2(CO)_9]$
(A)	(B)	(C)

QUESTION – (NCERT: PL-239 | NV, JEE Main Jan. 27, 2024 (I)

From the given list, the number of compounds with +4 oxidation state of Sulphur

SO_3, H_2SO_3, $SOCl_2$, SF_4, $BaSO_4$, $H_2S_2O_7$

QUESTION – (NCERT: PL-239 | NV, JEE Main Sep. 02, 2020 (II)

The oxidation states of transition metal atoms in $K_2Cr_2O_7$, $KMnO_4$ and K_2FeO_4, respectively, are x, y and z. The of x, y and z is _____.

QUESTION – (NCERT: PL-239, | JEE Main Jan. 07, 2020 (I))

Oxidation number of potassium in K_2O, K_2O_2 and KO_2, respectively, is :

A. +2, +1 and +1/2

B. +1, +1 and +1

C. +1, +4 and +2

D. +1, +2 and +4

QUESTION – (NCERT: PL-239, | JEE Main Jan. 07, 2020 (I))

The oxidation state of Cr in $[Cr(H_2O)_6]Cl_3$, $[Cr(C_6H_6)_2]$ & $K_2[Cr(CN)_2(O)_2(O_2)(NH_3)]$ respectively are :

A +3, +4 and +6

B +3, +2 and +4

C +3, 0 and +6

D +3, 0 and +4

QUESTION – (NCERT: PL-239, | JEE Main Online April 19, 2014)

Among the following, identify the species with an atom in +6 oxidation state:

A $[MnO_4]$

B $[Cr(CN)_6]^{3-}$

C Cr_2O_3

D CrO_2Cl_2

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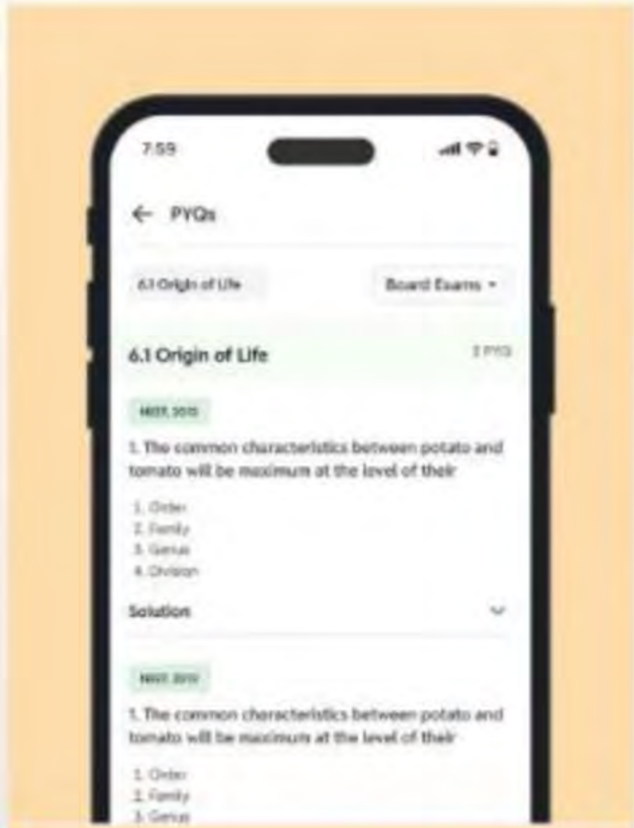
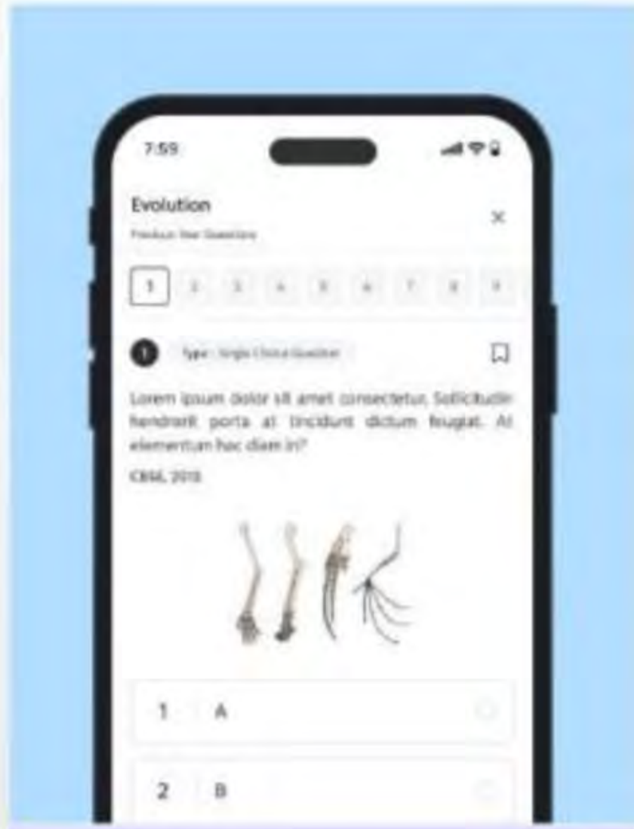


Topic-wise
Previous Year Questions



10,000+
Practice Questions to Ace Exams

THANK YOU