UDAAN 2025 DHA - 05

CHEMISTRY

Chemical Reactions & Equations

Ql On rusting iron forms a flaky layer over it which is_____in colour.

(A) green (B) reddish-brown

(C) black (D} white

Q2 Copper : Patina : Tarnishing :: Silver : 'X' : 'Y' Identify 'X' and 'Y' by understanding the analogy in the same order between copper, patina and tarnishing.

(A) X: Tarnishing, Y: Patina

(B} X: Patina, Y: Rusting

(C) X: Rust, Y: Rusting

(D) X: Patina, Y: Tarnishing

Q3 The following reaction is an example of a :

$4NH3(g) + 502(9)\text{---+ } 4NO(g) + 6H20(g)$

(i) displacement reaction

(ii) combination reaction

(iii} redox reaction

(iv} neutralisation reaction

(A) (i} and (iv} (B) (ii} and (iii}

(C) (i} and (iii} (D} (iii) and (iv}

Q4 Which of the following statements about the given reaction are correct?

$3Fe(s) + 4H_2 0(g)\text{---+ } Fe304(s) + 4H2(g)$

(i} Iron metal is getting oxidised

(ii} Water is getting reduced

(iii} Water is acting as reducing agent

(iv} Water is acting as oxidising agent

(A} (i}, (ii} and (iii}

(B} (iii} and (iv}

(C) (i}, (ii} and (iv}

(D} (ii} and (iv)

QS Identify the oxidising agent (oxidant} in the following reactions.

$Pb30_4 + 8HCl\text{---+ } 3PbCl2 + Cl2 + 4H20$

(A) $Pb_3 0_4$ (B} HCI

(C) $PbCl_2$ (D} H20

Answer Key

Ql	(B)	Q4	(C)
Q2	(D)	QS	(A)
Q3	(C)		

Hints & Solutions

Ql **Text Solution:**

Try to remember the iron after it gets rusted.

Video Solution:

Q2 **Text Solution:**

The type of layer formed over silver will be different from rust.

Video Solution:

Q3 **Text Solution:**

Check whether there is addition or removal of oxygen from any of the reactants.

Video Solution:

Q4 **Text Solution:**

The substance which oxidises other substances is known as an oxidising agent.

Video Solution:

QS **Text Solution:**

Identify the one that is reduced in the reaction.

Video Solution: