

DPP

DAILY PRACTICE PROBLEMS

CLASS : XIIth
DATE :

SOLUTION

SUBJECT : CHEMISTRY
DPP NO. : 5

Topic :-REDOX REACTIONS

1 (c)

Oxidation of Co and reduction of Cu^{2+} is taking place.

2 (a)

$$4 \times 1 + a + 6 \times (-2) = -1$$

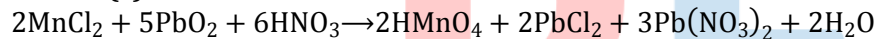
$$\therefore a = +7$$

3 (a)

$$a + 3 \times (+1) = 0$$

$$\therefore a = -3$$

4 (c)



5 (d)

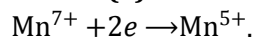
$$4 \times 1 + a + 4 \times (-1) = 0$$

$$\therefore a = 0$$

6 (c)

Ox. no. of each species remains same.

7 (a)

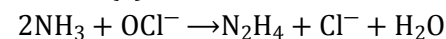


8 (a)

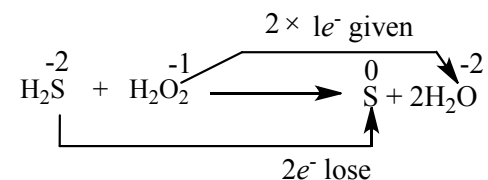
$$4 \times 1 + a + 6 \times (-1) = 0$$

$$\therefore a = +2$$

9 (a)



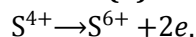
10 (d)



H_2S -Oxidation, Reducing agent.

H_2O_2 - Reduction, Oxidising agent.

11 (d)

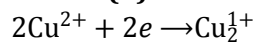


12 (b)

$$a + 2 \times 1 - 1 = 0$$

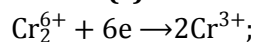
$$\therefore a = -1$$

13 (d)



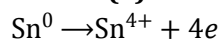
$$\therefore E = \frac{M}{1}$$

14 (c)

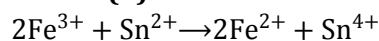


$\text{Cr}_2\text{O}_7^{2-}$ is reduced.

15 (a)

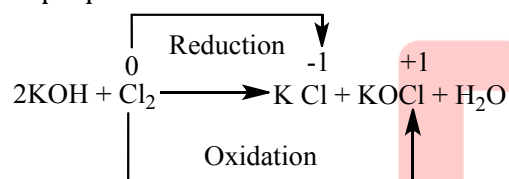


16 (d)



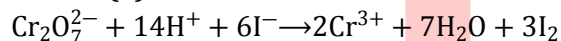
17 (c)

The reactions, in which the same element is oxidised as well as reduced, are called disproportionation reactions.



In this reaction, the same element, *ie.*, Cl_2 is oxidised as well as reduced, so it is an example of disproportionation reaction.

18 (a)



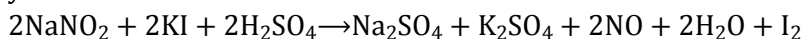
$\text{Cr}_2\text{O}_7^{2-}$ is reduced to Cr^{3+} .

Thus, final state of Cr is +3. Hence, (a)

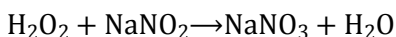
19 (d)

NaNO_2 (Sodium nitrite) acts both as oxidising as well as reducing agent because in it N-atom is in +3 oxidation state (intermediate oxidation state).

Oxidising property



Reducing property



20 (a)

Graphic is uncombined state of carbon.

ANSWER-KEY

Q.	1	2	3	4	5	6	7	8	9	10
A.	C	A	A	C	D	C	A	A	A	D
Q.	11	12	13	14	15	16	17	18	19	20
A.	D	B	D	C	A	D	C	A	D	A

PE