

DPP

DAILY PRACTICE PROBLEMS

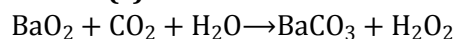
CLASS : XIIth
DATE :

SOLUTION

SUBJECT : CHEMISTRY
DPP NO. : 1

Topic :-HYDROGEN

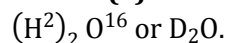
1 (c)



2 (a)

It is a fact.

3 (a)



D has 1*n*, 1*p* and 1*e*

O has 8*n*, 8*p* and 8*e*

4 (a)

It is a fact.

5 (b)

It is a fact.

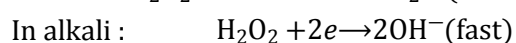
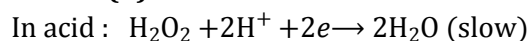
6 (d)

Electronic configuration of ${}_1\text{H}^1$ and ${}_1\text{H}^2$ is same.

7 (c)

It is a fact.

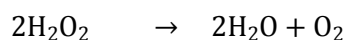
9 (d)



10 (b)

"10 volume H_2O_2 " means 1 mL of its solution on decomposition at NTP, give 10 mL oxygen gas.

Volume of oxygen formed from 100 mL of solution at NTP = 1000 mL.



2 moles 1 mole

$2 \times 34 \text{ g}$ 22400 mL.

∴ 22400 mL O_2 formed at NTP by decomposition of 68 g H_2O_2 .

∴ 1 mL O_2 formed at NTP from $\frac{68}{22400}$ of H_2O_2

∴ 1000 mL O₂ formed at NTP from

$$\frac{68 \times 1000}{22400} \text{ g H}_2\text{O}_2 = 3.035 \text{ g H}_2\text{O}_2$$

So, concentration of "10 volume H₂O₂"

= 3.0% approximately

12 (a)

O₃ reacts with Hg to form Hg₂O which sticks on the walls of glass. This is called tailing of mercury, O₃ + 2Hg → Hg₂O + O₂. The tailing is removed by the action of H₂O₂ on Hg₂O. H₂O₂ + Hg₂O → 2Hg + H₂O + O₂

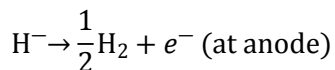
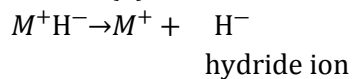
13 (d)

The ions responsible for hard water are soluble in water.

44 (a)

Liq. H₂ because of low atomic mass and high enthalpy of combustion and liq. O₂ a strong supporter for combustion.

15 (b)



16 (a)

It is a fact.

17 (d)

34 g H₂O₂ has 2 g H₂.

19 (d)

Acetanilide, alcohol, H₃PO₄ act as negative catalyst for decomposition of H₂O₂.

20 (c)

D₂O has different properties than H₂O.

PE

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

PE