

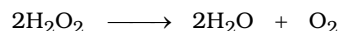
## Numerical Value Type

DTS-11

**126.(6)** Total six types of molecules of water are possible.

**127.(4)** In tritium atom one proton, one electron and two neutrons are present.

**128.(30)** '10 volume'  $\text{H}_2\text{O}_2$  sample = 10 ml of oxygen at STP are produced from 1 ml of '10 volume  $\text{H}_2\text{O}_2$  sample' of  $\text{H}_2\text{O}_2$  solution.



68 gm                                      22400 ml

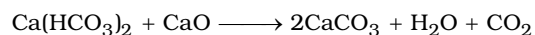
$$1 \text{ ml of oxygen is obtained from } = \frac{68}{22400} \times 10 = 0.03 \text{ gm } \text{H}_2\text{O}_2$$

1 ml of  $\text{H}_2\text{O}_2$  solution contains = 0.03 gm  $\text{H}_2\text{O}_2$

100 ml of  $\text{H}_2\text{O}_2$  solution contains = 3 gm  $\text{H}_2\text{O}_2$

Strength = 30 gm / L

**129.(560)**



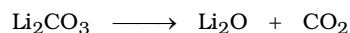
162 g              56 g

162 g  $\text{Ca}(\text{HCO}_3)_2 = 56 \text{ g of CaO}$

$$1 \text{ g } \text{Ca}(\text{HCO}_3)_2 = \frac{56}{162} \text{ gm of CaO}$$

$$1620 \text{ gm } \text{Ca}(\text{HCO}_3)_2 = \frac{56}{162} \times 1620 \text{ gm} \Rightarrow 560 \text{ gm}$$

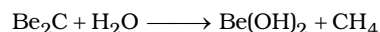
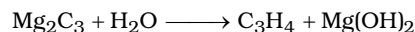
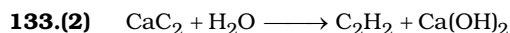
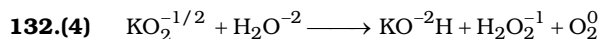
**130.(1)**  $\text{Li}_2\text{CO}_3$  decomposes while  $\text{K}_2\text{CO}_3$  is stable and does not decompose



1 mole                                      1 mole

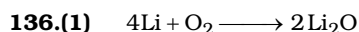
**131.(6)** (1)  $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$  or  $2\text{CaSO}_4 \cdot \text{H}_2\text{O}$  (P.O.P);       $x = 2$

(2)  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$  (gypsum);                                       $y = 4$



**134.(4)** Second period element can form maximum four bonds.

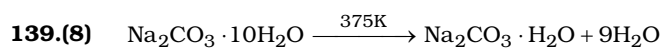
**135.(120)** Atomic number of last element is 118 and it is group 18th element.



Other metals form peroxide and super oxide under normal condition.

**137.(2)** Electron precise compounds have the required number of electrons to write their conventional Lewis dot structure. Group 14 form such compound which are tetrahedral in geometry.

**138.(4)** Single molecule of water can make four H-bonds.



$$Y = 9$$

$$X = 1$$

$$Y - X = 8$$

**140.(2)** Compound of lithium are more covalent and has higher lattice energy. Only 3 & 4 are correct