

Level - 1	DTS-5
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- 61.(D)** Refer NCERT
- 62.(B)** $\text{SiCl}_4 + \text{H}_2\text{O} \longrightarrow \text{Si}(\text{OH})_4 \xrightarrow{\Delta} \text{SiO}_2$
- 63.(B)** CO reacts with haemoglobin in blood to form carboxyhaemoglobin.
- 64.(A)** Boiling point of hydrides increases down the group due to increase in Vander Waal radius/molar mass.
- 65.(D)** $\cdot\text{CH}_3$ is sp^2 hybridised. Here unpaired electron is present in pure p-orbital.
- 66.(C)** CO_2 : Bond angle is 180°
 SiO_2 exists in form of 3D silicate. Bond angle = 109.5°
- 67.(B)** $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O} + \text{HCl} \longrightarrow 2\text{NaCl} + \text{H}_3\text{BO}_3$
- 68.(B)** BF_3 is covalent
- 69.(B)** Al_2O_3 is insoluble in water due to high Lattice energy and low hydration energy.
- 70.(A)** $\text{H}_2\text{C}_2\text{O}_4 \xrightarrow[\text{Conc. H}_2\text{SO}_4]{\Delta} \text{H}_2\text{O} + \text{CO} + \text{CO}_2$
- 71.(D)** $(\text{AlCl}_3)_n$ sublimes on heating
- 72.(B)** Number of shared oxygen in sheet silicate is 3.
- 73.(A)** Silicones repel water due to presence of alkyl group
- 74.(C)** $\text{H}_2\text{C}_2\text{O}_4 \longrightarrow \underset{(y)}{\text{CO}} + \underset{(x)}{\text{CO}_2} + \underset{(z)}{\text{H}_2\text{O}}$
 $x : \text{sp}, \quad y : \text{sp}, \quad z : \text{sp}^3$
- 75.(D)** Bond order
- | | | |
|--------------------|---|------|
| CO | : | 3 |
| CO_2 | : | 2 |
| CO_3^{2-} | : | 1.33 |
- Bond length $\propto \frac{1}{\text{Bond order}}$