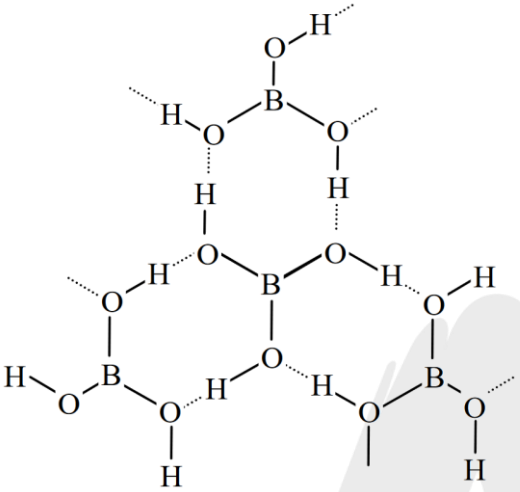
DPP-07

SOLUTION

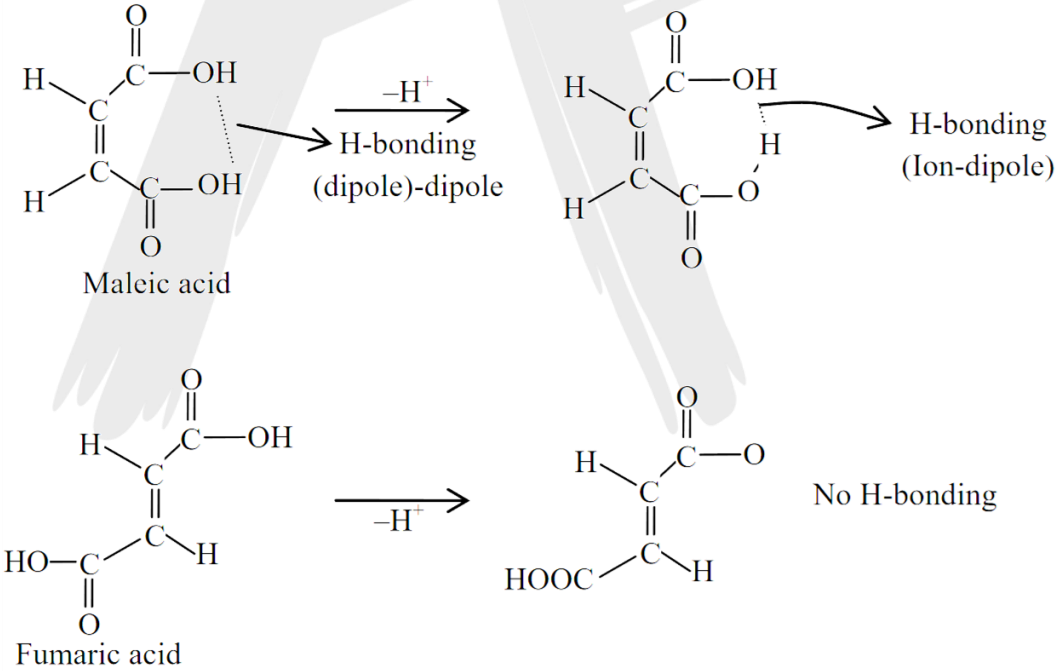
Link to View Video Solution: Click Here

1.

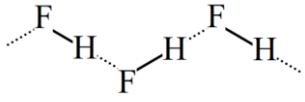


2. Inter molecular H-Bonding in case of para nitro phenol is strong enough to increase boiling point which is not favoured in o-nitro phenol.

3. Maleic acid anion gets stabilize due to intra molecular H-bonding which is not possible in anion of Fumaric acid. SoH releasing tendency is more in case of maleic acid.



4. Due to strong H-Bonding in H − F, there is strong intermolecular attraction force.



5. Due to H-Bonding in NH_3, it can be easily liquify.

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6. Density of ice is higher than that of water due to cage like structure of ice volume of ice increases and density decreases.

7. On heating ice in temperature range $0-4°C$ H-bonds of ice break down, which decreases volume, hence density of H_2O increases. On heating ice after $4°C$ thermal vibrations of H_2O molecules increases which increases effective volume of ice, so density of ice again decreases.

8. $H-I$ bond is weak as compare to $H-F$ so it can be dissociated easily and can give H^+ easily.

9. The organic matter in wood participate in H-bonding with water molecules in ice-cream.

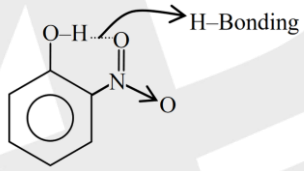
10. $K^+[F-H....F]$

$\downarrow$

H-bonding

But $KHBr_2$ & KHI_2 can't form H-Bond.

11. In o-Nitrophenol intra molecular H-bond is present which decreases it's solubility in water.



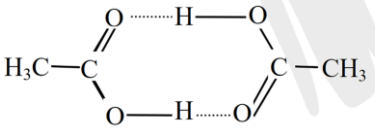
Ortho Nitro-phenol

12. In o-hydroxy benzeldehyde intramolecular H-bond is present which is less stronger than intermolecular H-bond in p-hydroxy benzeldehyde.

13. Extent of H-bonding in glycerol is more as compare to ethanol so it is more viscous.

14. Due to H-bonding in H_2O

15. Due to H-bonding in acetic acid it forms dimer so overall molecular weight is just double of original



Dimer of CH_3COOH

16. Due to bigger size of 'CI' atom it's interaction is not enough to evolve the amount of energy which lies in the range of H-bong.

17. $\underset{\text{liquid}}{(AcOH)_n} \xrightarrow{\text{on vapour}} \frac{n}{2}$

$\text{But in } \underset{\text{liquid}}{(H_2O)_n} \xrightarrow{\text{on vapour}} n$

} Not completely converted

Here all H_2O molecule gets vaporised. So change is more

18. As extent of H-bond is more in H_2O as compare to HF, heat of vaporisation of water is higher than HF.