

**DPP-07**

- Q.1** Explain the structure of Boric acid in solid state.
- Q.2** Boiling point of o-Nitrophenol is less than meta and para nitrophenol. Why?
- Q.3** Maleic acid is more acidic than fumaric acid. Why?
- Q.4** H – F is only liquid among halogen acid. Why?
- Q.5** Ammonia is more easily liquefied than HCl, explain.
- Q.6** Why ice floats on water?
- Q.7** Water shows maximum density at 4°C. Why?
- Q.8** HI is the strongest halogen acid, whereas H – F is the weakest. Why?
- Q.9** Wood pieces are used to hold ice-cream. Why?
- Q.10** KHF₂ is possible but not KHBr₂ or KHI₂. Why?
- Q.11** O - Nitrophenol is less soluble in H₂O than p - Nitrophenol. Why?
- Q.12** o-Hydroxy benzaldehyde is a liquid at room temperature while p-hydroxy benzaldehyde is a high melting solid.
- Q.13** Glycerol is more viscous than ethanol. Explain.
- Q.14** CH₄ and H₂O have nearly same molecular weight. Yet CH₄ has a boiling point 112 K and water has 373 K. Explain.
- Q.15** The experimental molecular weight of acetic acid is just double than theoretical molecular weight of acetic acid. Why?
- Q.16** Although chlorine has same electronegativity as nitrogen but the former does not form effective H-bonding. Explain.
- Q.17** Molar entropy change of vapourization of acetic acid is less than that of water. Explain
- Q.18** Heat of vapourization of water is higher than HF, however strength of H-bond in HF is higher than water. Explain