

### **QUESTIONS FOR PRACTICE**

1. What are the criteria for a molecule being liquid crystalline? Give typical representation of a liquid crystal molecule. What are thermotropics and Lyotropics Liquid Crystals?
2. Explain director and parameter of Liquid Crystals.
3. What are different phases of thermotropic liquid crystals? Explain any one phase in detail with diagram
4. Explain in brief the different phases and the properties of Liquid crystals.
5. What is liquid crystal? Why it is called mesomorphic state of matter? With diagram explain three different phases of thermotropic liquid crystals.
6. Give classification of liquid crystals. With the help of neat diagram, explain cholesteric liquid crystal. What is pitch in cholesteric liquid crystal.
7. Explain nematic liquid crystal with the help of diagram.
8. What is smectic liquid crystal? Explain with diagram.
9. Explain display applications of liquid crystals.