1. Why do covalent compounds have low melting and boiling points?

2. Give the name and structural formula of next homologue of HCOOH.

3. Explain about the following.
   (a) Single bond
   (b) Double bond
   (c) Triple Bond

4. Describe the structure of diamond. Draw a simple diagram to show the arrangement of carbon atoms in it.

5. (a) Explain why diamond has a high melting point.
    (b) State any two uses of diamond.
Practice Challenge - Subjective

6. An element E exists in three allotropic forms A, B and C. In allotrope A, the atoms of element E are joined to form spherical molecules. In allotrope B, each atom of element E is surrounded by three other E atoms to form a sheet-like structure. In allotrope C, each atom of element E is surrounded by four other E atoms to form a rigid structure.
   (a) Name the element E.
   (b) What is allotrope A?
   (c) What is allotrope B?
   (d) What is allotrope C?
   (e) Which allotrope is used in making jewellery?
   (f) Which allotrope is used in making the electrode of a dry cell?

7. Name the functional groups present in the following compounds:
   (a) CH₃COCH₂CH₂CH₂CH₃
   (b) CH₃CH₂CH₂COOH
   (c) CH₃CH₂CH₂CH₂CHO
   (d) CH₃CH₂OH

8. Name a compound of each type and draw the figure.
   (a) Cyclic compound with single bond.
   (b) Cyclic compound with triple bond.