1. Explain the chemical differences in reactions between alkanes, alkenes, and alkynes using suitable examples.

2. Discuss how functional groups influence the chemical reactivity and physical properties of organic compounds with examples.

3. Describe isomerism in hydrocarbons and compare chain, position, and functional group isomerism.

4. Explain the preparation and chemical properties of ethanoic acid and its role in esterification reactions.

5. How are soaps and detergents different in chemical composition, and why are detergents preferred in hard water?

6. Discuss the allotropes of carbon and compare their structure and physical properties.

7. Explain how homologous series help in systematic study of organic compounds with examples.

8. Describe the structure, preparation, and uses of ethanol and explain its chemical reactivity.

9. How is IUPAC naming applied to compounds with multiple functional groups and side chains?

10. Compare the physical and chemical properties of alkane, alkene, and alkyne series in terms of bond type and reactivity.