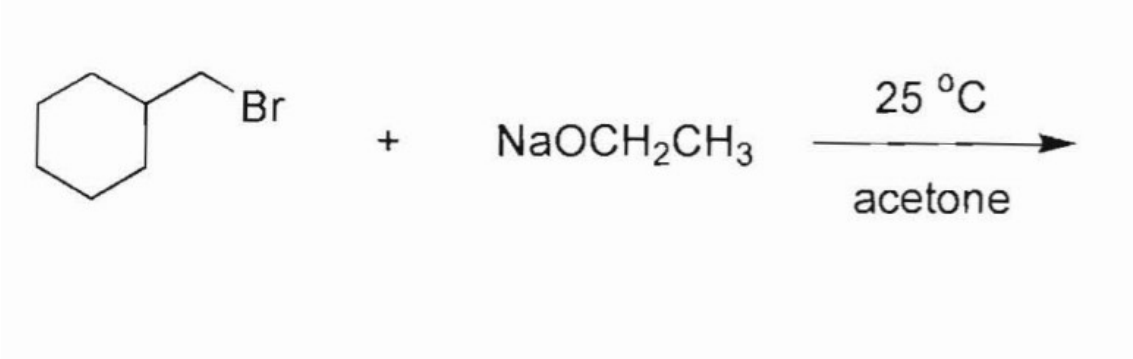
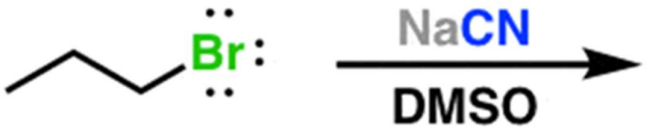
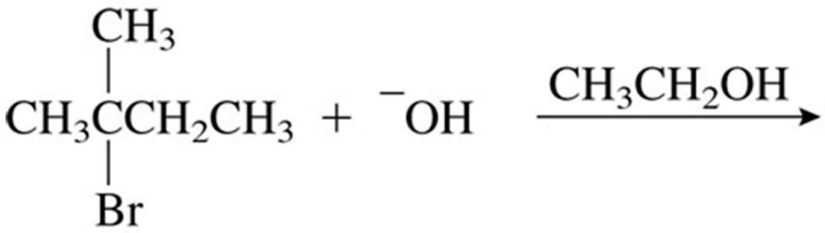
Chapter – 4 Practice Questions

1. Define the following terms
   a) Plane of symmetry, Centre of symmetry, Alternating axis of symmetry and Rotational axis of symmetry
2. What is meant by Chirality? Give examples.
3. Differentiate enantiomer and diastereomer. Give examples.
4. Discuss the following projection formulae with one example
   a) Wedge-dash, Sawhorse and Newmann
5. Write notes on Dieckmann condensation reaction.
6. Explain the role of $LiAlH_4$ in the reaction of ketones to secondary alcohols.
7. How does cyclopropane react with HI and H_2SO_4?
8. Describe the mechanism of E_1 and E2 reaction.
9. What is isomerism? Explain structural isomerism and stereo isomerism and its types with one example each.
10. Discuss in detail about the conformations of n-butane.
11. Explain Cahn-Ingold Prelog rules to determine the absolute configuration on a chiral center. Examples must be provided for each step.
12. Describe the different types of addition reactions.
13. Explain the role of the following reagents in reduction
    a) $NaBH_4$
    a) K_2Cr_2O7
14. Outline the synthesis of the following with mechanism
    a) Paracetamol and Aspirin
15. Elaborate the types of isomerism in coordination complexes with an example.
16. Compare and contrast S_N2 reaction with S_N1 reaction.
17. 

18.


Br:
NaCN
DMSO

19.


CH3
CH3CCH2CH3
Br
+
−OH
CH3CH2OH

20.


Br
CH3CH2CHCH3
+
O
CH3CO−
DMF