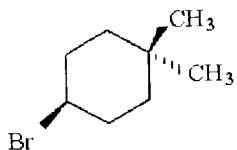
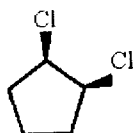


Review Questions for Chapter 6

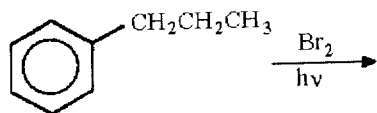
- 1) Provide an acceptable name for  $\text{CHCl}_3$ .
- 2) Provide an acceptable name for the compound shown below.



- 3) Provide an acceptable name for  $\text{CH}_3\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{I}$ .
- 4) Provide an acceptable name for the compound shown below.



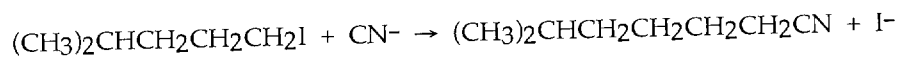
- 5) Provide the structure of 1-bromo-3-methylhexane.
- 6) Although F is more electronegative than Cl, the  $\text{C}-\text{Cl}$  bond has a larger dipole moment than the  $\text{C}-\text{F}$  bond. Explain.
- 7) Provide the structure of the major organic product in the reaction below.



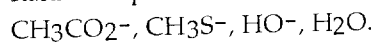
- 8) Provide the structure of the major organic product in the reaction below.



- 9) Provide a detailed, stepwise mechanism for the reaction below.



- 10) Rank the species below in order of increasing nucleophilicity in hydroxylic solvents:



- 11) What type of solvent is best for  $\text{S}_{\text{N}}2$  reactions which employ anionic nucleophiles: polar, protic solvents; polar, aprotic solvents; or nonpolar solvents? Explain.