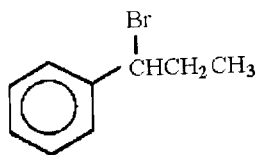


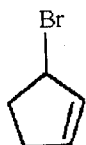
Answer Key

Testname: REVIEW QUESTIONS CHAPTER 6.TST

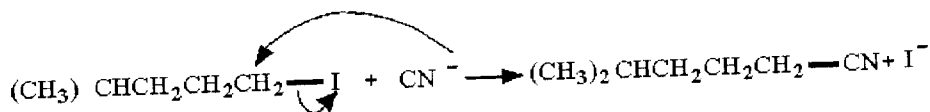
- 1) chloroform or trichloromethane
- 2) 1-bromo-4, 4-dimethylcyclohexane
- 3) 2-iodo-2-methylpentane
- 4) *cis*-1, 2-dichlorocyclopentane
- 5)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_2\text{Br}$
- 6) The bond dipole moment is determined by a product of the amount of charge separation and the distance over which the charge is separated,  $\mu = 4.8 \times \delta \times d$ . Although  $\delta$  is larger in the C-F bond, the greater length of the C-Cl bond ultimately makes its dipole moment larger.
- 7)



8)



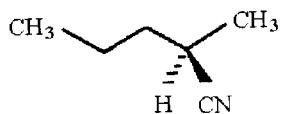
9)



10)  $\text{H}_2\text{O} < \text{CH}_3\text{CO}_2^- < \text{HO}^- < \text{CH}_3\text{S}^-$

11) Polar, aprotic solvents are best. These solvents have strong dipole moments to enhance solubility of the anionic species but lack the ability to solvate the anion by hydrogen bonding.

12)



13)

