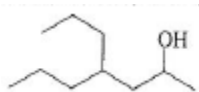
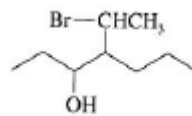


1. Give the systematic names of the following alcohols. Also classify them as primary, secondary or tertiary.

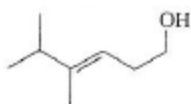
a)



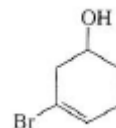
b)



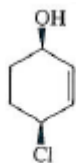
c)



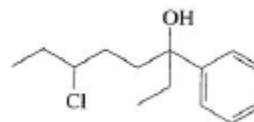
d)



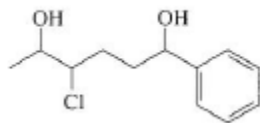
e)



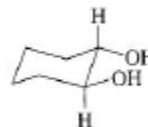
f)



g)



h)



2. Draw the structures of the following compounds

a) Triphenylmethanol

b) 3-(bromomethyl)-4-octanol

c) 3-cyclopenten-1-ol

d) 3-cyclohexyl-3-pentanol

e) 2, 4-pentanediol

3. Predict which one compound of the following pairs of the compounds will have a higher boiling point. Give a brief reason for your choice.
- a) 1-hexanol or 3,3-dimethyl-1-butanol

 - b) 2-hexanone or 2-hexanol

 - c) 2-hexanol or 1,5-hexanediol

 - d) 2-pentanol or 2-hexanol
4. Predict which compounds in the following have the highest and the least solubility in water.
- a) 1-butanol, 2-methyl-1-propanol, 2-methyl-2-propanol

 - b) Chlorocyclohexane, cyclohexanol, 1,2-cyclohexanediol
5. Predict which of the following compound in the pairs is more acidic.
- a) Cyclohexanol or 2-chlorocyclohexanol

 - b) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{OH}$ or $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{COOH}$

 - c) 2,2-dimethyl-1-butanol or 1-butanol

6. Complete the following acid base reactions

