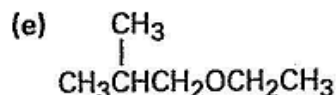
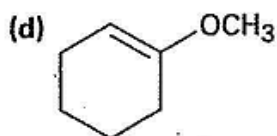
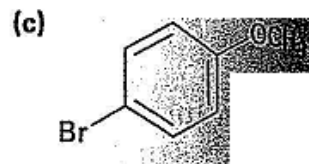
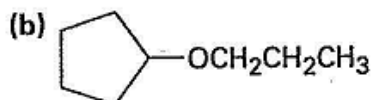
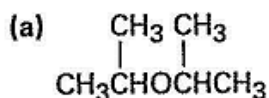


Problem 18.1

Name the following ethers:

**Problem 18.5**

How would you prepare the following ethers? Use whichever method you think is more appropriate: the Williamson synthesis or the alkoxymercuration reaction.

- a) butylcyclohexylether (b) Benzyl ethyl ether ($\text{C}_6\text{H}_5\text{CH}_2\text{OCH}_2\text{CH}_3$)
 b) di-*tert*-butyl ether (d) Tetrahydrofuran

Problem 18.6

Rank the following halides in order of their reactivity in the Williamson synthesis:
 bromoethane, 2-bromopropane, bromobenzene
 chloroethane, bromoethane, 1-iodopropene

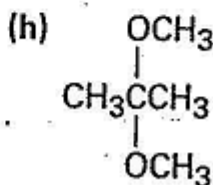
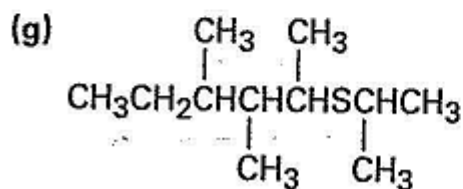
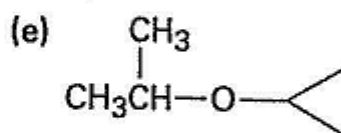
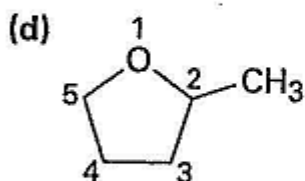
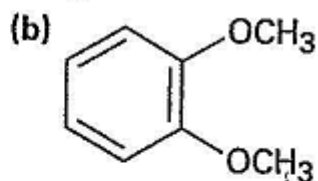
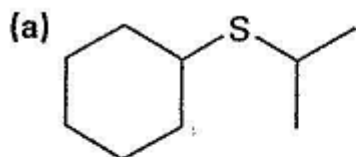
Problem 18.23

Draw structures corresponding to the following IUPAC names:

- (a) Ethyl 1-ethylpropyl ether (b) Di(*p*-chlorophenyl) ether
 (c) 3,4-Dimethoxybenzoic acid (d) Cyclopentyloxycyclohexane
 (e) 4-Allyl-2-methoxyphenol (eugenol; from oil of cloves)

Problem 18.24

Give IUPAC names for the following structures:

**Problem 18.25**

How would you prepare the following ethers?

