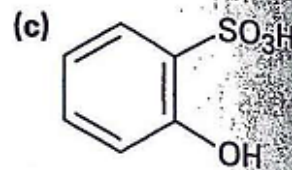
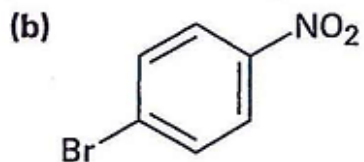
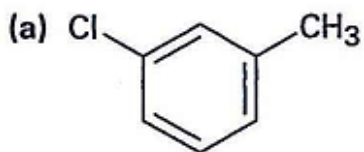
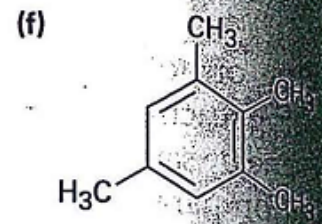
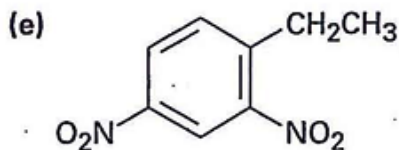
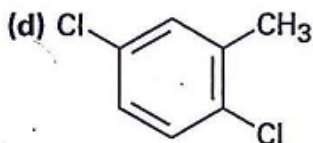
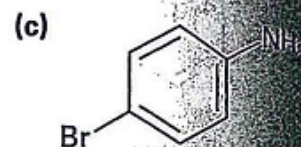
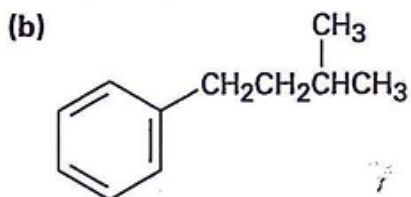
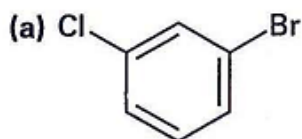


**Problem 15.1**

Tell whether the following compounds are ortho-, meta-, or para-disubstituted:

**Problem 15.2**

Give IUPAC names for the following compounds:

**Problem 15.3**

Draw structures corresponding to the following IUPAC names:

(a) *p*-Bromochlorobenzene

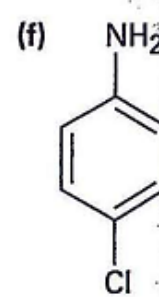
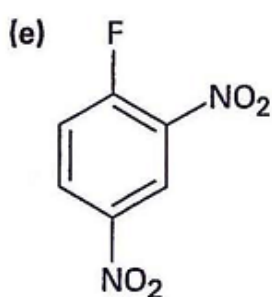
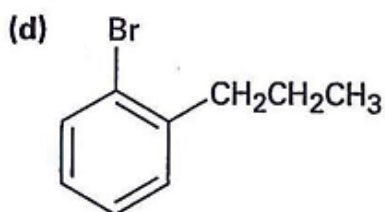
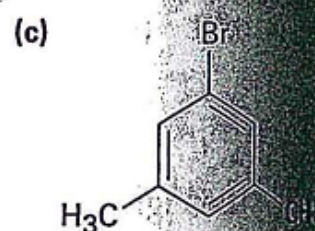
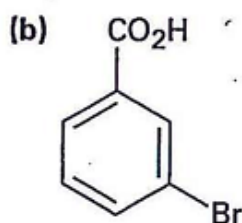
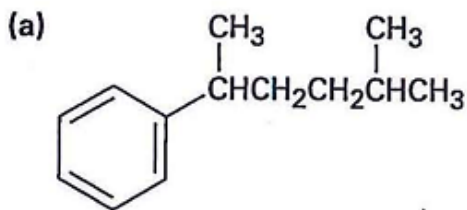
(b) *p*-Bromotoluene

(c) *m*-Chloroaniline

(d) 1-Chloro-3,5-dimethylbenzene

**Problem 15.18**

Give IUPAC names for the following compounds:

**Problem 15.19**

Draw structures corresponding to the following names:

(a) 3-Methyl-1,2-benzenediamine

(b) 1,3,5-Benzenetriol

(c) 3-Methyl-2-phenylhexane

(d) *o*-Aminobenzoic acid

(e) *m*-Bromophenol

(f) 2,4,6-Trinitrophenol (picric acid)

**Problem 15.20**

Draw and name all possible isomers of the following:

(a) Dinitrobenzene

(b) Bromodimethylbenzene

(c) Trinitrophenol

**Problem 15.21**

Draw and name all possible aromatic compounds with the formula  $C_7H_7Cl$ .