General steps to identify an unknown organic compound:

1. Solubility test: to obtain information on whether the unknown is an acid, neutral, or a basic compound;

2. Collecting data on modern instruments:
   
   (a) IR,
   
   (b) 1H NMR,
   
   (c) 13C NMR,
   
   (d) mass spectrum,
   
   (e) DEPT 13C and 2D NMR if needed.

3. Deduce the structure.