1. Knowing that  $J_{ac} > J_{ab} > J_{bc}$  how many lines (peaks) would be observed for  $H_a$ ?

$$H_b$$
 $H_c$ 
 $O$ 
 $CH_3$ 

 Write the free radical mechanism for the following decomposition and give the formula for the two radicals involved in the propagation steps of the following free radical reaction.

$$CH_3$$
 $CH_3$ 
 $CH_3$