1. D, F, J, M, R, X, Z, DD



(b) The intermediate radical formed by abstraction of a hydrogen atom from 1,4-pentadiene is resonance stabilized by two double bonds (i.e., "doubly allylic"). The radical obtained from 1-pentene is allylic, whereas the most stable radical formed form pentane is not allylic.

3. Here are appropriate routes, you should be able to fill in the reagents and conditions (which are required for full credit).



Br