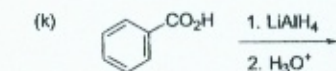
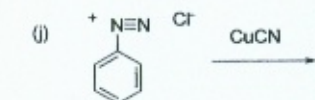
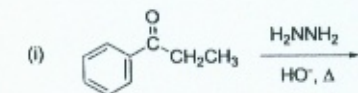
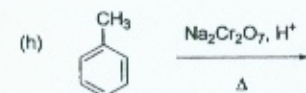
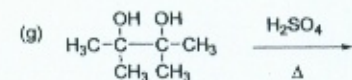
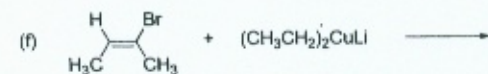
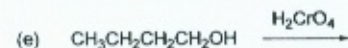
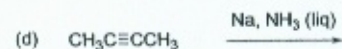
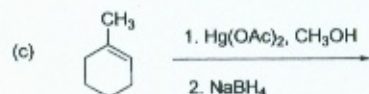
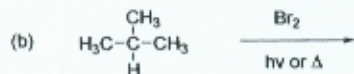
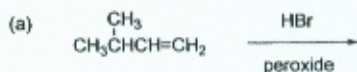
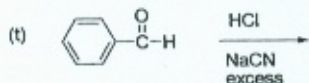
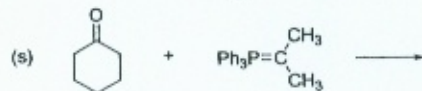
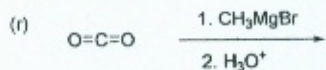
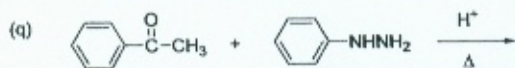
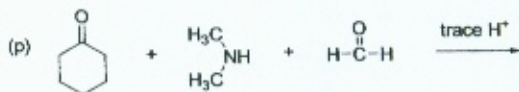
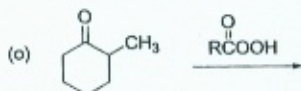
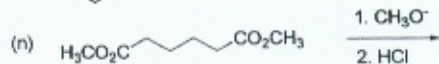
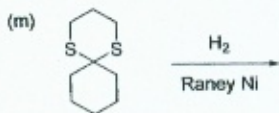
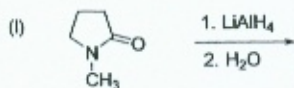


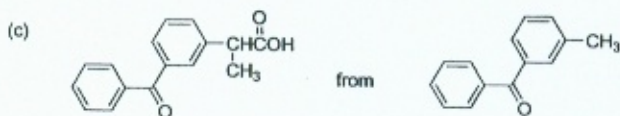
(60%) 1. Give the major product of each of the following reactions.



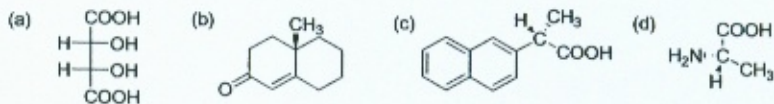


(15%) 2. How would you synthesize each of the following compounds from the given starting material?

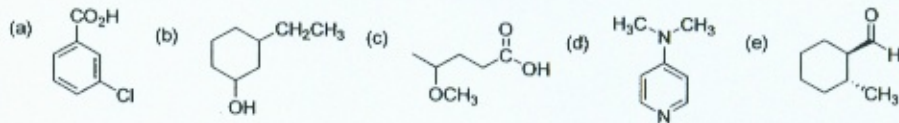




(10%) 3. Assign an *R* or *S* configuration to each asymmetric carbon of the following compounds.



(10%) 4. Give the systematic name for each of the following compounds.



(5%) 5. Propose a reasonable mechanism for the following reactions.

