

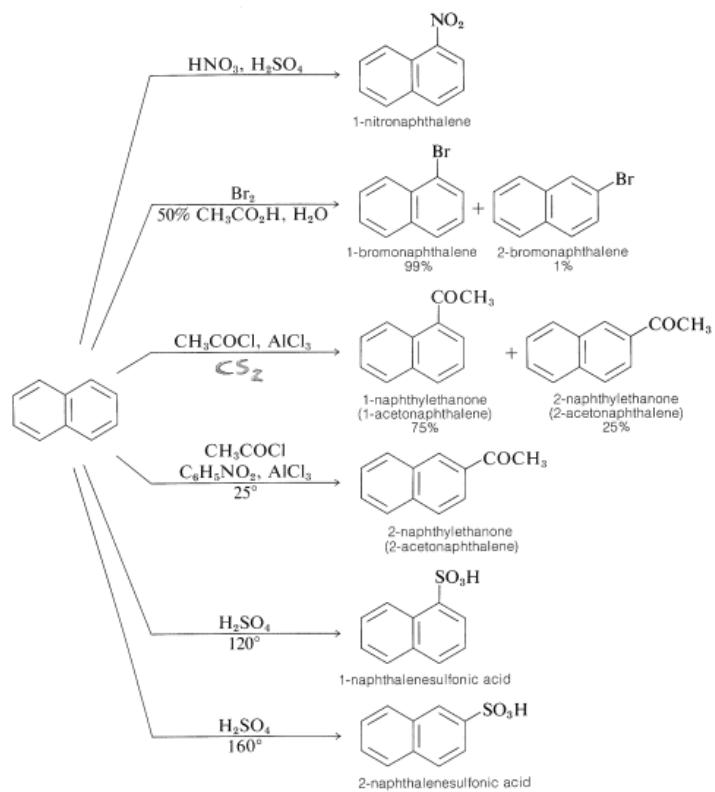
PHARMACEUTICAL ORGANIC CHEMISTRY-II- BP301T

UNIT: 4 Polynuclear hydrocarbons

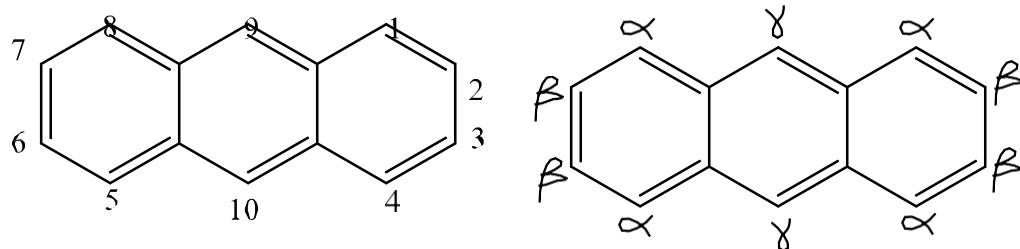
CLASS: 3

TOPIC: Naphthalene and Anthracene

Orientation in the substitution of naphthalene can be complex, although the 1 position is the most reactive. Some examples follow.



Anthracene is an example of condensed polynuclear hydrocarbons containing three benzene rings fused with each other in a linear manner.



α - position equivalent to 1,4,5,8
 β - position equivalent to 2,3,6,7

γ - position equivalent to 9,10

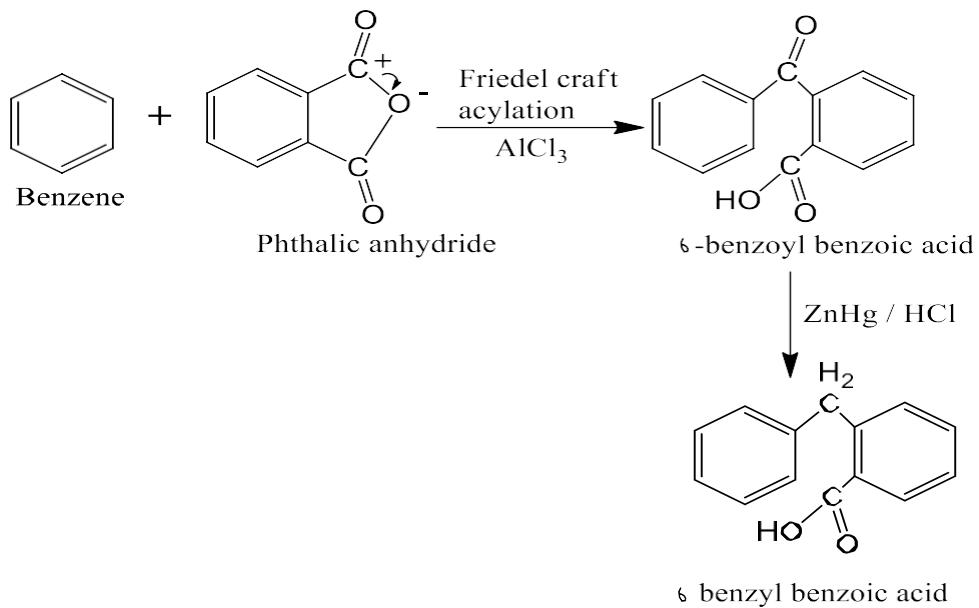
If monosubstitution is carried out in anthracene, three monosubstituted product are obtained, α or 1- substituted, β or 2 substituted and γ or 9 substituted.

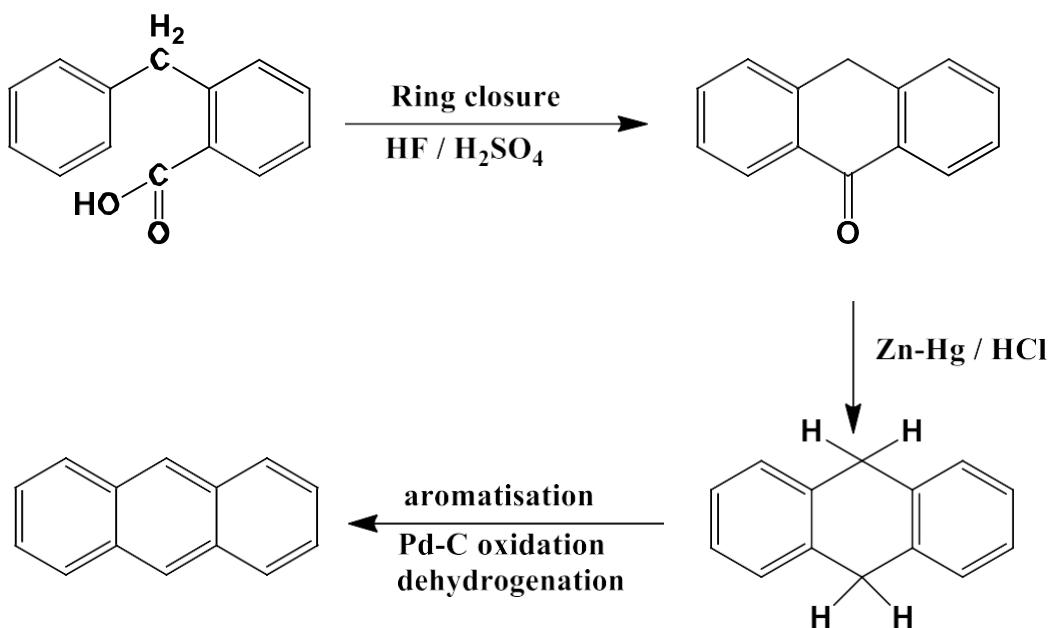
Methods of Preparation

Haworth synthesis

It involve mainly four type of reactions-

- Friedel craft acylation
- Clemmensen reduction
- Ring closure
- Aromatization





2. Diel's Alder reaction

