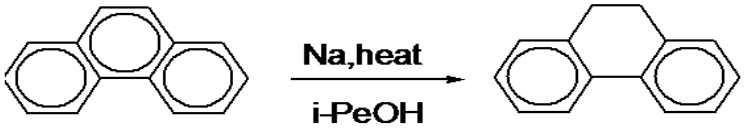
PHARMACEUTICAL ORGANIC CHEMISTRY-II- BP301T

UNIT: 4 Polynuclear hydrocarbons

CLASS: 7

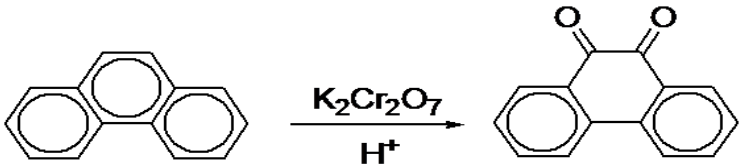
- **TOPIC: Phenanthrene *Reactions of Phenanthrene***

Reduction



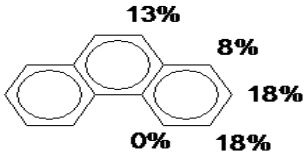
9,10-dihydrophenanthrene

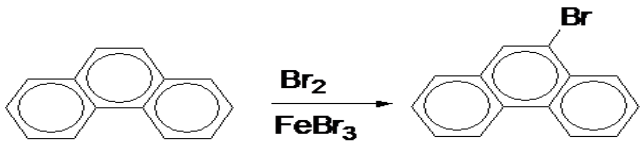
Oxidation

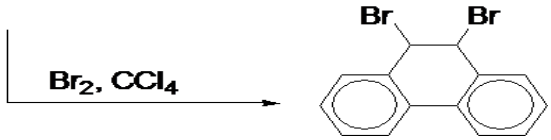


9,10-penanthrone

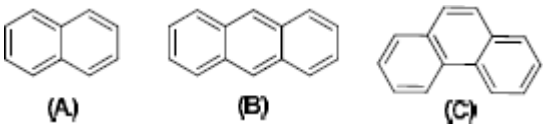
Bromination is an exception:







- ***Aromatic character of naphthalene, anthracene and phenanthrene***



- Resonance energy of A = 61 kcal mol^{-1}
- Resonance energy of B = 84 kcal mol^{-1}
- Resonance energy of C = 92 kcal mol^{-1}
- Resonance energy of benzene = 36 kcal mol^{-1}

- ***Reactions Phenanthrene*** **(**Electrophilic addition versus electrophilic substitution**)**