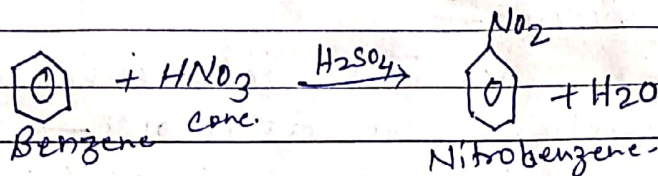


part-II Subsidiary.
Chemistry.

1. Mechanism of Nitration of Benzene.

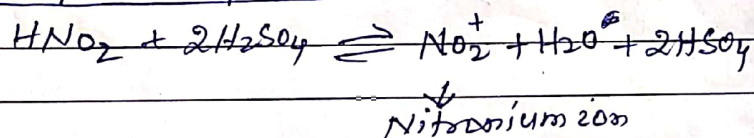
The reaction involves the treatment of an aromatic compound with a mixture of Nitric acid and Sulphuric acid



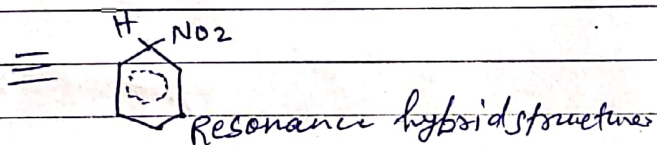
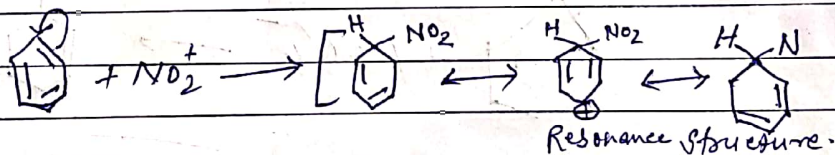
Mechanism:-

The various steps in the nitration of benzene can be outline as below:-

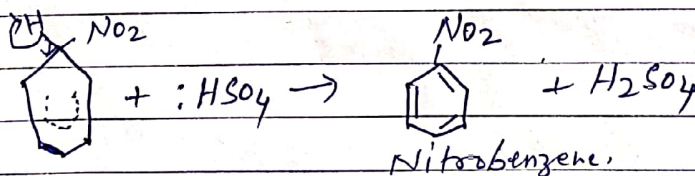
(i) Generation of electrophile:-



(ii) Formation of Carbocation:-



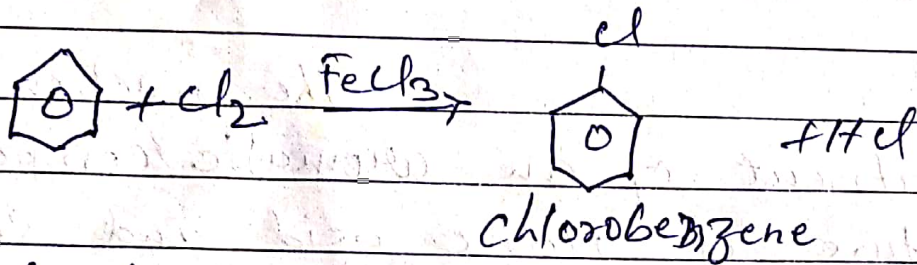
(iii) Abstraction of proton from the Carbocation.



Mechanism of Hydrogenation of Benzene: →

Halogenation of benzene and chloro hydrocarbons can be brought about about ferro with hydrogen in the presence of Lewis acid such as ferric halides, anhydrous Aluminium chloride.

Chlorination of benzene is considered below.



Mechanism —

Various steps involved in the reactions are as follows —

① Generation of electrophiles —

