

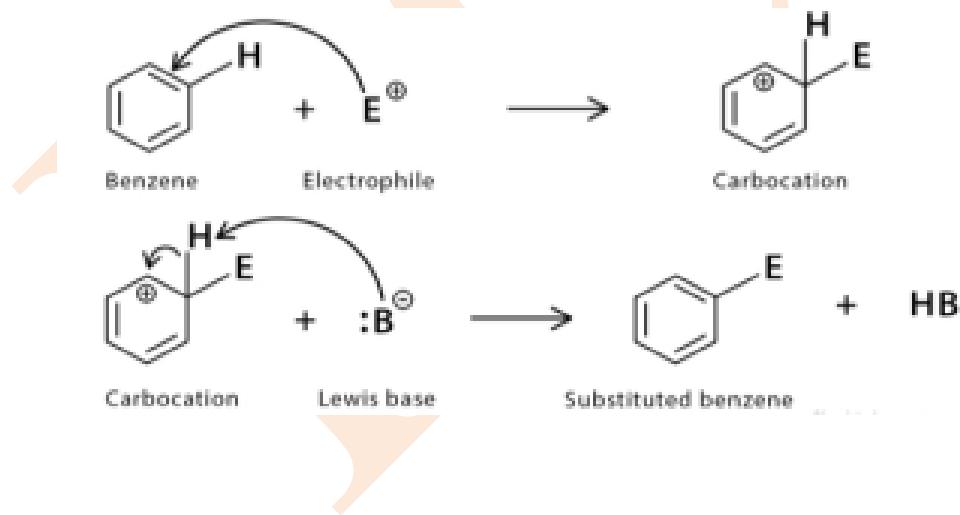
PHARMACEUTICAL ORGANIC CHEMISTRY-II- BP301T

UNIT: 1 Benzene and its derivatives

CLASS: 4

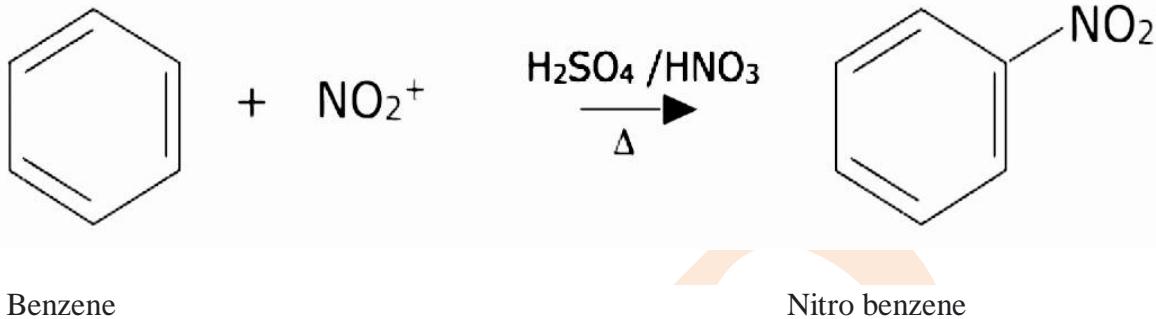
TOPIC: Chemical reactions of benzene**Chemical reactions:**

- 1) Electrophilic substitution reaction
- 2) Addition reaction
- 3) Oxidation reaction

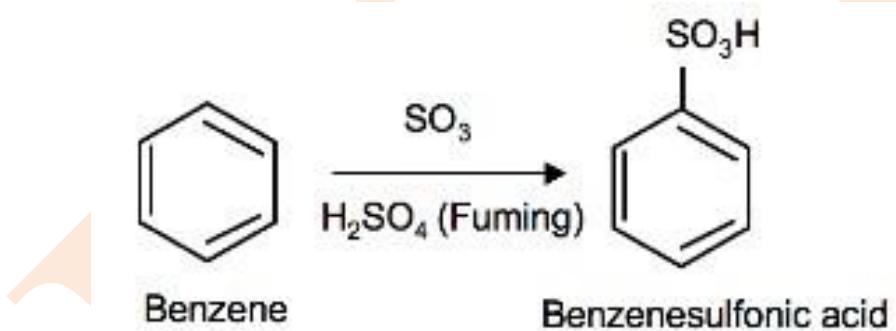
Electrophilic substitution reaction:**Chemical reactions of benzene****Nitration:**

Nitrobenzene is formed when benzene interacts with concentrated nitric acid at 323-333k in the presence of intense sulphuric acid. This is referred to as benzene nitration.

Nitration of benzene

Sulphonation of benzene:

When benzene and sulphuric acid undergo an electrophilic substitution reaction. Benzene is heated to 40°C under the influence of intense fuming sulphuric acid for a long period. This process produces benzene sulfonic acid.

Halogenations of benzene:

Benzene is reacting with bromine molecule to form bromo benzene.

