

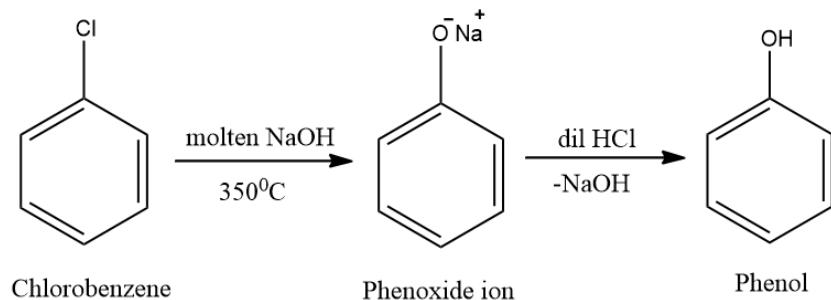
## **PHARMACEUTICAL ORGANIC CHEMISTRY-II- BP301T**

## UNIT: 2 Phenols

CLASS: 3

## **TOPIC** Method of Preparations of Phenols:

### 1) From Chlorobenzene:



Chlorobenzene is react with sodium hydroxide to form phenoxide ion

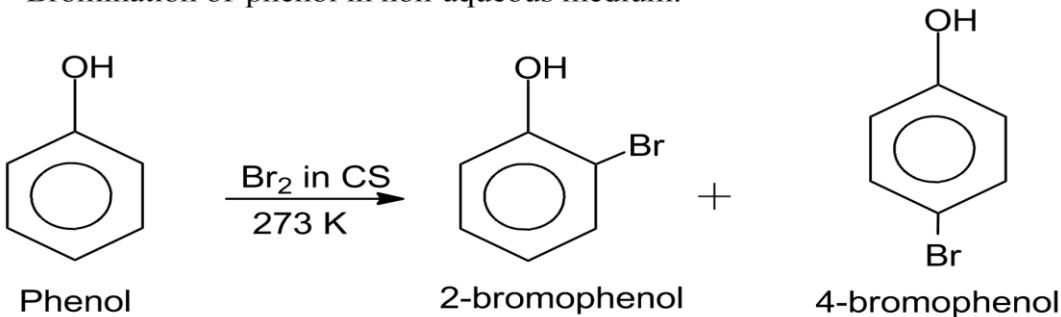
The phenoxide ion is reacting with dilute hydrochloric acid to form phenol.

## 2) From Bromination:

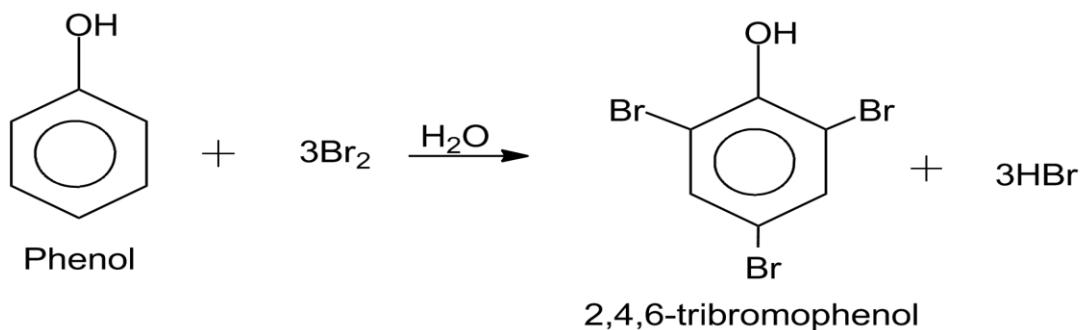
Phenol is reacting with 2 molecules of bromine to form 2-Bromo Phenol and 4-Bromo Phenol.

Phenol is reacting with 3 molecules of bromine to form 2, 4, 6 tri bromo Phenol.

Bromination of phenol in non-aqueous medium:

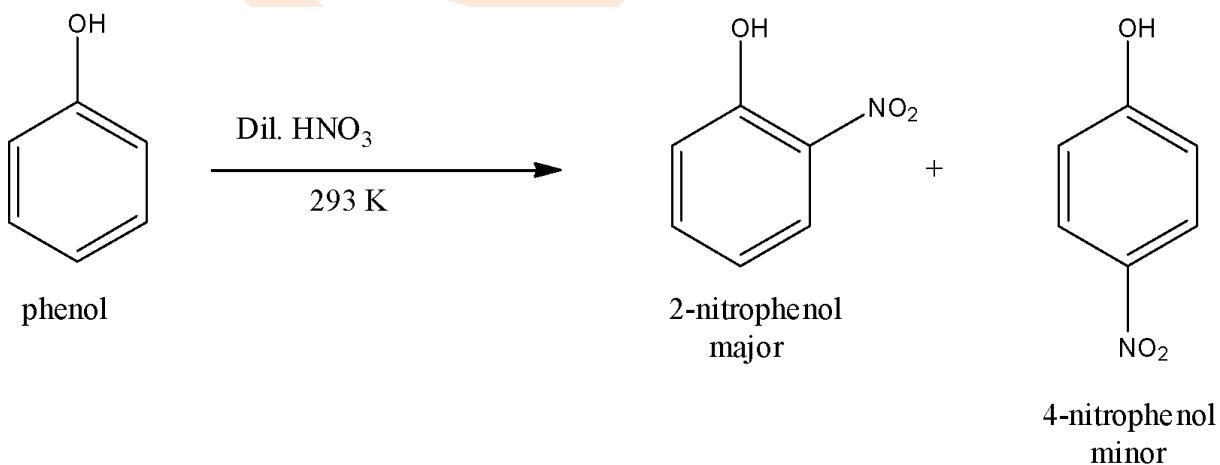


Bromination of phenol in aqueous medium:



### 3) From Nitration:

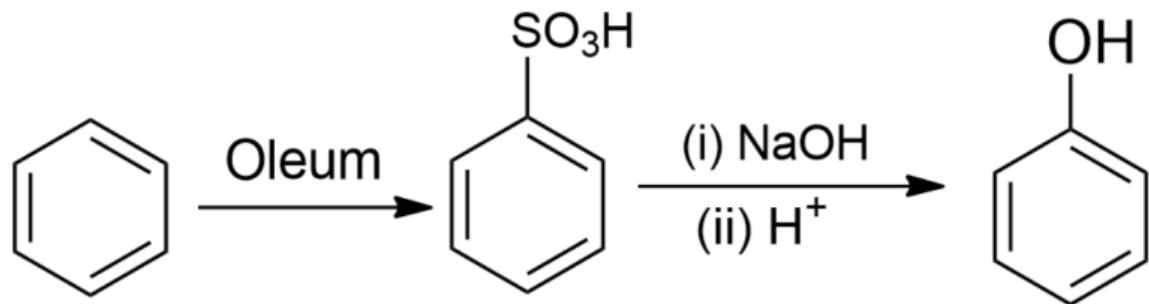
Phenol is reacting with dilute nitric acid to form 2- nitro phenol and 4-nitro phenol.



### 4) From Sulphonation:

Benzene is reacting with oleum to form Benzene sulphonic acid

Benzene sulphonic acid reacting with sodium hydroxide to form phenol.



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