

ALCOHOLS PHENOLS AND ETHERS^{1.}

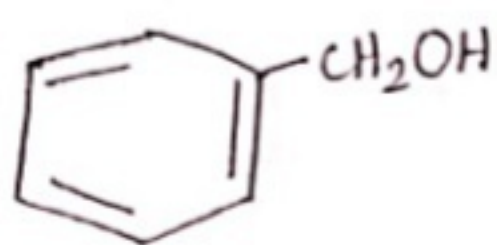
Lecture-2, Date-29/07/2020

CHEMISTRY, CLASS-XII, UNIT-11

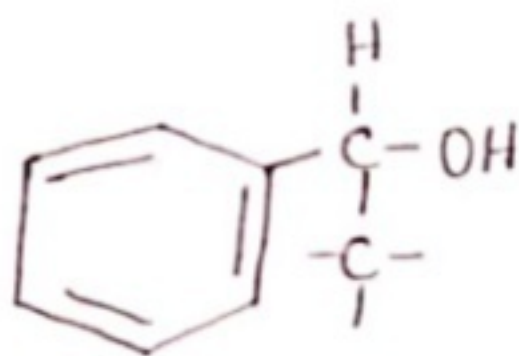
BENZYLIC ALCOHOLS

In these alcohols, the $-OH$ group is attached to a sp^3 -hybridised carbon atom next to an aromatic ring.

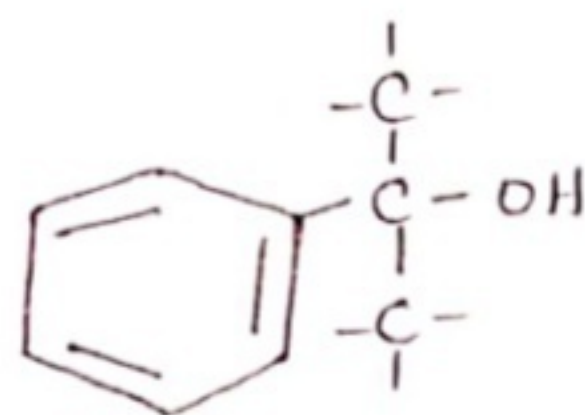
For example,



Primary
(1°)



Secondary
(2°)



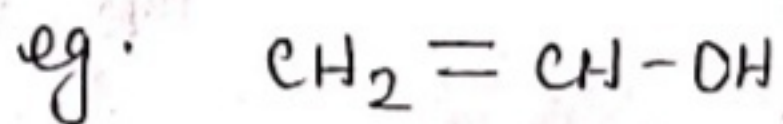
Tertiary
(3°)

Note:— Allylic and benzylic alcohols may be Primary, secondary or tertiary.

Compounds Containing C-OH bond sp^2

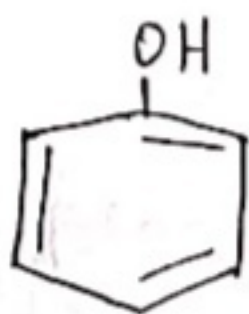
These alcohols contain $-OH$ group bonded to a carbon-carbon double bond, i.e.; to a vinylic carbon or to an acyl carbon.

* These alcohols are also known as vinylic alcohols.

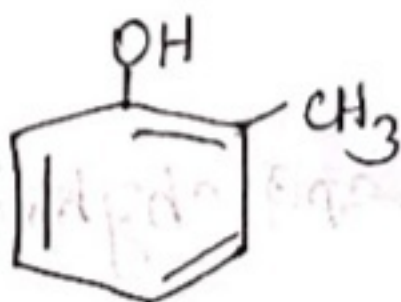


PHENOLS

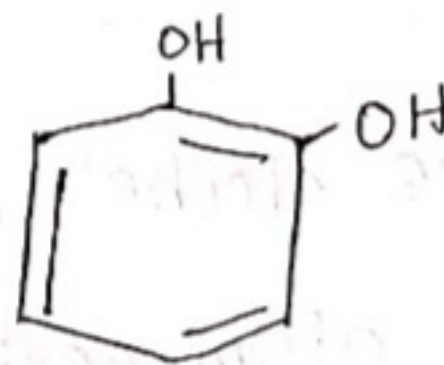
Mono, Di And Trihydric Phenols



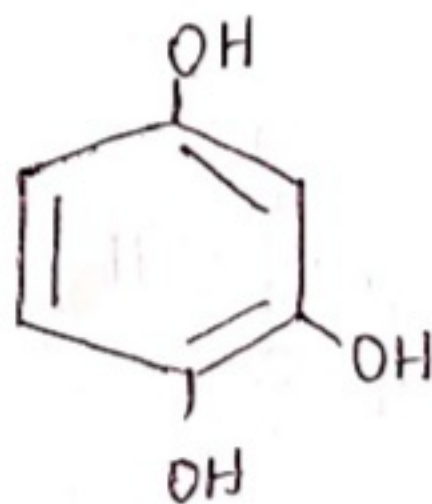
Monohydric



Monohydric



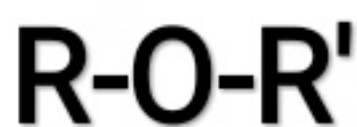
Dihydric



Trihydric

ETHER

Functional Group: $-\text{O}-$



When $\text{R} = \text{R}'$ then ether is called simple ether or symmetrical ether.

When $\text{R} \neq \text{R}'$ then ether is called mixed ether or unsymmetrical ether.

R & R' may alkyl or aryl group.

NCERT Book Intext Question 11.1

Solution

(i) 1°

(ii) 1°

(iii) 1°

(iv) 2°

(v) 2°

(vi) 3°

11.2 (ii) & (vi) are allylic alcohol.

To be Continued in next lecture...