

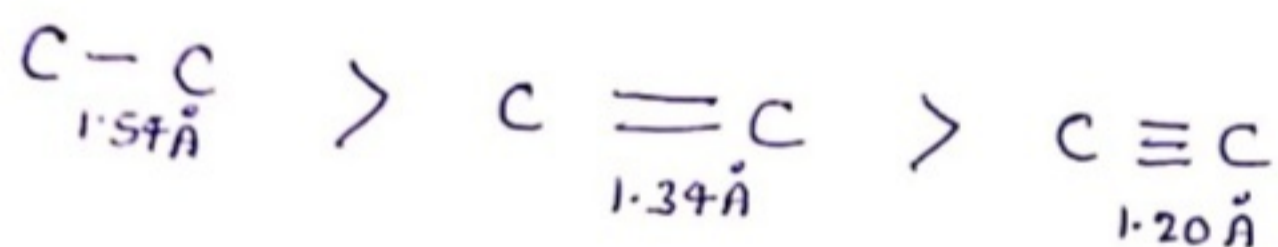
SOME BASIC PRINCIPLES AND

09/12/2020 TECHNIQUES By-Dr.Rinky

CHEMISTRY, CLASS-XI, UNIT-12

LECTURE-3, SESSION 2020-22

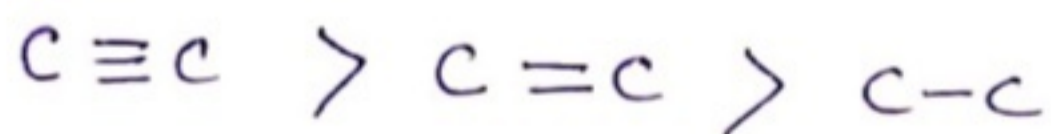
BOND LENGTH



$$1 \text{ \AA} = 10^{-10} \text{ m}$$

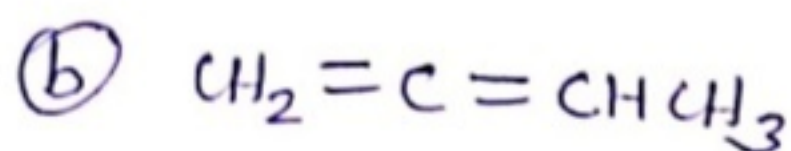
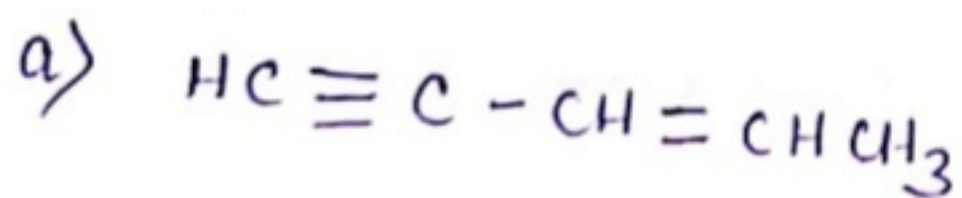
BOND ENERGY

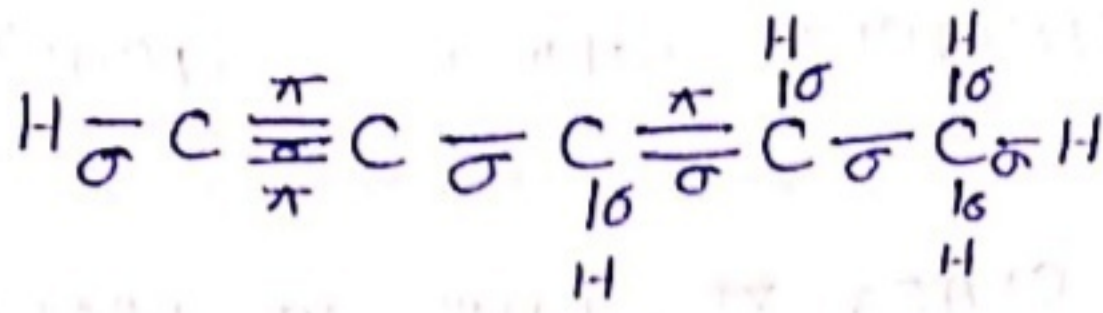
* Energy required to break a bond.



Q. 12.1

How many σ and π -bonds are present in each of the following molecules?



Solⁿ:-No. of σ -bond = 10No. of π -bond = 3

METHODS TO FIND HYBRIDISATION IN ORGANIC COMPOUNDS

Quick Method

* Count the no. of σ -bond attached to the atom for which we have to find Hybridisation.

* If No. of σ -bond = '2' then Hybridisation will be 'sp'

* _____ '3' _____ sp^2

* _____ '4' _____ sp^3

* _____ 5 _____ sp^3d

* _____ 6 _____ sp^3d^2

* _____ 7 _____ sp^3d^3

Note :- Lone pair of electron also count as a ' σ '-bond.

To be continued in next lecture
