

J.E.E./A.I.P.M.T.Foundation - XI Chemistry WorksheetTime: 30 min Ch#12: Organic Chemistry - Some Basic Principles and Techniques-02 Full Marks: 20**Instructions:**

1. All questions are compulsory.
2. Please give the explanation for the answer where applicable.

Q1 - What are isomers? Explain with example.

(2 Marks)

Q2 - What is a sigma ( $\sigma$ ) bond?

(1 Mark)

Q3 - What is the pi ( $\pi$ ) bond?

(1 Mark)

Q4 - Explain  $sp^3$  hybridisation in the terms of carbon atom.

(1 Mark)

Q5 - What is the word root? Give example.

(2 Marks)

Q6 - Define Metamerism and Position Isomerism. Give Examples.

(3 Marks)

Q7 - What are Homolytic and Hetrolytic Fission?

(3 Marks)

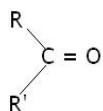
Q8 - Solve the following Problems:

A) During estimation of nitrogen present in an organic compound by Kjeldahl's method the ammonia evolved from 0.8 gm of nitrogen, neutralized 10 ml of 1 M . Find out the percentage of nitrogen in the compound.

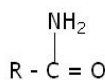
B) In sulphur estimation, 0.160 gm of an organic compound gave 0.4820 gm of barium sulphate .What is the percentage of sulphur in the compound ?

(5 Marks)

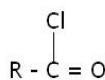
Q9 - Recognize the functional group present in the following compounds.



i)



ii)



iii)



(2 Marks)