

J.E.E./A.I.P.M.T.Foundation - XI Chemistry Worksheet

Time: 30 min

Ch#13: Hydrocarbons-03

Full Marks: 20

Instructions:

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

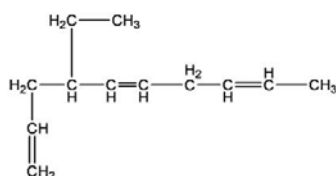
Q1 - Define conformation.

(1 Mark)

Q2 - Define cracking with an example.

(1 Mark)

Q3 - Write the IUPAC name of the following compound



(1 Mark)

Q4 - Draw all the possible structural isomers of  $\text{C}_6\text{H}_{14}$ . Also write their IUPAC names.

(2 Marks)

Q5 - Convert

- (i) Phenol into benzene.
- (ii) Benzene into ethyl benzene.

(2 Marks)

Q6 - Which one is more polar, cis-but-2-ene or trans-but-2-ene and why?

(2 Marks)

Q7 - Convert:

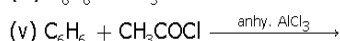
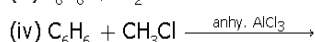
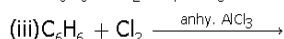
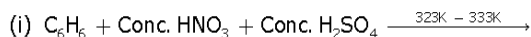
- (a) Ethylene to ethane.
- (b) Benzene to acetophenone.

(3 Marks)

Q8 - (i) With the help of resonating structures explain that methyl group is *o,p*-directing?  
 (ii) Convert acetic acid to ethylene.

(3 Marks)

Q9 - Complete the following reactions:



(5 Marks)