

13.08.20.

B.Sc. Part I (Hons)  
Organic chemistry.

Paper : 1 C.

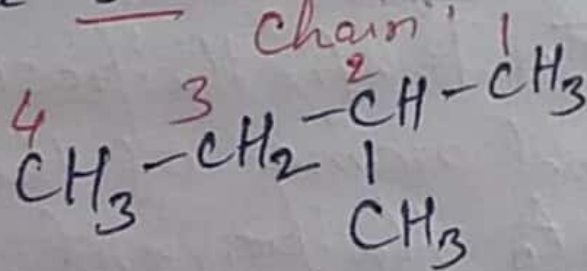
Topic : IUPAC RULES FOR  
Naming Alkanes.

The IUPAC rules for  
naming alkanes are given  
below : —

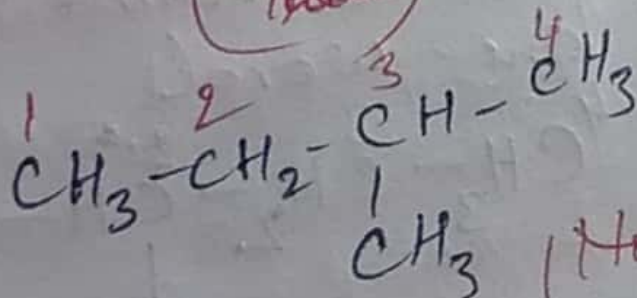
Rule 1. Select the longest  
continuous carbon chain.

Rule 2. Name the longest  
chain.

Rule 3. Number the longest  
chain.

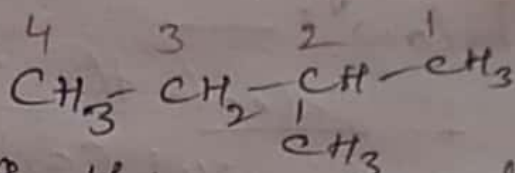


(True) correct.



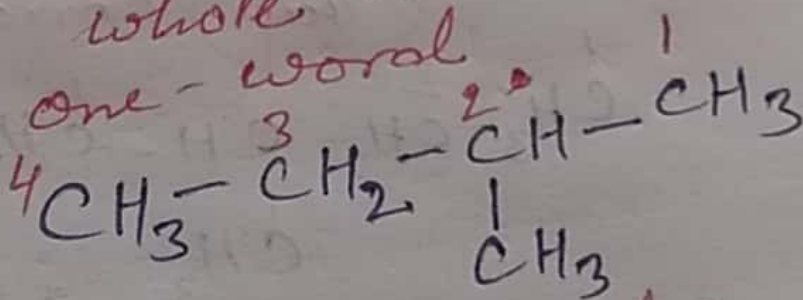
(Not correct)

Rule 4. Identify the Substituent :-



In this compound the attached group is located on carbon 2 of the chain and it is a methyl group.

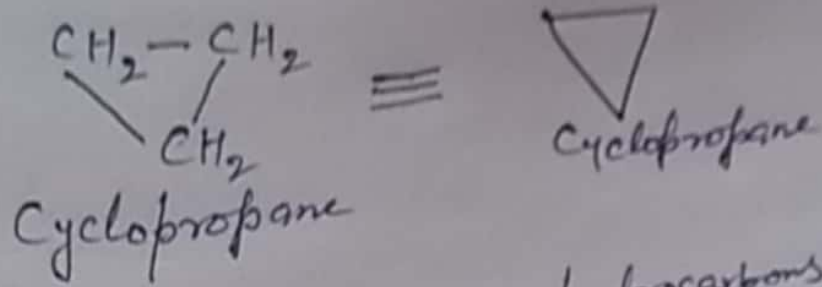
Rule 5. Prefix the position number and name of the substituent onto the parent name. The whole name is written as one word.



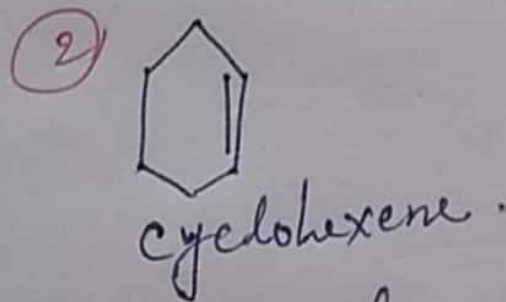
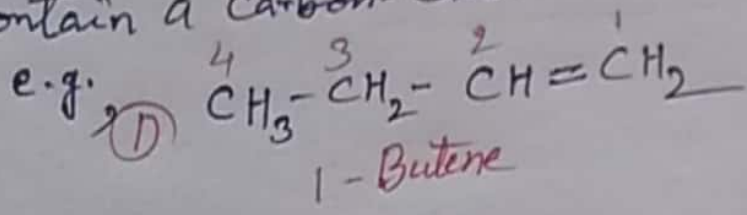
2-Methylbutane.



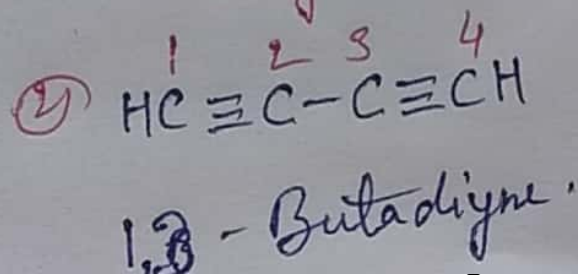
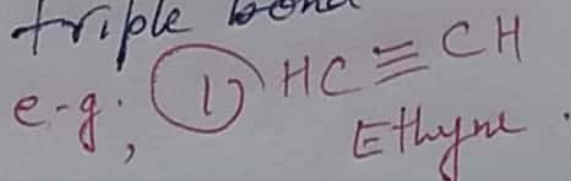
Cycloalkanes: Cycloalkanes are alkanes in which carbon atoms are arranged in a ring.



Alkenes: Alkenes are hydrocarbons that contain a carbon-carbon double bond.

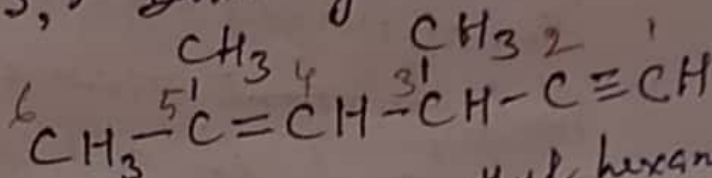


Alkynes: It contains a carbon-carbon triple bond.

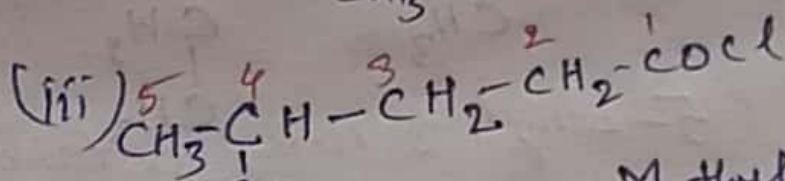
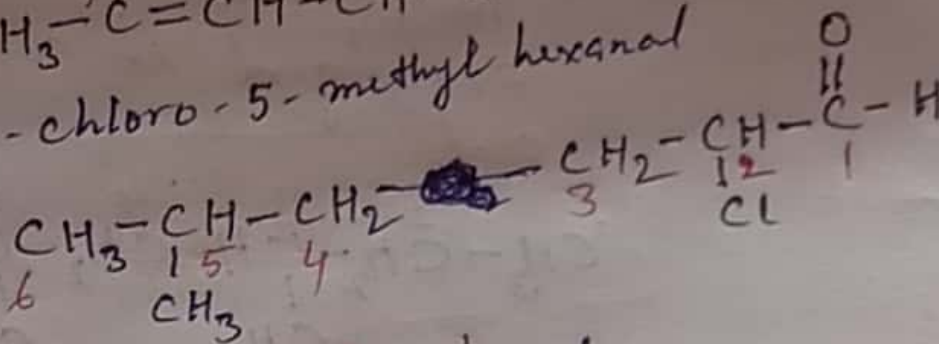


## Writing Structural Formulas From Name:

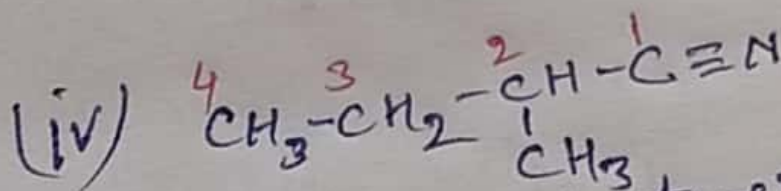
(i) 3,5 Dimethyl-4-hexen-1-yne.



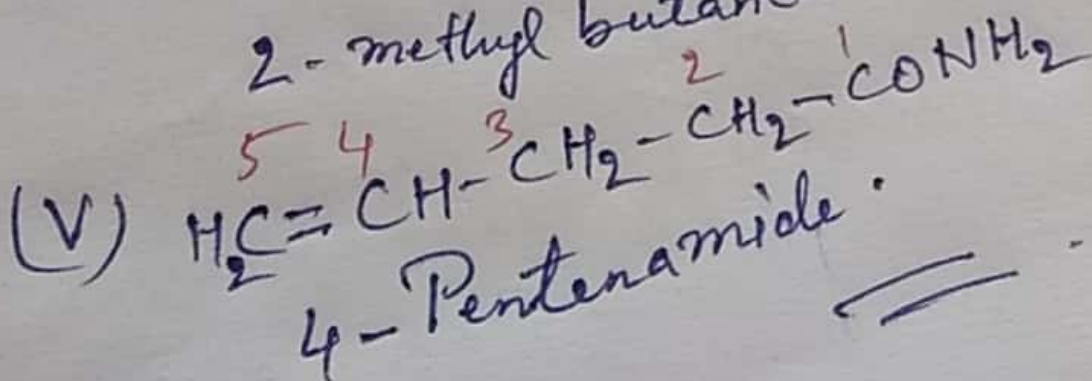
(ii) 2-chloro-5-methyl hexanal



IUPAC Name: 4-Methyl pentanoyl chloride.



2-methyl butanenitrile.



4-Pentamide.