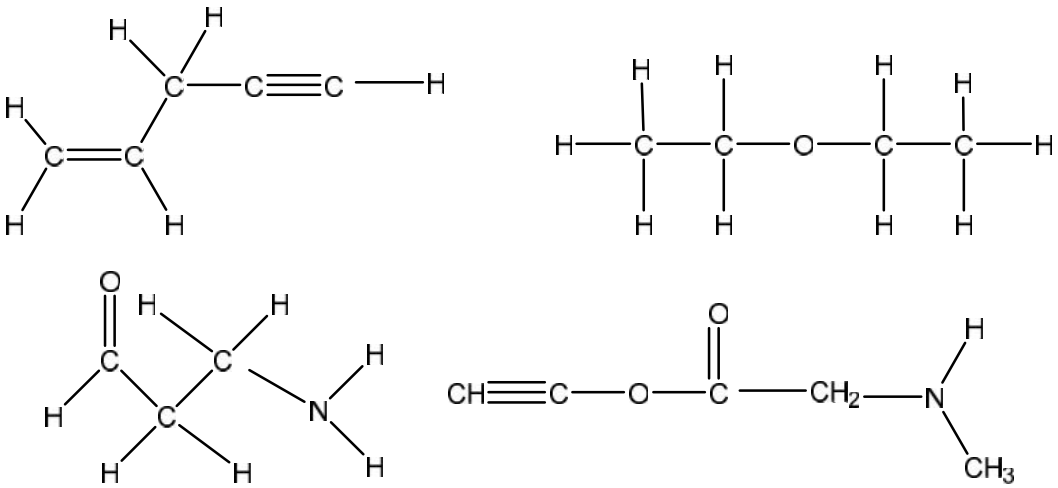
Abdelhafid BOUSSOUF University Center - Mila
Process engineering department
3rd year L.M.D – Organic Chemistry
Dr. Imane MAYOUF

Series N° 01

Exercise 1:

Indicate the hybridization state of C, the δ bond number in the following compounds:

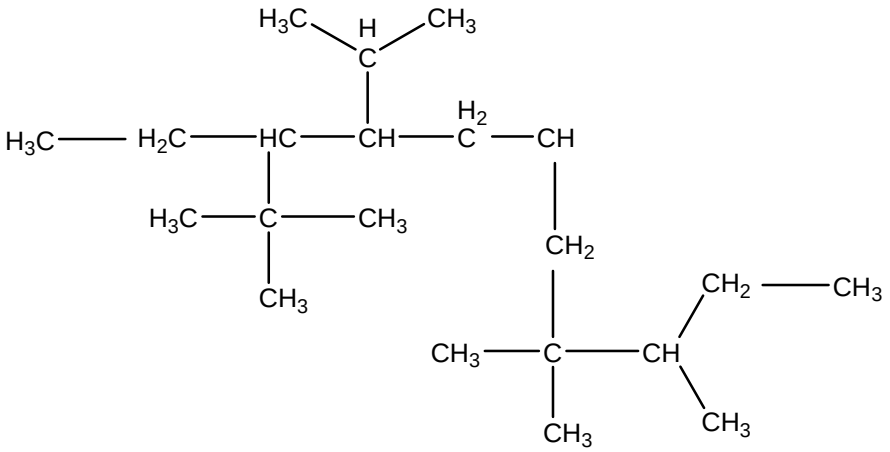


Exercise 2:

Find the number of unsaturations possessed by the compounds corresponding to the following crude formulas: C_4H_{10}, $C_3H_4Cl_2$, C_3H_9N, C_3H_6O.

Exercise 3:

Look at the following saturated hydrocarbon:



- Indicate the different types of carbon (primary, secondary, tertiary or quaternary).
- write the crude and topological formula of this compound

2/ represent a chain of seven carbons: Linear, Branched, Cyclical, Polycyclic (bi- and tricycle).

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Exercise 4:

Represent the topological structure of the following compounds and correct the name if necessary

A. 4-isopropyl-5-propyloctane
B. Butan-2,3-dione
C. Butane-1,4-dial
D. Hexan-2-one
E. Ethanoic acid
F. Cyclo-2-pentanol
G. Butadiene
H. 4-aminobenzoic acid
I. N-butylpropane
J. Cyclopent-1-ene-1-ol
K. Methyl ethanoat
L. 8-methylbicyclo [4.2.1] non-6-ene

Exercise 5:

Give the name according to the I.U.P.A.C nomenclature of the following compounds: