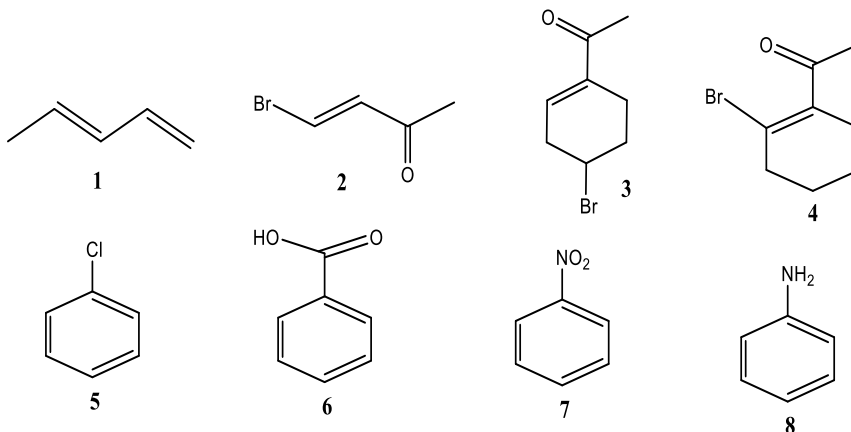
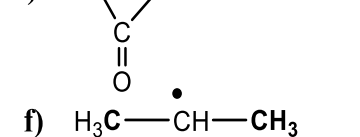
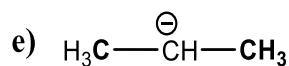
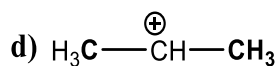
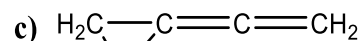
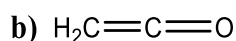
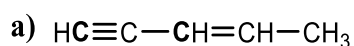


TD1 : Intermédiaires réactionnels et représentation spatiale des molécules

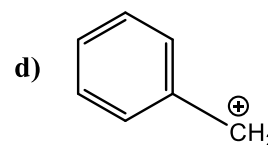
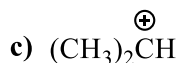
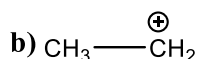
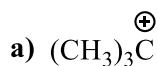
Exercice 1 : Ecrire les formes mésomères des composés suivants, tout en précisant les différents effets :



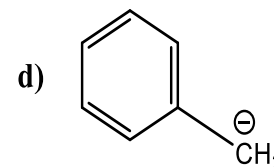
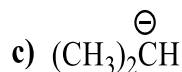
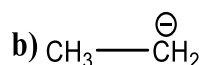
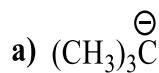
Exercice 2 : Préciser l'hybridation des atomes de carbones des molécules suivantes :



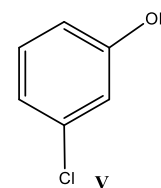
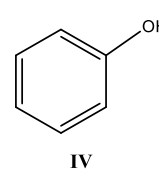
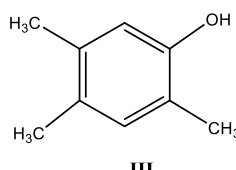
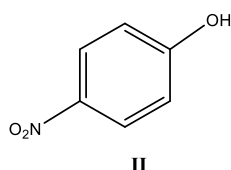
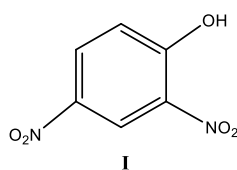
Exercice 3 : Classer les carbocations suivants en fonction de leur stabilité :



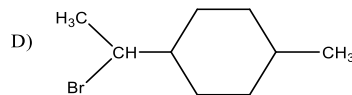
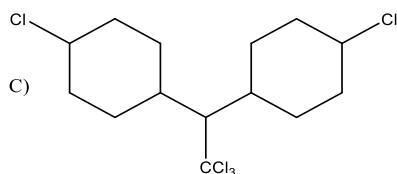
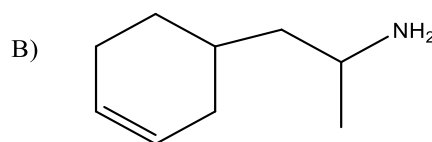
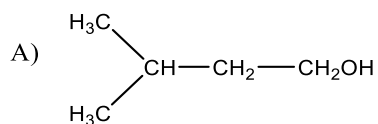
Exercice 4 : Classer les carbanions suivants en fonction de leur stabilité:



Exercice 5 : Classer les phénols suivants en fonction de leur acidité :

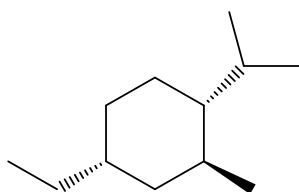


Exercice 6 : Indiquer les carbones asymétriques sur les molécules suivantes :

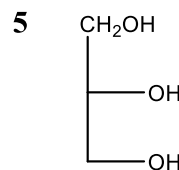
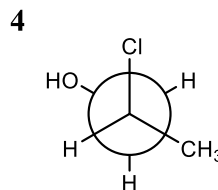
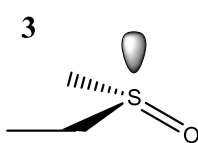
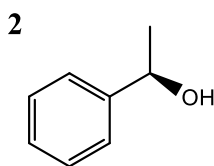
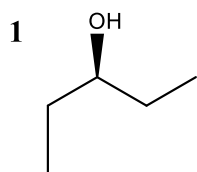


Exercice 7 : Représenter en projection de Newman, les différentes conformations du butane et de la 4-hydroxybutan-2-one. Préciser les conformations les plus stables.

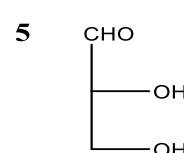
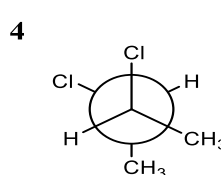
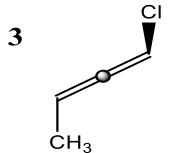
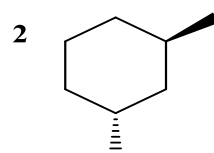
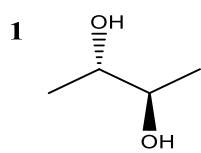
Exercice 8 : Donner les deux principaux conformères « chaises » pour la molécule suivante, tout en précisant la plus stable.



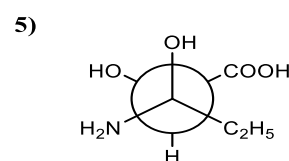
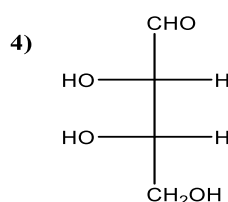
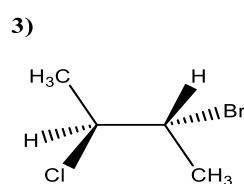
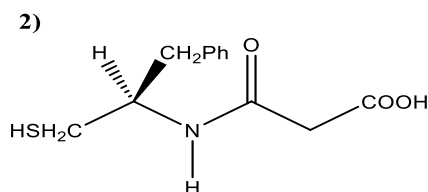
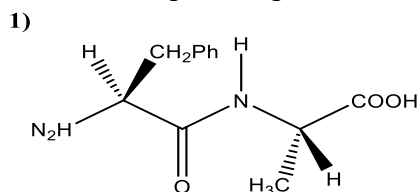
Exercice 9 : Donner les molécules chirales dans la série suivante :



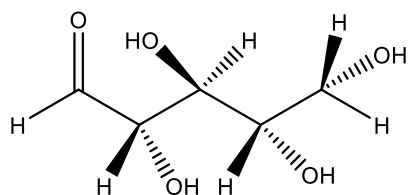
Exercice 10 : Donner les molécules chirales dans la série suivante :



Exercice 11 : Indiquer la configuration absolue de chaque atome de carbone asymétrique en précisant l'ordre de priorité pour chacun d'eux.



Exercice 12 : Soit l'aldopentose suivant :

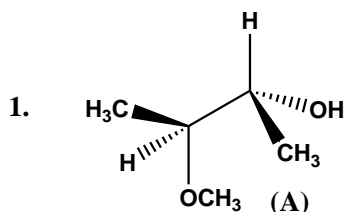


1) Indiquer la configuration absolue de chaque atome de carbone asymétrique en précisant l'ordre de priorité pour chacun d'eux.

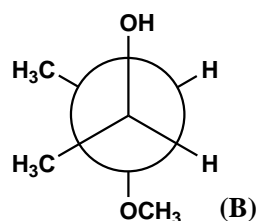
2) Représenter cette molécule en projection de Fischer.

Exercice 13 : Représenter en projection de Fisher, les différents stéréoisomères du 2,3,4-trihydroxybutanal. Indiquer les relations existantes entre ces stéréoisomères.

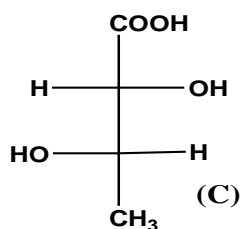
Exercice 14 : Etablir la relation dans chacune des paires de molécules suivantes : identiques, conformères, énantiomères, diastéréoisomères ou autres.



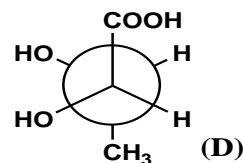
et



2.



et



Exercice 15 : Préciser le type d'isomérisie plane existant entre les molécules suivantes :

