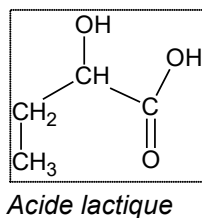
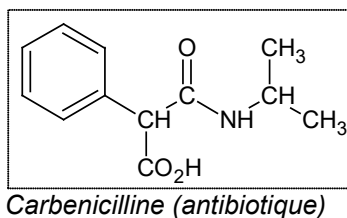
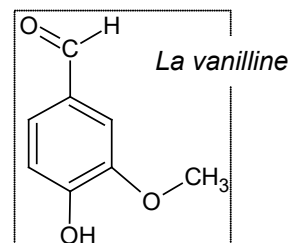
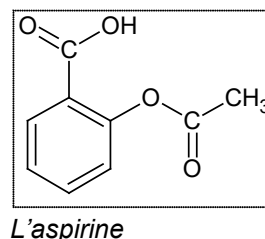
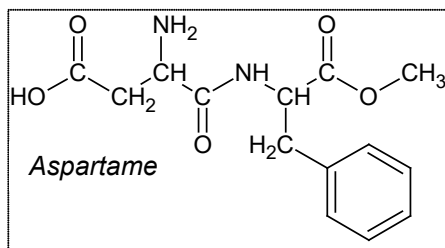
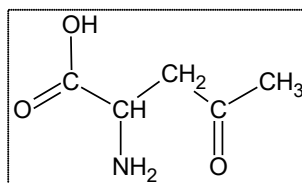




Analyse structurale de la matière par spectroscopie IR

Exercices

Exercice 1



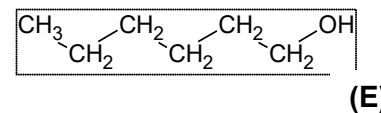
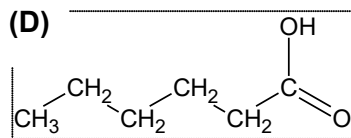
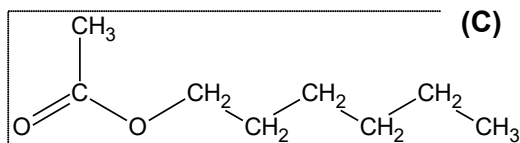
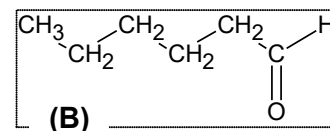
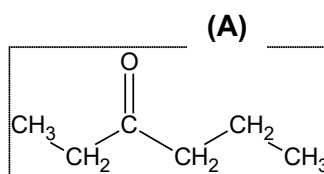
- Déterminer les groupes fonctionnels présents dans les molécules ci-contre

Exercice 2

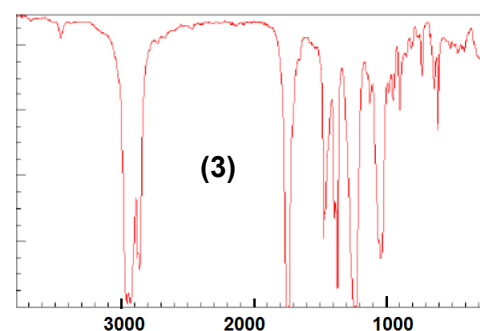
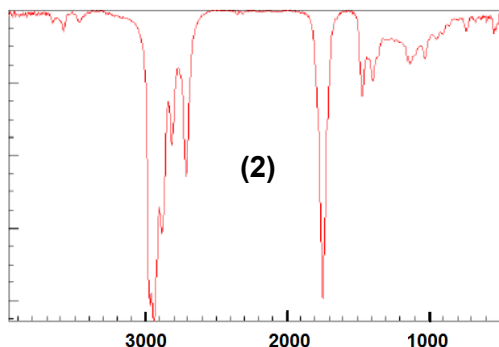
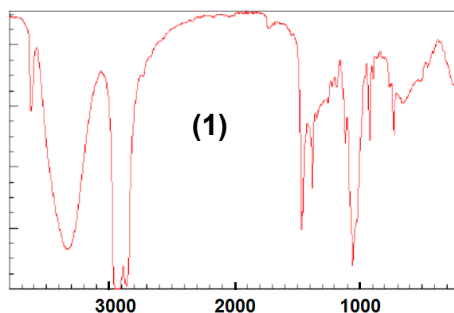
Un laborantin maladroit a mélangé les 3 étiquettes de 3 produits. Il effectue une analyse IR et il doit remettre les étiquettes en place.

S1 : hexanal (aldéhyde) ; S2 : éthanoate d'hexyle (ester) ; S3 : hexan-1-ol (alcool)

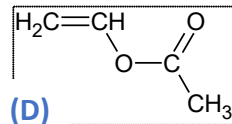
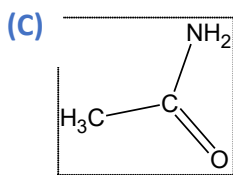
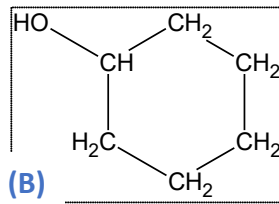
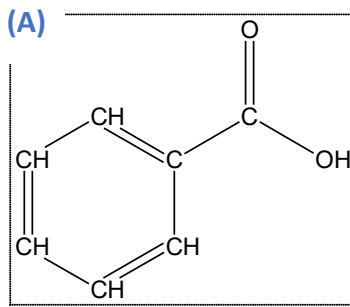
1) Déterminer les groupes fonctionnels présents dans les molécules ci-contre, puis retrouver les formules semi-développées correspondant aux molécules analysées par le laborantin



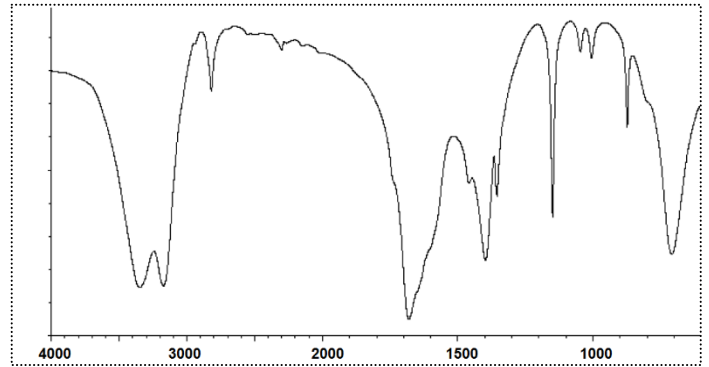
2) Retrouver le spectre IR des 3 molécules parmi ceux présentés ci-dessous



Exercice 3

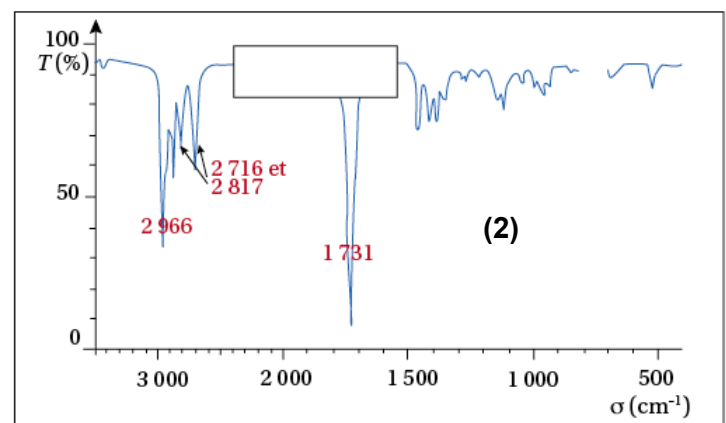
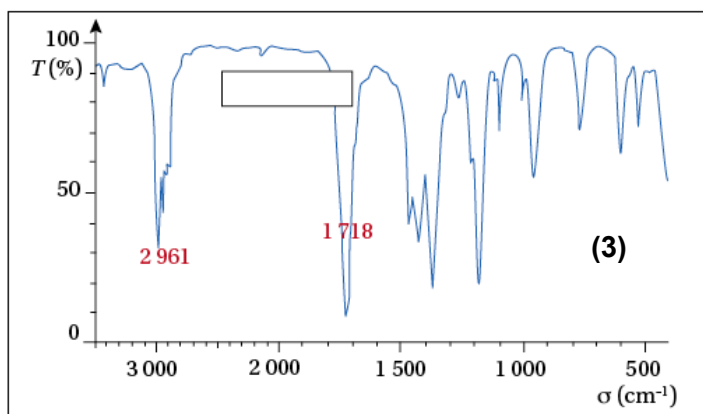
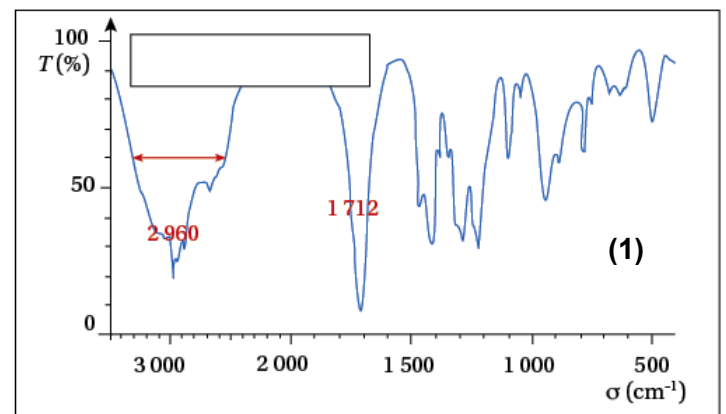
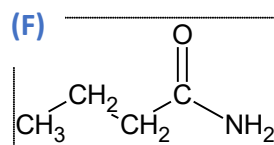
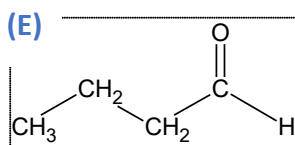
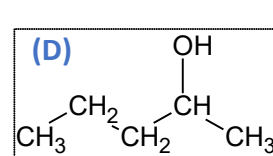
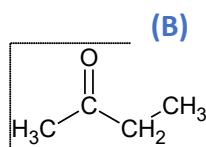
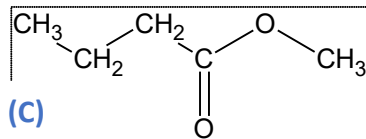
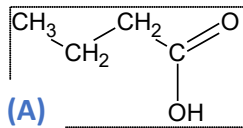


- Donner la formule topologique des molécules
- Entourer et nommer le groupe fonctionnel présent dans chacune des molécules
- Identifier la molécule dont on donne le spectre IR ci-dessous



Exercice 4

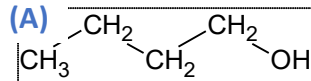
- Associer à chaque spectre IR sa molécule



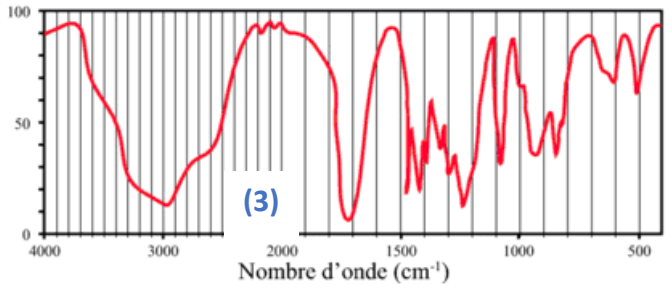
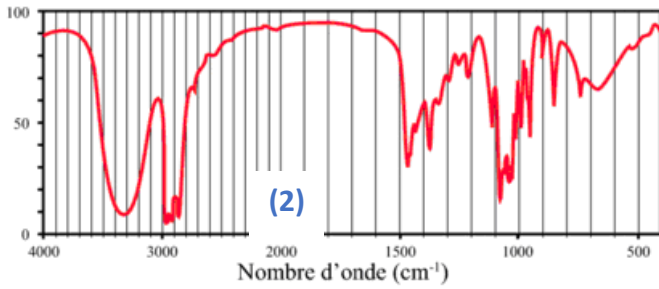
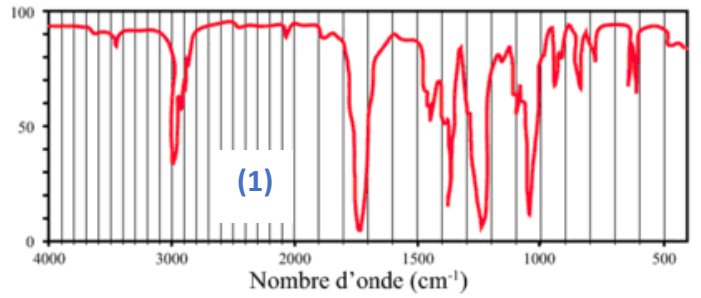
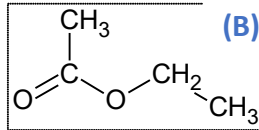
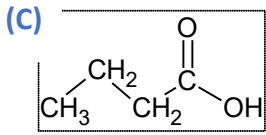
Partie 2/ Chimie organique

Séquence 11 · Spectroscopie IR

Exercice 5

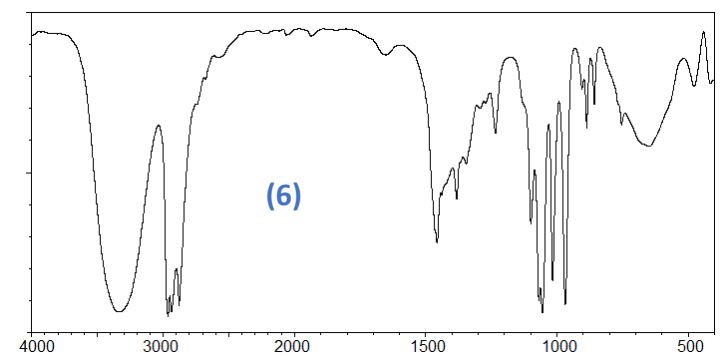
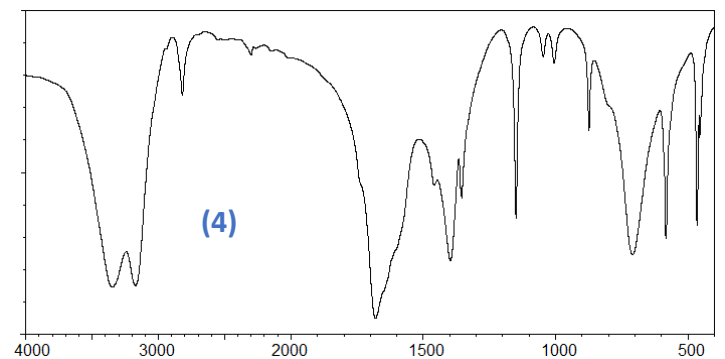
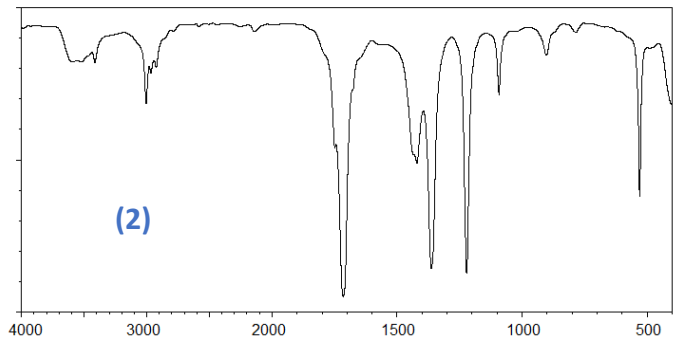
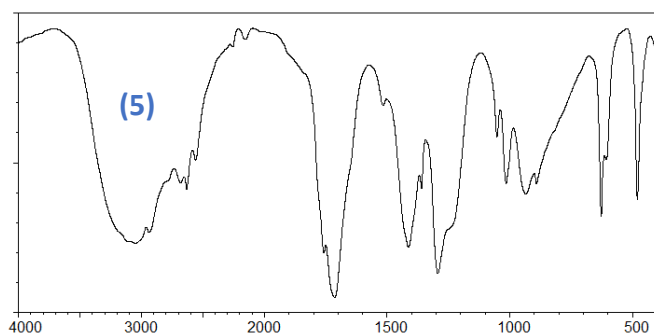
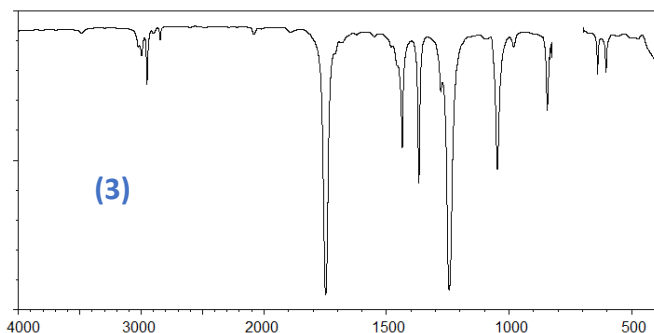
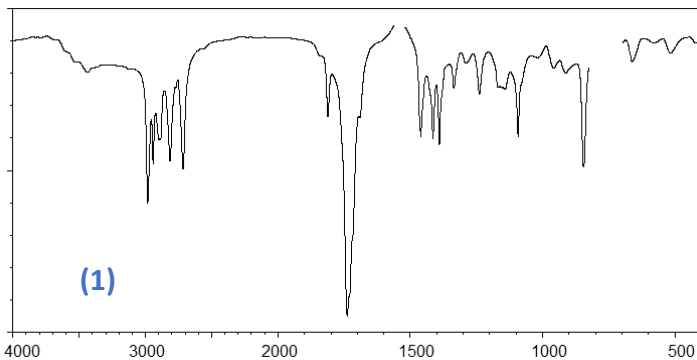
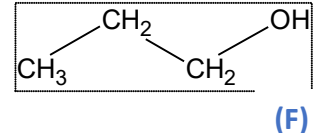
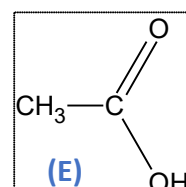
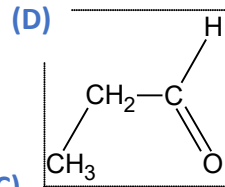
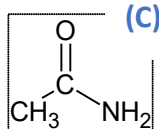
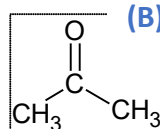
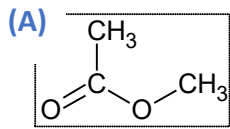


- Associer à chaque molécule son spectre IR



Exercice 6

- Associer à chaque molécule son spectre IR



Exercice 7

- Associer à chaque molécule son spectre IR

