Vibrational spectroscopies: infrared and Raman

From theory to pharmaceutical and biomedical applications

1.2

- **Practical work**

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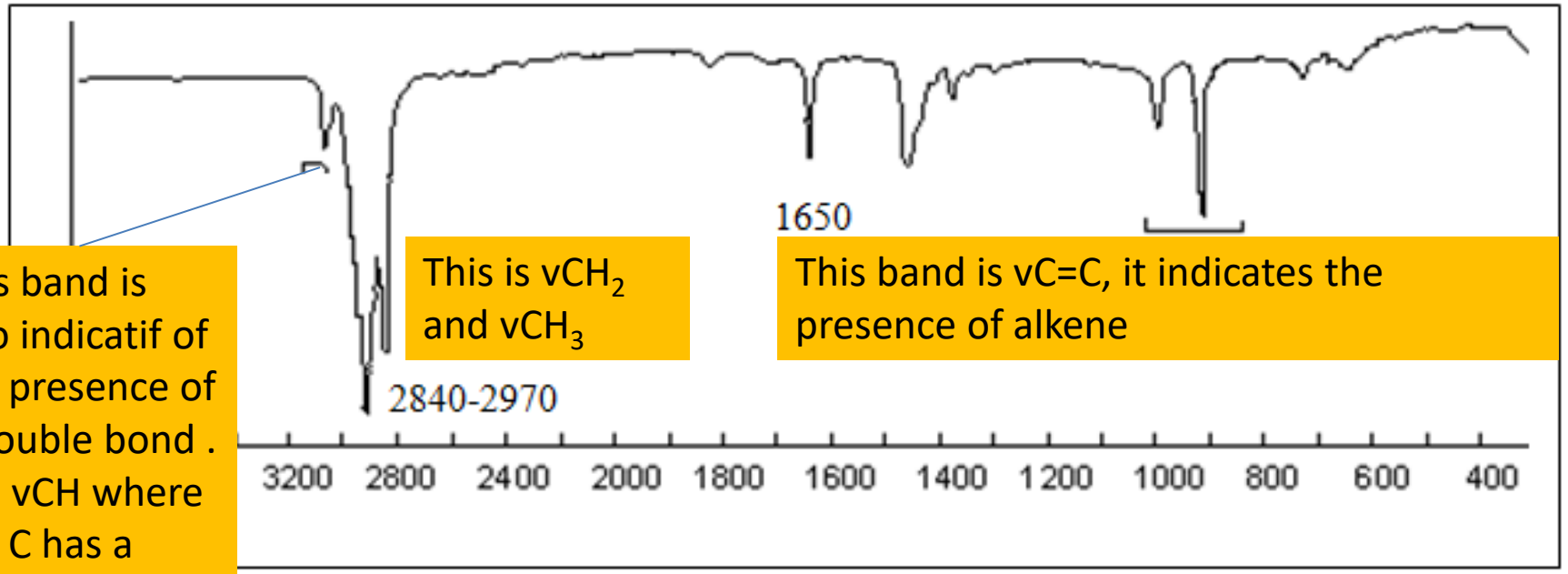
Lipides: systèmes analytiques et biologiques

Lip(Sys)²-EA7357

Based on the vibrational bands, determine the nature of the molecule:

Alkane, Alkene, Alkyne, primary Alcohol

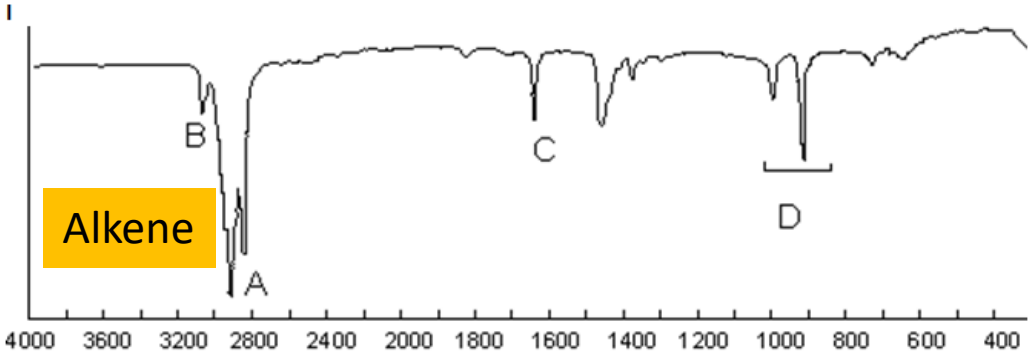


This band is also indicatif of the presence of a double bond . It is vCH where the C has a double bond CH=C,

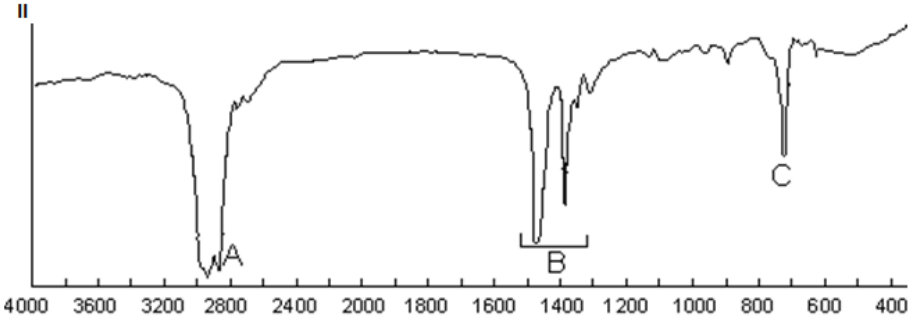
This is vCH_2 and vCH_3

This band is vC=C, it indicates the presence of alkene

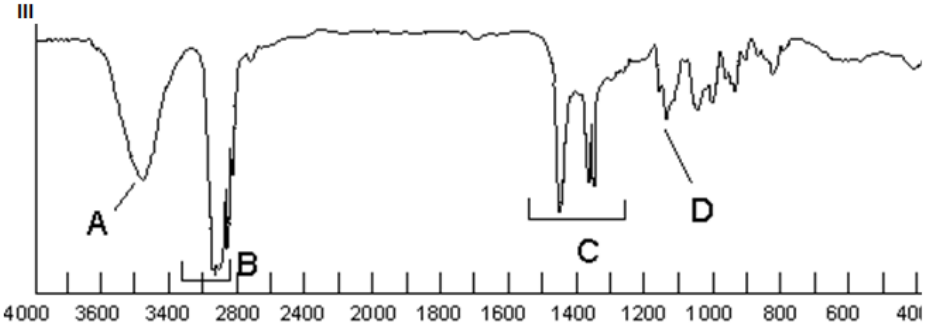
Which is the spectrum of alkane, alkene, alcohol ?
Note and assign the characteristic bands



Alkene

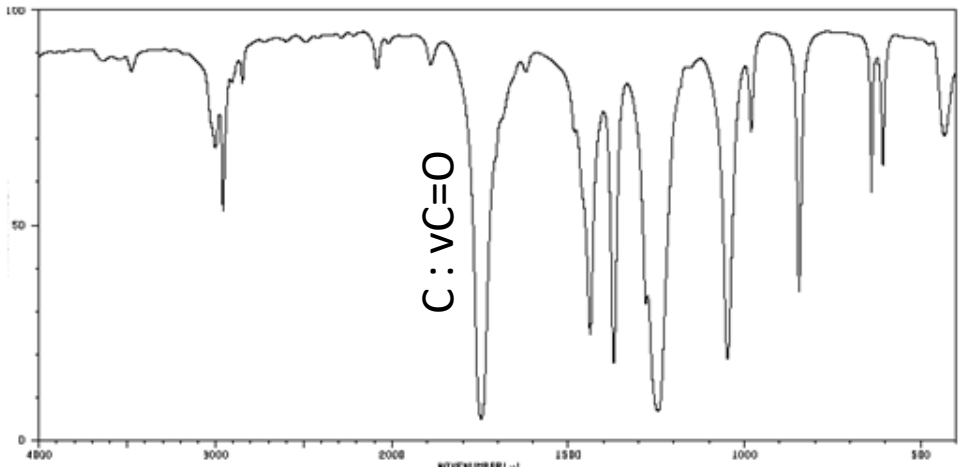


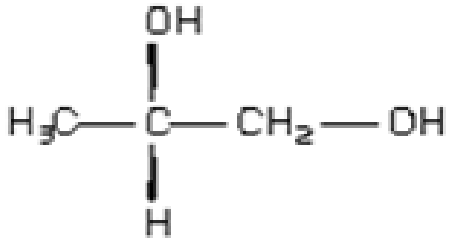
Alckane
A: This is vCH_2 and vCH_3

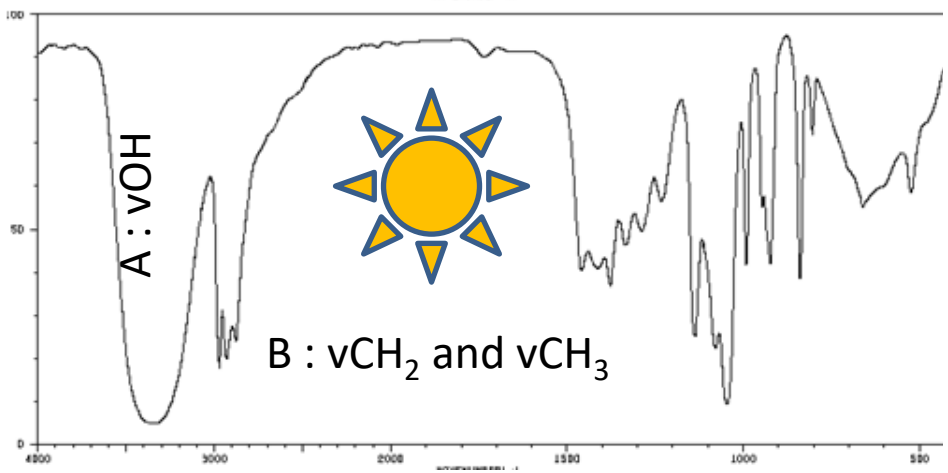


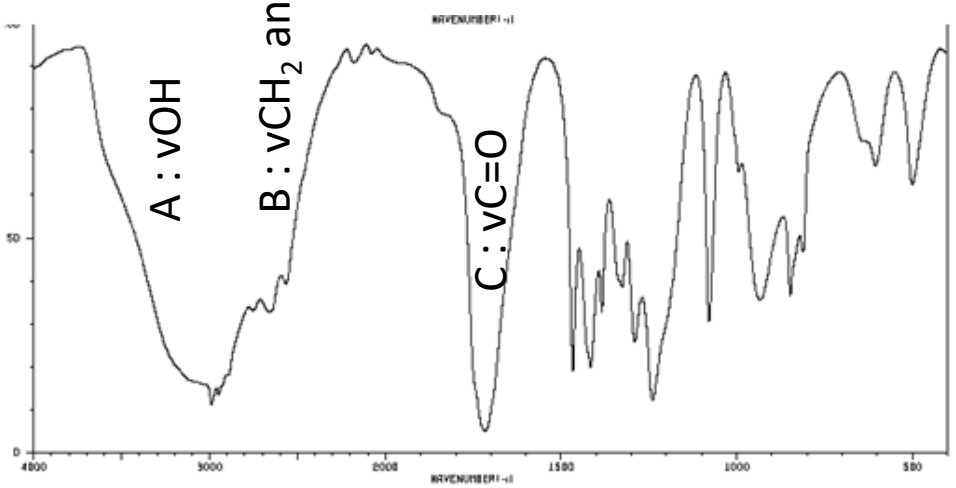
Alcohol :
A : vOH
B : vCH_2 and vCH_3

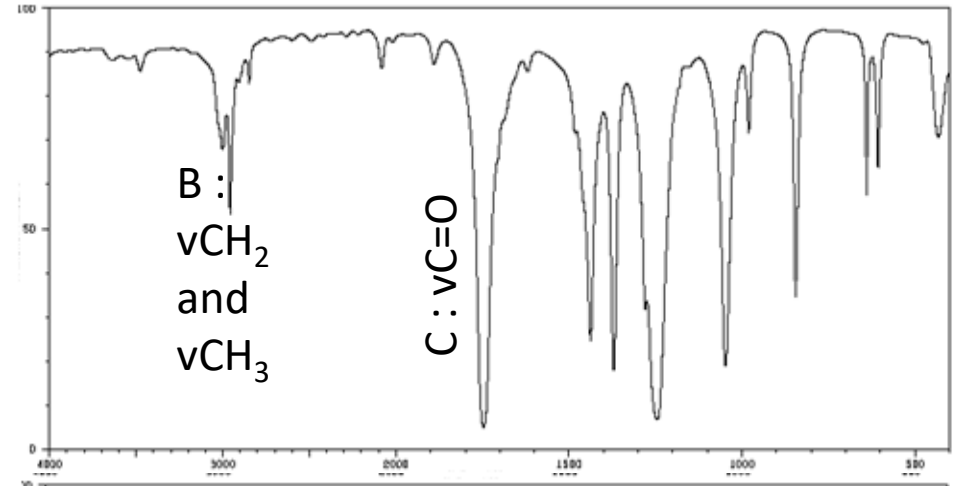
Which is the right spectrum ?
Note and assign the characteristic bands



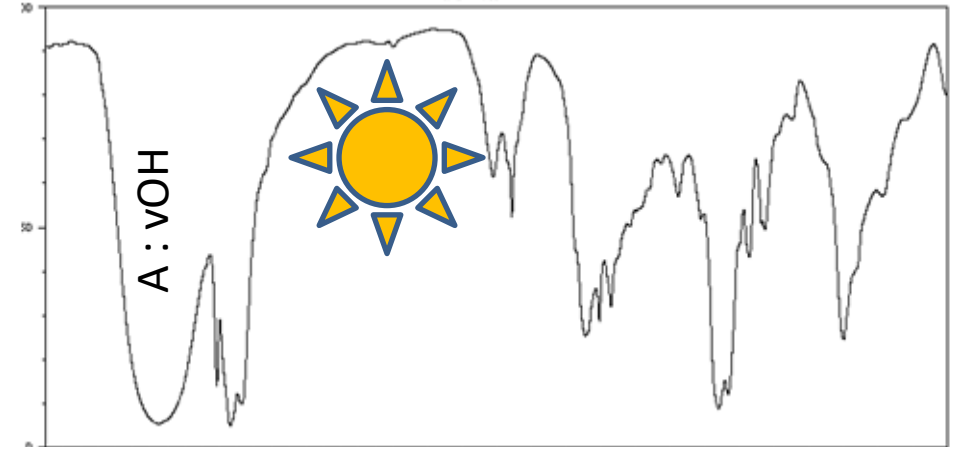


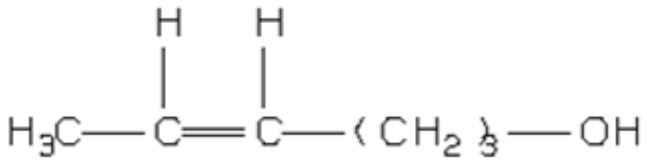


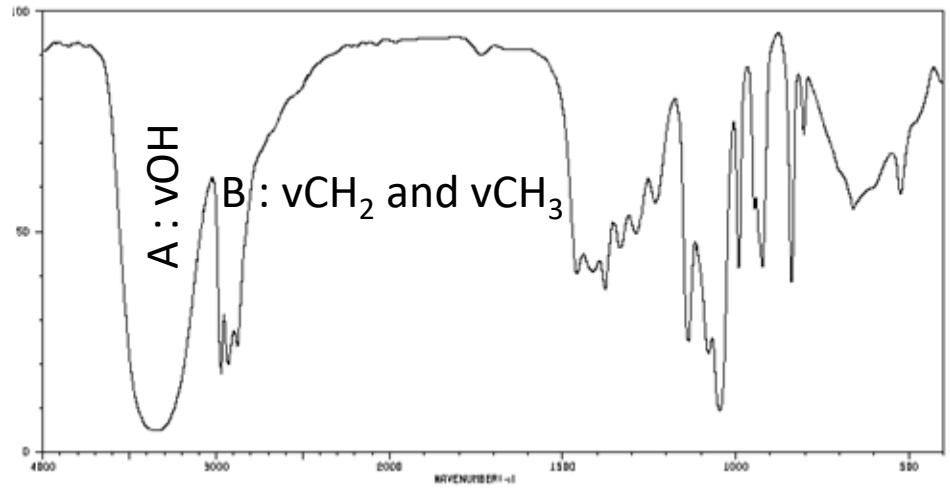


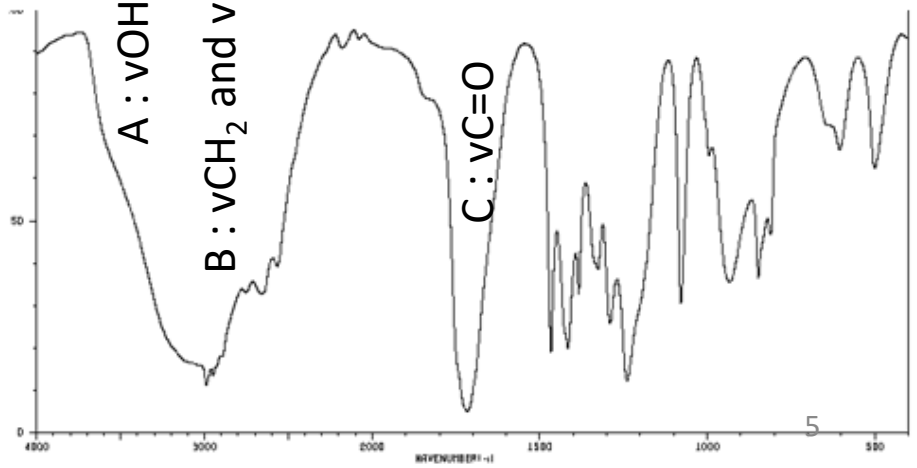


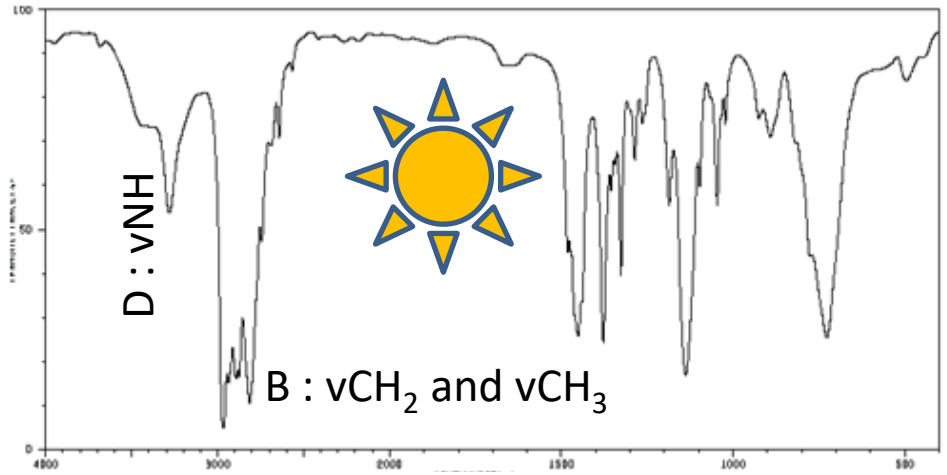
Which is the right spectrum ?
Note and assign the characteristic bands











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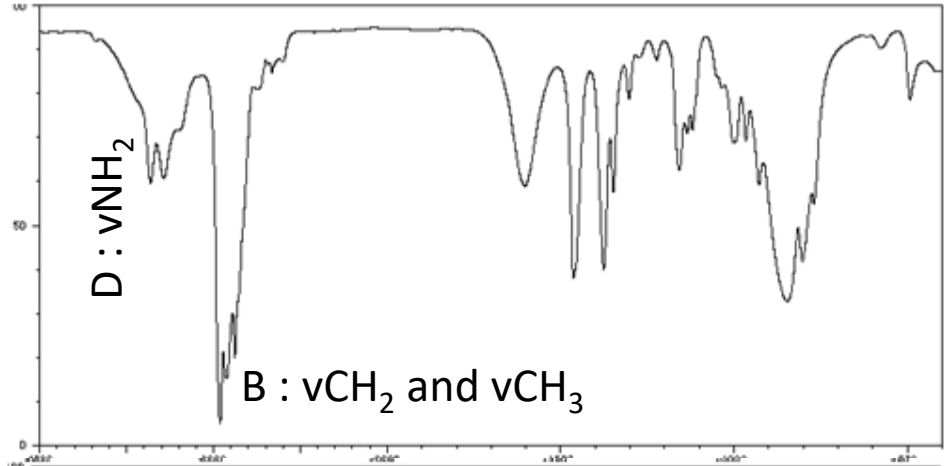
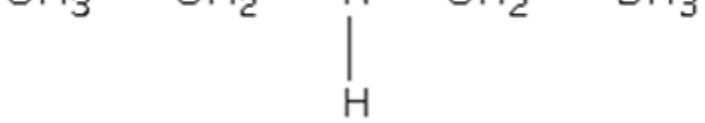
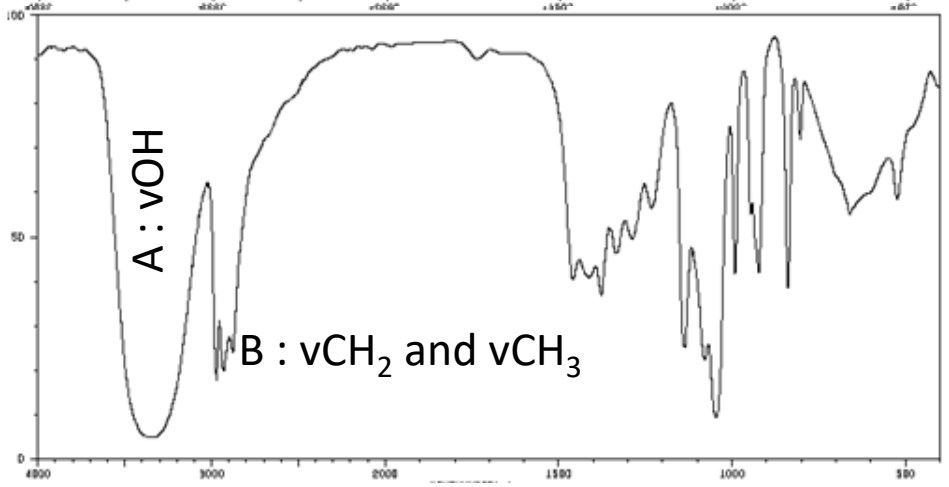
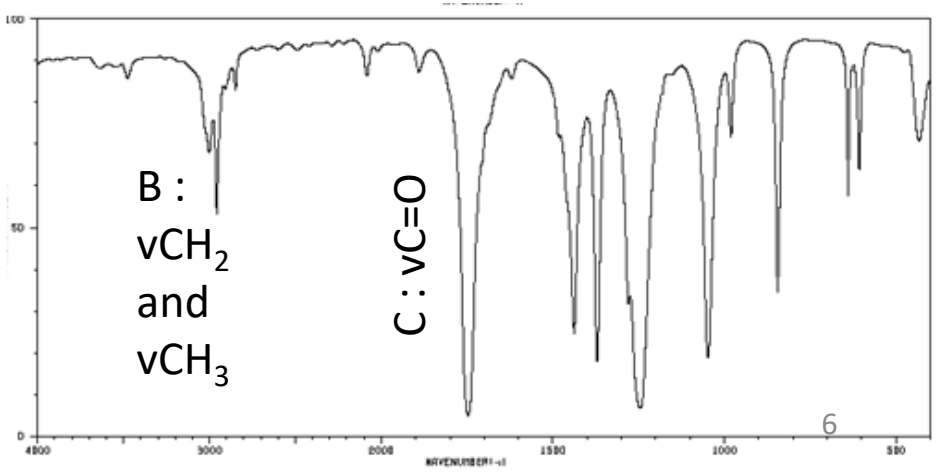
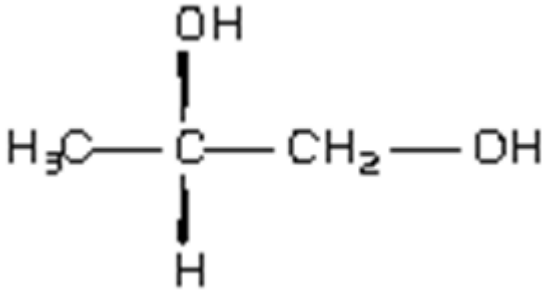


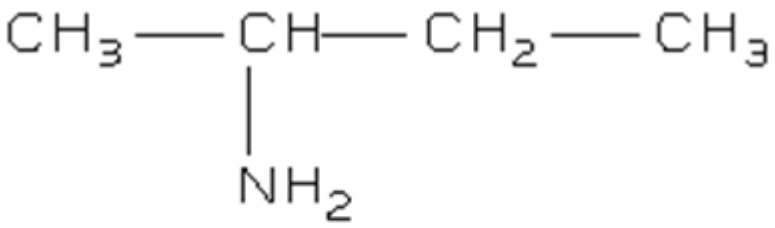


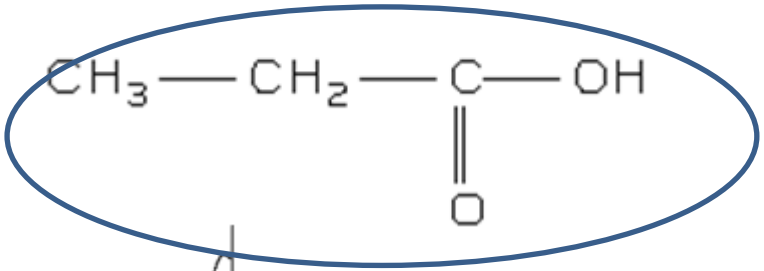


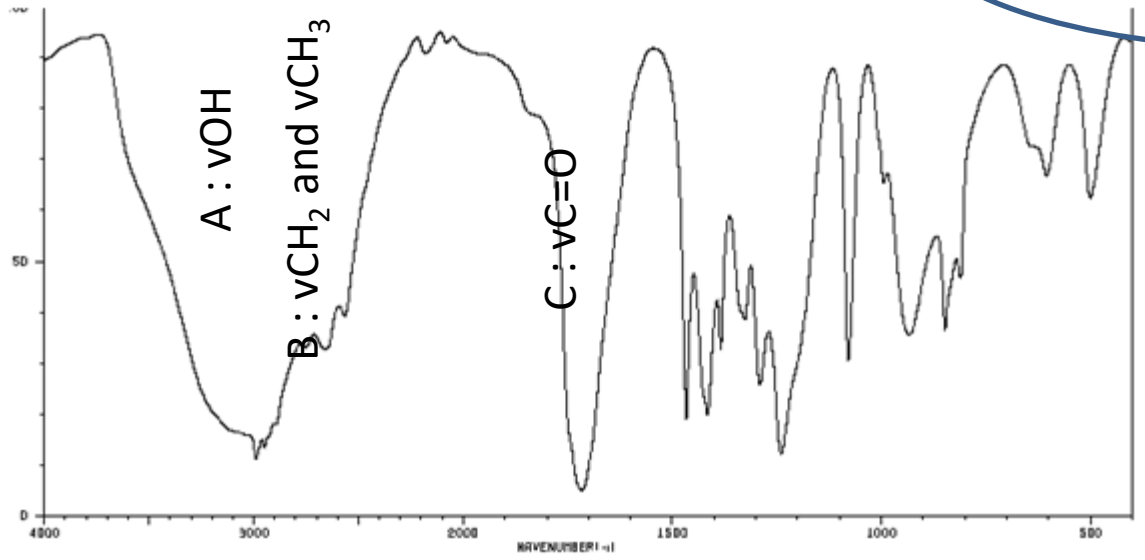


Which is the right formula ?
Note and assign the characteristic bands on the spectrum









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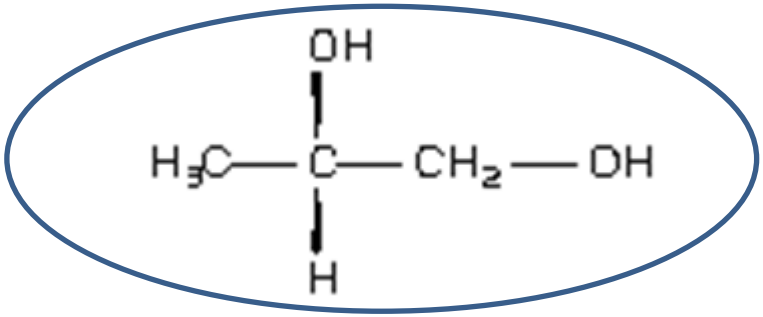

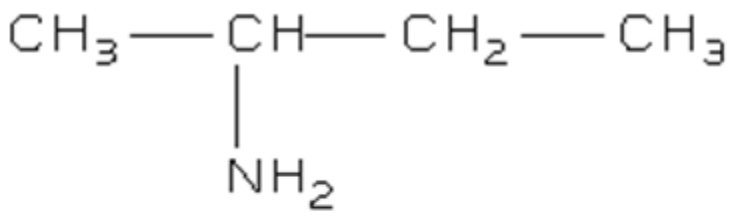

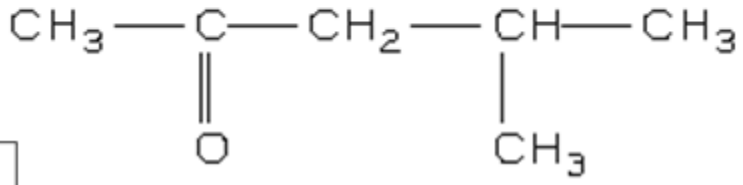

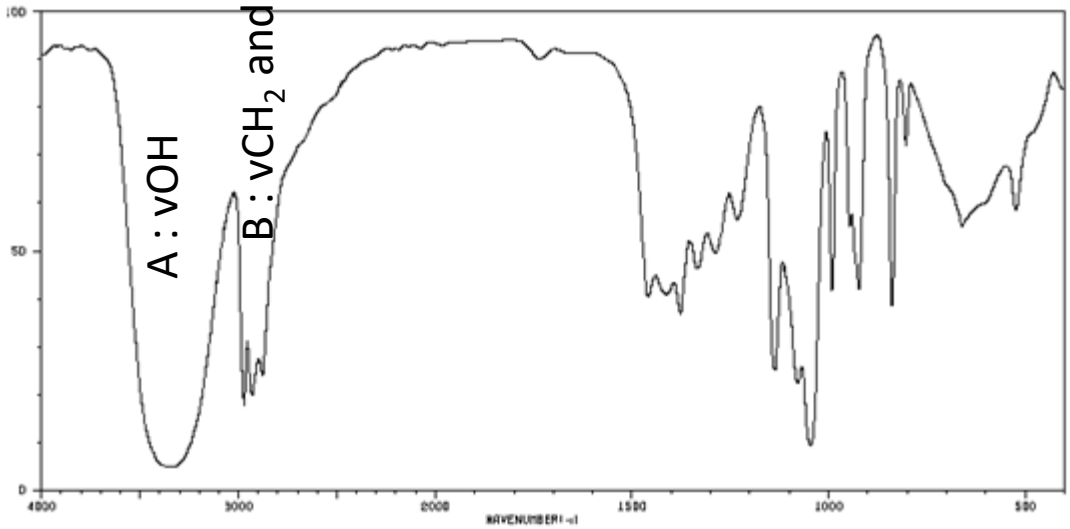

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