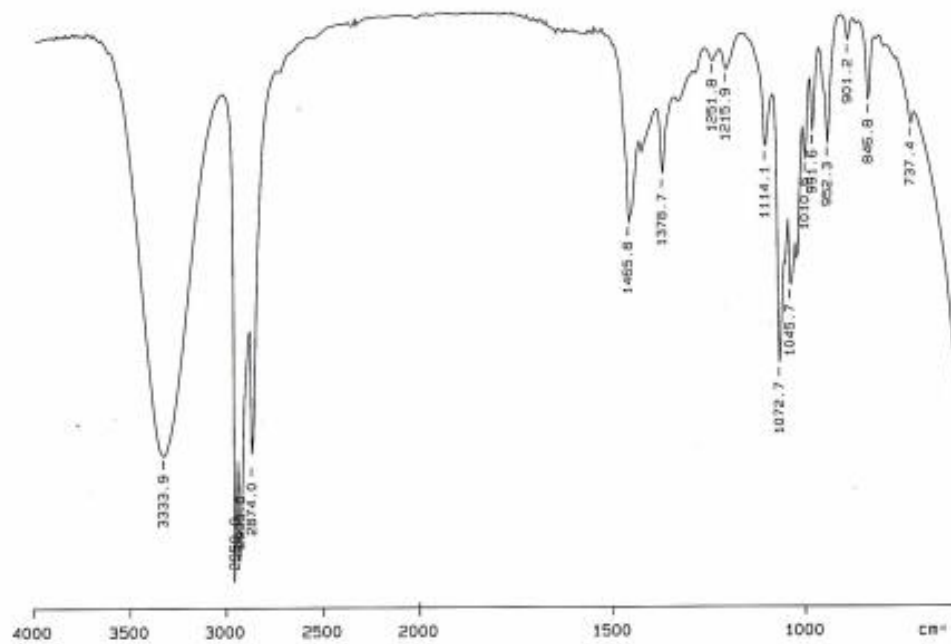


PRACTICE: Based on IR data given determine the structure of the unknown. Unknown compound **A** has molecular formula $C_4H_{11}N$. It shows a peak at 2900 cm^{-1} and peaks in the fingerprint region.

PRACTICE: Based on IR data given determine the structure of the unknown. Unknown compound **B** has molecular formula $C_4H_{11}N$. It shows a single peak at approximately 3400 cm^{-1} as well as peaks at 2900 cm^{-1} and in the fingerprint region. Compound B also possesses a branched alkyl group.

PRACTICE: Based on IR data given determine the structure of the unknown. Unknown compound **C** has molecular formula $C_6H_{10}O_3$. It shows peaks at $2900, 1850, 1740\text{ cm}^{-1}$ and in the fingerprint region.

PRACTICE: Match the following functional group choices with the supplied infrared spectra data



A) Ether

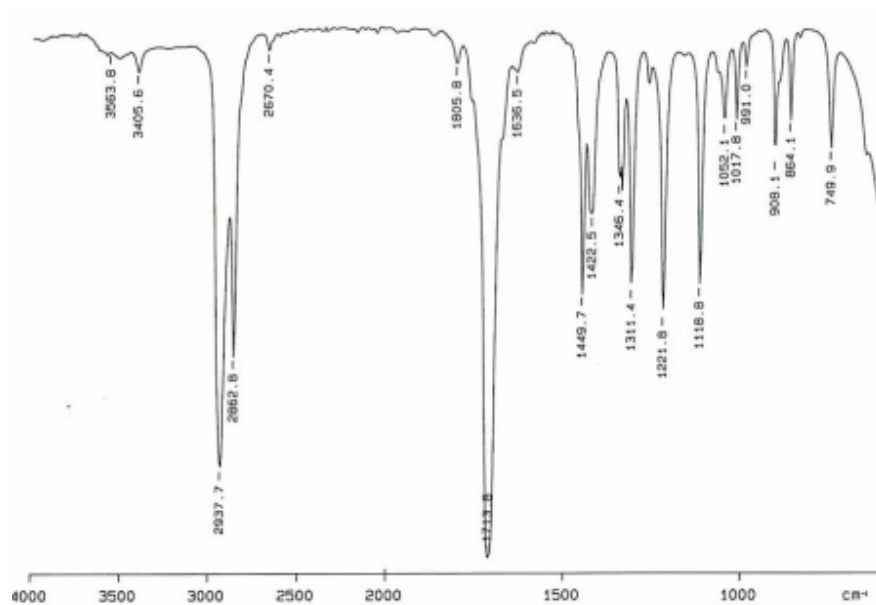
B) Ketone

C) Alcohol

D) Alkene

E) Nitrile

PRACTICE: Match the following functional group choices with the supplied infrared spectra data.



A) Alkyl Halide

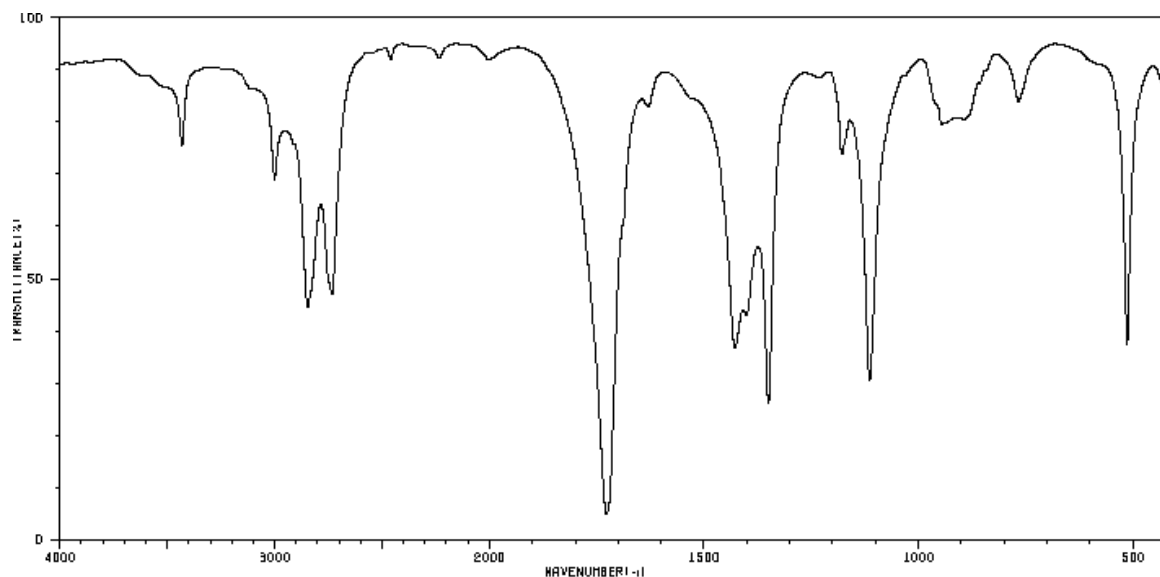
B) Alkyne

C) Carboxylic Acid

D) Alkene

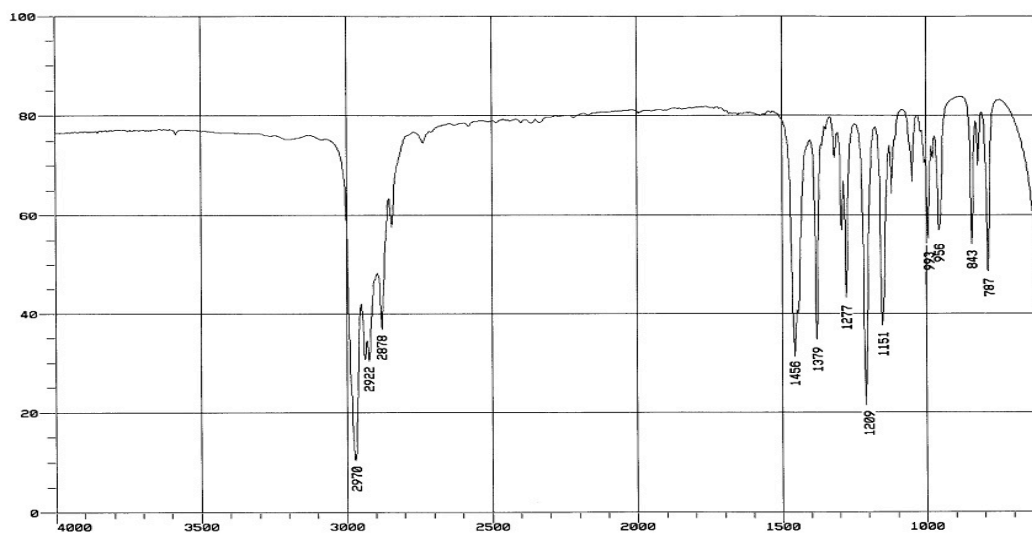
E) Ketone

PRACTICE: Match the following functional group choices with the supplied infrared spectra data.



- A) Aldehyde B) Alkane C) Carboxylic Acid D) Ester E) Ether

PRACTICE: Match the following functional group choices with the supplied infrared spectra data.



- A) Ketone B) Alkyne C) Alkene D) Alkyl Halide E) Amine