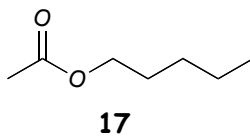
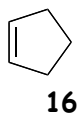
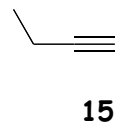
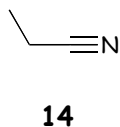
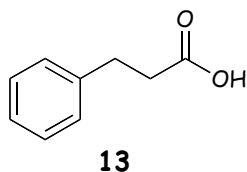
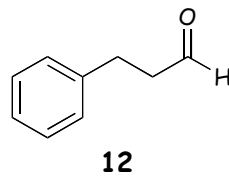
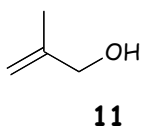
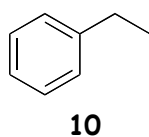
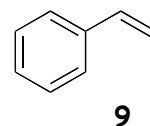
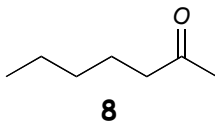
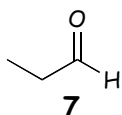
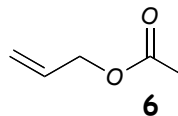
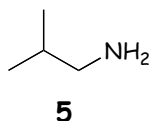
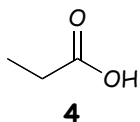
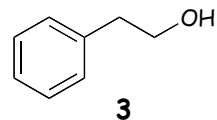
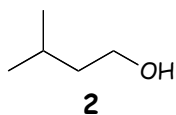
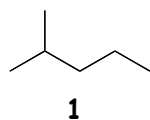


STRUCTURE DETERMINATION PROBLEMS USING IR SPECTROSCOPY

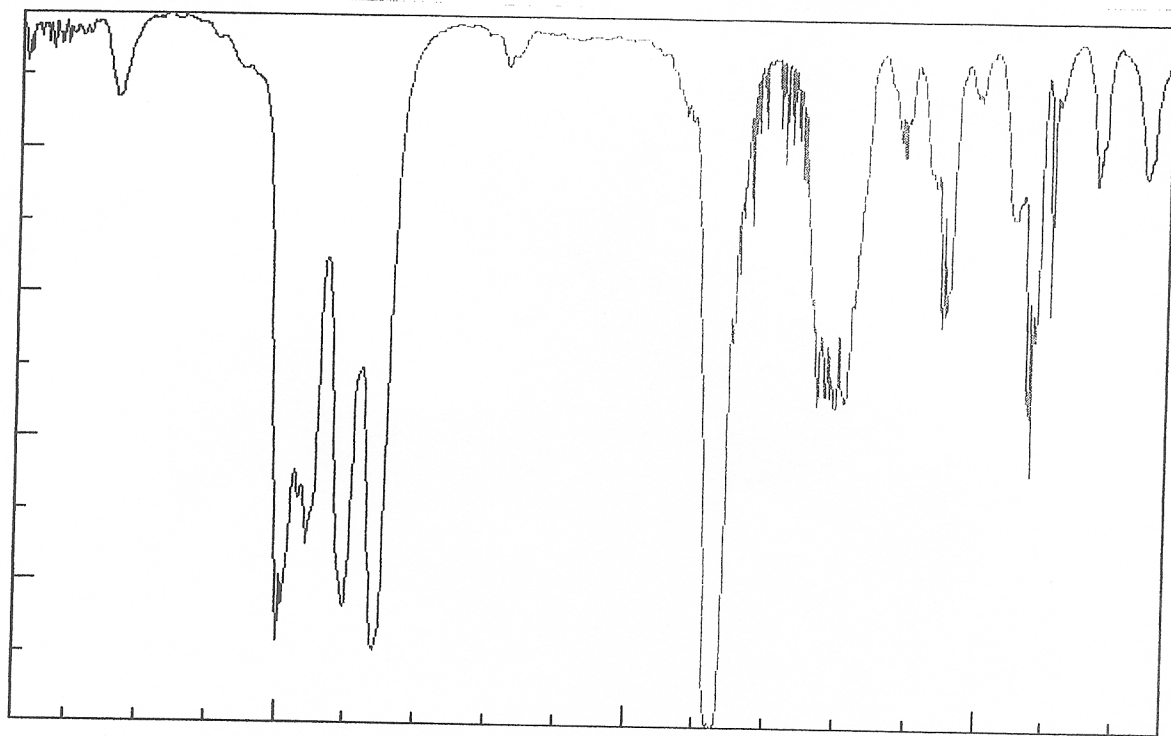
The IR spectra (A - F) of the six compounds are provided on the following pages. Each of the spectra is produced by one of 17 compounds that are shown below. Match each spectrum with the correct compound.



(A)

TRANSMITTANCE

0.8
0.6
0.4
0.2



3000

2000

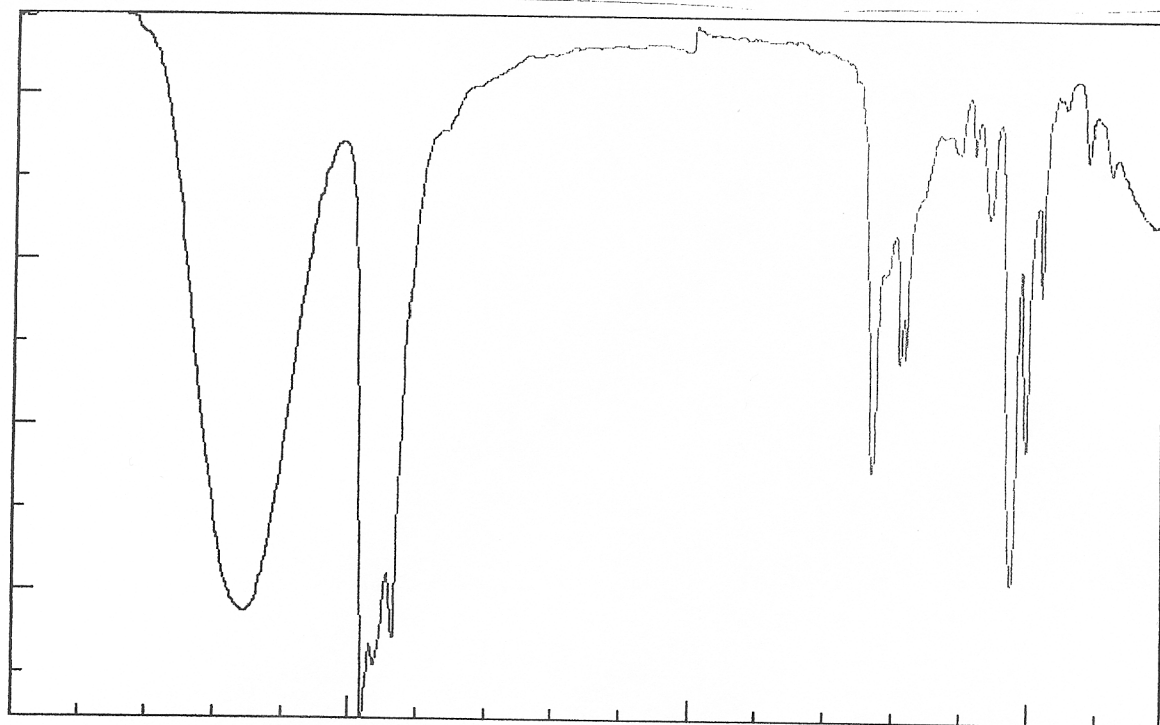
1000

Wavenumber (cm-1)

(B)

TRANSMITTANCE

0.8
0.6
0.4
0.2



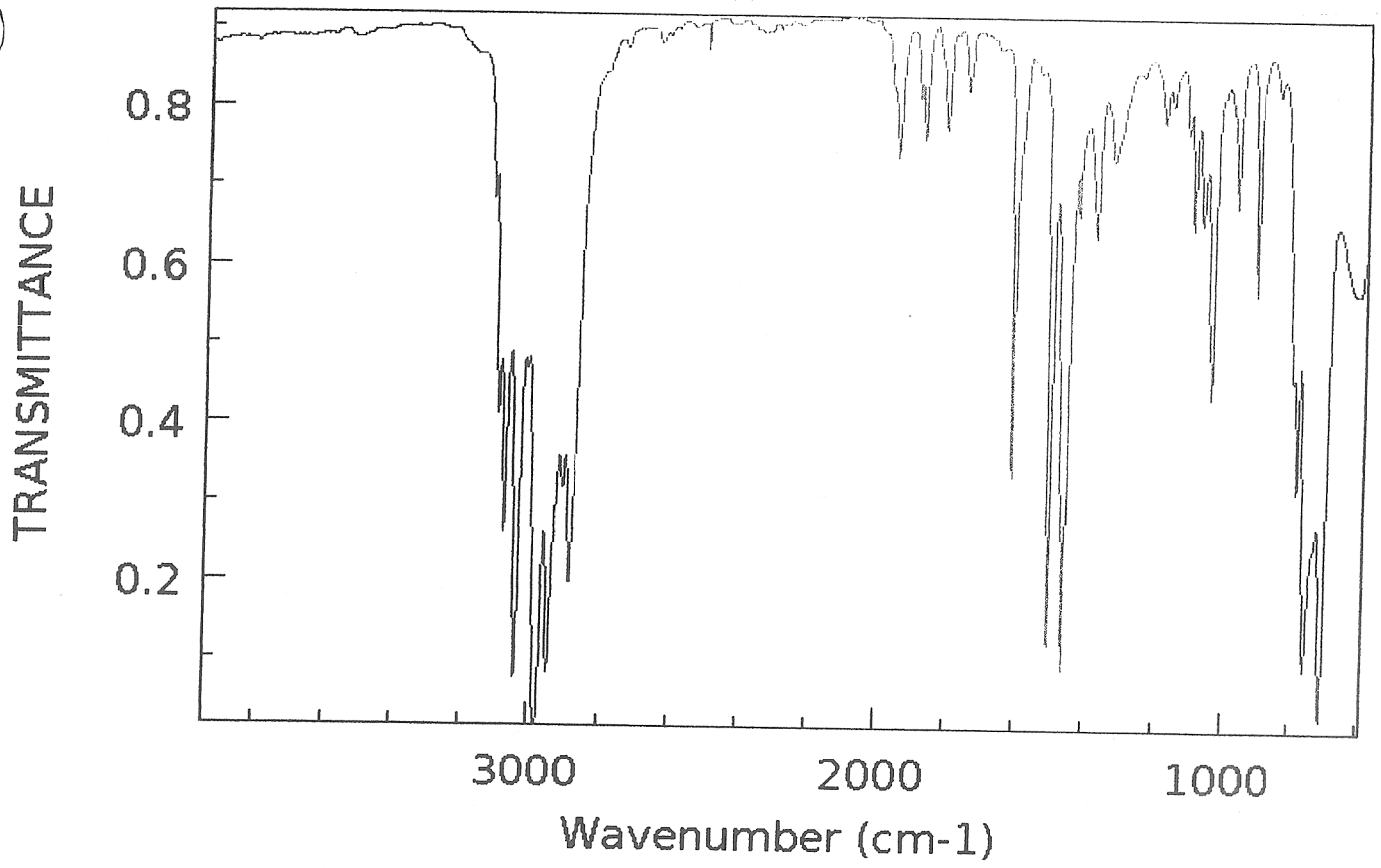
3000

2000

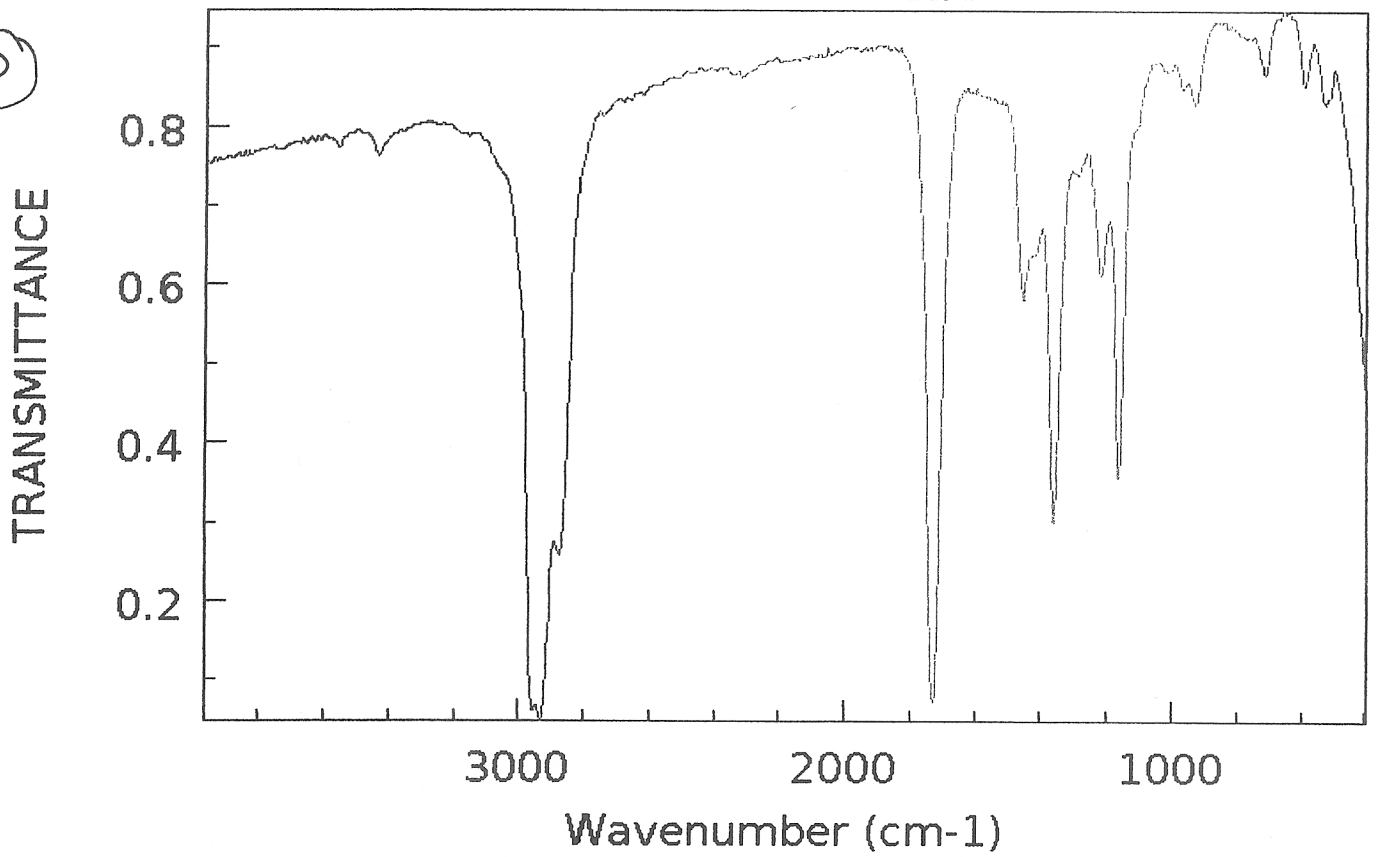
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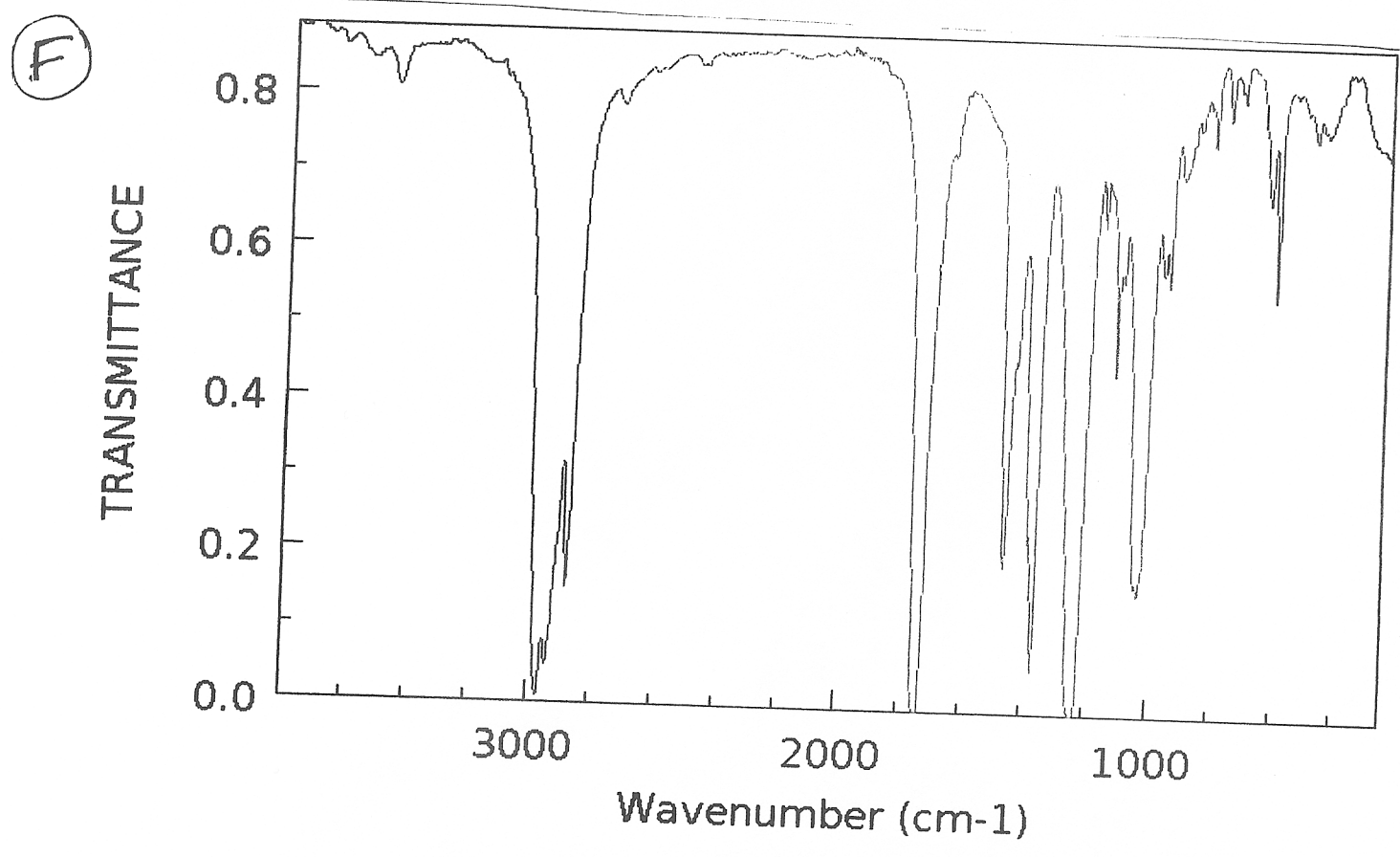
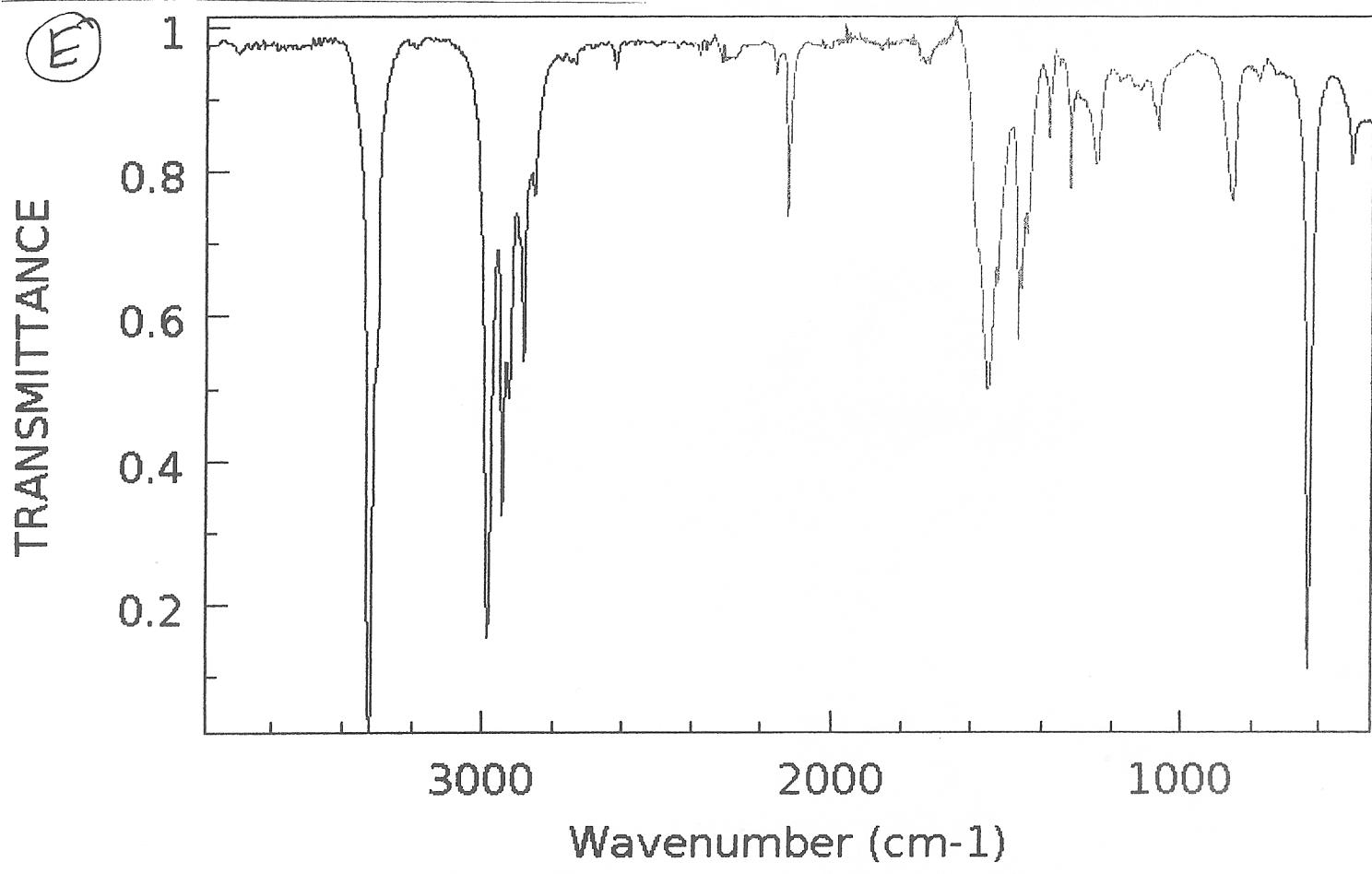
Wavenumber (cm-1)

(C)



(D)





STRUCTURE DETERMINATION PROBLEMS USING IR SPECTROSCOPY - Answer Key

Spectrum A = Compound 7

Spectrum B = Compound 2

Spectrum C = Compound 10

Spectrum D = Compound 8

Spectrum E = Compound 15

Spectrum F = Compound 17