How many different signals would you expect to see in a proton-decoupled carbon nmr spectrum of the following compound?

(remember, a proton decoupled carbon nmr means that the spectrum is run in such a way that the signals are not split, we only use this kind of carbon nmr spectrum in this class)

A 3  
B 4  
C 6  
D 8

Which correctly describes the number of signals seen in the proton decoupled carbon nmr spectra of the following 3 compounds (i, ii and iii)?

(remember, a proton decoupled carbon nmr means that the spectrum is run in such a way that the signals are not split, we only use this kind of carbon nmr spectrum in this class)

A  7 signals for i, 5 signals for ii and 6 signals for iii.  
B  11 signals for i, 10 signals for ii and 8 signals for iii.  
C  7 signals for i, 4 signals for ii and 5 signals for iii.  
D  8 signals for i, 4 signals for ii and 7 signals for iii.
**Question 3**

Identify the most deshielded carbon atom in the following structure as that labelled A, B, C or D.

**Question 4**

Which compound has the following nmr spectrum?
Question 5
MCnmr4

Which carbon would be the LEAST deshielded in methyl pyruvate?

\[ \text{methyl pyruvate} \]

Question 6
MC25d

Which compound has the spectra provided?

\[ \text{m/z}=116 \]

\[ \text{2998} \quad 2899 \quad 1729 \quad 1492 \]

3H singlet
2H quintet
1H sextet
3H doublet
3H triplet
Question 7
MC25e

Which compound has these spectra?

- m/z = 116
- 2 peaks here
- 3H triplet
- 3H triplet
- 2H sextet
- 2H triplet
- 2H quartet

A

B

C

D
Question 8
MC25h

Which compound has these spectra?

A

B

C

D
QUESTION 9
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes
What overall final grade do you expect to earn in this class?
A  
B  
C  
D  

QUESTION 10
There are NO INCORRECT answers to this question, ALL answers to this question will be considered correct for grading purposes
How hard did you work on organic chemistry this week (not including watching/attending lectures)
A  Very Hard  
B  Hard  
C  Somewhat Hard  
D  Not very Hard this week