Student name: _____ Date: _____ [tab-int]

Intensities Table 1. Intensities of couple spectra that present the same multiplicity.

Hydroxymethyl neutral radical [a001]			
	Peak-1	Peak-2	Peak-3
Pixels			
Normalized[a]			
Theoretical[b]			

Di-tert-butyl nitroxide neutral radical [a008]			
	Peak-1	Peak-2	Peak-3
Pixels			
Normalized[a]			
Theoretical[c]			

1,4-Benzosemiquinone anion radical [a003]					
	Peak-1	Peak-2	Peak-3	Peak-4	Peak-5
Pixels					
Normalized[a]					
Theoretical[b]					

Substituted nitronyl nitroxide neutral radical [a009]					
	Peak-1	Peak-2	Peak-3	Peak-4	Peak-5
Pixels					
Normalized[a]					
Theoretical[c]					

[a] Normalize the intensities so that the smallest one will worth the unit.
[b] Write the theoretical intensities given in Table 2.
[c] Write the theoretical intensities given in Table 3.

For the following two molecules normalize the intensities using as reference (unit) the intensity of the second line.

Cyclooctatetraene anion radical [a007]									
	Peak-1	Peak-2	Peak-3	Peak-4	Peak-5	Peak-6	Peak-7	Peak-8	Peak-9
Pixels	—-								—-
Normalized[d]	—-								—-
Theoretical[e]	—-								—-

Tetracyanoethene anion radical [a010]									
	Peak-1	Peak-2	Peak-3	Peak-4	Peak-5	Peak-6	Peak-7	Peak-8	Peak-9
Pixels	—-								—-
Normalized[d]	—-								—-
Theoretical[f]	—-								—-

[d] Normalize the intensities so that the second line (peak-2) will worth the unit.
[e] Write the theoretical intensities of the Table 2 normalizing to the unit the second line.
[f] Write the theoretical intensities of the Table 3 normalizing to the unit the second line.

Question: Why in these two last molecules we have normalized to the second line instead of the first one?