Student name: _____ Date: _____ [tab-a031]

[Exercise]

- Measure the heights of the lines 1, 2, 6, 17 and 18 and normalize them. Verify that they follow the relative theoretical intensities: 1:2:4:3:3.
- Print the simulated spectrum with the tree of splittings.
- Write down the lines that form the three doublets.
- Write down the lines of the six triplets that arise form the splittings of the three doublets
- Indicate the 4 lines that arise form these triplets that do not follow the relation 1:2:1.
- Write in the form of results the different canonical structures of the anion radical and order them according to its stability.
- Number the radical and assign the hyperfine splittings considering the previous section.
- Fill the following Table Tab-a031.

Table of nitrobenzene anion radical [a031].

	Line 1	Line 2	Line 6	Line 17	Line 18
Pixels					
Normalized[a]					
Theoretical[b]	1	2	4	3	3

Doublets	1^o		2^o		3^o	
Lines						

Triplets	1^o			2^o			3^o			4^o			5^o			6^o		
Lines																		

[a] Normalize the intensities so the smallest one worth the unit.