LECTURE 11

1.	Write the Lewis structure, including any equivalent energy resonance structures, for the
	following molecules.
	(a) xenon trioxide (XeO ₃)
	(b) dihydrogen phosphate, PO ₄ H ₂ ⁻¹
	(c) $(AsO_4)^{3-}$

- 2. For the following molecules or molecular ions, draw the Lewis structures.

 (a) AlCl₄⁻¹ (b) XeF₃⁺¹ (c) PCl₆⁻¹ (d) IF₅
- 3. Based on Lewis structures, arrange the following molecules in order of **increasing** bond order (a single bond has a bond order of one, a double bond has a bond order of two, etc.). Circle any molecules that are likely free radicals.

 (a) C-C bond in C-H. C-H. C-H.:
 - (a) C-C bond in C_2H_2 , C_2H_4 , C_2H_6 ; (b) Cl-O bond in ClO_2^{-1} and ClO_3^{-1} (Note that there are no O-O bonds.)

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