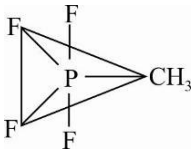
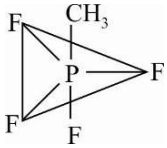
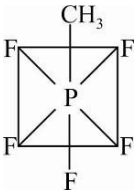
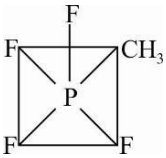
Date Planned : __ / __ / __	Daily Tutorial Sheet - 12	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level - 3	Exact Duration :_____

141 Which element form $p\pi - p\pi$ multiple bonds with itself and with carbon and oxygen ?

(A) P, As **(B)** N, As **(C)** N, P **(D)** N

142. For the molecule PF_4CH_3 which of the following structure is the most stable considering that CH_3 is more electropositive than F.

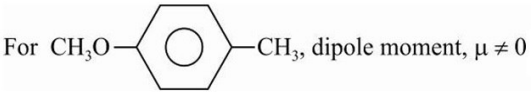
(A)  **(B)**  **(C)**  **(D)** 

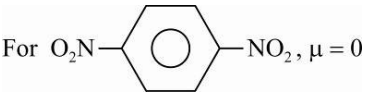
***143.** Which of the molecules is(are) planar ?

(A) $F_2C = C = CF_2$ **(B)** $F_2B - C \equiv C - BF_2$

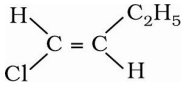
(C) $(SiH_3)_3N$ **(D)** $NH_2 - NH_2$

***144.** Choose the correct statements :

(A) For  , dipole moment, $\mu \neq 0$

(B) For  , $\mu = 0$

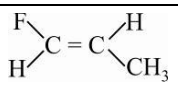
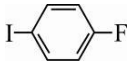
(C) For  , $\mu \approx 0$

(D) For  , $\mu = 0$

145. Which of the following molecular orbital is the HOMO in N_2 ?

(A) σ_{2s} **(B)** σ_{2pz} **(C)** σ^*_{2s} **(D)** π_{2px}

146. Match the following :

Column-I (Molecule)		Column-II (Dipole Moment)	
(A)	CO_2	**(P)**	Subtractive
(B)		**(Q)**	Additive
(C)		**(R)**	$\mu_R = 0$
(D)	BF_3	**(S)**	$\mu_R \neq 0$