Date Planned : __ / __ / __	Daily Tutorial Sheet - 6	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level - 2	Exact Duration :_____

76. Which of the following has a geometry different from the other three species (having the same geometry) ?

(A) BF_4^- **(B)** SO_4^{2-} **(C)** XeF_4 **(D)** PH_4^+

77. Among the following, the species which has the lowest value of bond angle is :

(A) NO_2^- **(B)** NO_2 **(C)** NO_2^+ **(D)** N_2O

78. In which of the following pairs do the molecules have identical shapes ?

(A) SO_2 and SO_3 **(B)** $SnCl_2$ and O_3

(C) $SnCl_4$ and XeF_4 **(D)** XeO_3 and I_3^-

79. Which of the following species is planar and has a bond angle very close to 120° ?

(A) BF_3 **(B)** NO_3^- **(C)** CO_3^{2-} **(D)** All of these

80. Which of the following pairs of species have identical structures and shapes ?

(A) NO_2^+ and NO_2^- **(B)** PCl_5 and BrF_5 **(C)** XeF_4 and ICl_4^- **(D)** XeF_4 and XeO_4

81. In which of the following molecules would you expect the nitrogen-to-nitrogen bond to be the shortest?

(A) N_2H_4 **(B)** N_2 **(C)** N_2O_4 **(D)** N_2O

***82.** Which of the following is(are) correct statements(s) ?

(A) The bond present in NaCl are non-directional

(B) The bond angle of I_3^- is more than H_2O

(C) The bond present in NaCl are directional

(D) The bond present in NaCl are stronger than bond in CCl_4

***83.** Which of the following have sp^3d hybridization ?

(A) SF_4 **(B)** $BrCl_3$ **(C)** $XeOF_2$ **(D)** BrF_3

***84.** Which of the following molecule have two lone pairs of electrons on central atom ?

(A) F_2O **(B)** ClF_3 **(C)** XeF_4 **(D)** SF_4

85. Which one of the following is a correct set?

(A) H_2O, sp^3, angular **(B)** BCl_3 sp^3, angular

(C) NH_4^+, dsp^2, square planar **(D)** CH_4, dsp^2, tetrahedral