Date Planned : __ / __ / __	Daily Tutorial Sheet-5	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	JEE Main (Archive)	Exact Duration :_____

61. In XeO_3F_2, the number of bond pair(s), π - bond(s) and lone pair(s) on Xe atom respectively are : **(2018)**

(A) 4, 2, 2 **(B)** 4, 4, 2 **(C)** 5, 2, 0 **(D)** 5, 3, 0

62. The correct order of electron affinity is : **(2018)**

(A) Cl > F > O **(B)** F > O > Cl **(C)** F > Cl > O **(D)** O > F > Cl

63. Among the oxides of nitrogen : N_2O_3, N_2O_4 and N_2O_5; the molecule(s) having nitrogen-nitrogen bond is/are : **(2018)**

(A) N_2O_3 and N_2O_5 **(B)** N_2O_4 and N_2O_5

(C) N_2O_3 and N_2O_4 **(D)** only N_2O_5

64. The noble gas that does NOT occur in the atmosphere is : **(2019)**

(A) Kr **(B)** Ne **(C)** He **(D)** Rn

65. HF has highest boiling point among hydrogen halides, because it has : **(2019)**

(A) strongest hydrogen bonding **(B)** lowest ionic character

(C) strongest van der Waal's interactions **(D)** lowest dissociation enthalpy

66. The correct order of the oxidation states of nitrogen in NO, N_2O, NO_2 and N_2O_3 is : **(2019)**

(A) $NO_2 < NO < N_2O_3 < N_2O$ **(B)** $N_2O < N_2O_3 < NO < NO_2$

(C) $N_2O < NO < N_2O_3 < NO_2$ **(D)** $NO_2 < N_2O_3 < NO < N_2O$

67. Good reducing nature of H_3PO_2 is attributed to the presence of : **(2019)**

(A) Two P – OH bonds **(B)** One P – H bond

(C) One P – OH bond **(D)** Two P – H bonds

68. The pair that contains two P-H bonds in each of the oxoacids is : **(2019)**

(A) $H_4P_2O_5$ and H_3PO_3 **(B)** H_3PO_3 and H_3PO_2

(C) $H_4P_2O_5$ and $H_4P_2O_6$ **(D)** H_3PO_2 and $H_4P_2O_5$

69. Chlorine on reaction with hot and concentrated sodium hydroxide gives : **(2019)**

(A) Cl^- and ClO_3^- **(C)** ClO_3^- and ClO_2^- **(C)** Cl^- and ClO^- **(D)** Cl^- and ClO_2^-

70. Iodine reacts with concentrated HNO_3 to yield Y along with other products. The oxidation state of iodine in Y, is : **(2019)**

(A) 5 **(B)** 7 **(C)** 3 **(D)** 1

71. In the following reactions, products (A) and (B), respectively, are: **(2020)**

$$\underset{\text{(hot and conc.)}}{NaOH} + Cl_2 \rightarrow (A) + \text{side products}$$

$$Ca(OH)_2 + \underset{\text{(dry)}}{Cl_2} \rightarrow (B) + \text{side products}$$

(A) $NaClO_3$ and $Ca(ClO_3)_2$ **(B)** $NaClO_3$ and $Ca(OCl)_2$

(C) NaOCl and $Ca(ClO_3)_2$ **(D)** NaOCl and $Ca(OCl)_2$

72. White phosphorus on reaction with concentrated NaOH solution in an inert atmosphere of CO_2 gives phosphine and compound (X). X on acidification with HCl gives compound (Y). The basicity of compound (Y) is: **(2020)**

(A) 2 **(B)** 4 **(C)** 1 **(D)** 3

73. A metal (A) on heating in nitrogen gas given compound B. B on treatment with H_2O gives a colourless gas which when passed through $CuSO_4$ solution gives a dark blue-violet coloured solution. A and B respectively, are: **(2020)**

(A) Na and Na_3N **(B)** Mg and $Mg(NO_3)_2$

(C) Na and $NaNO_3$ **(D)** Mg and Mg_3N_2

74. The acidic, basic and amphoteric oxides, respectively, are : **(2020)**

(A) MgO, Cl_2O, Al_2O_3 **(B)** Cl_2O, CaO, P_4O_{10}

(C) N_2O_3, Li_2O, Al_2O_3 **(D)** Na_2O, SO_3, Al_2O_3

75. Chlorine reacts with hot and concentrated NaOH and produces compounds (X) and (Y). Compound (X) gives white precipitate with silver nitrate solution. The average bond order between Cl and O atoms in (Y) is_____. **(2020)**

76. The number of bonds between sulphur and oxygen atoms in $S_2O_8^{2-}$ and the number of bonds between sulphur and sulphur atoms in rhombic sulphur, respectively, are : **(2020)**

(A) 4 and 8 **(B)** 4 and 6 **(C)** 8 and 6 **(D)** 8 and 8