Paper Code

Number: 2481 **INTERMEDIATE PART-I (11ᵗʰ CLASS)**

CHEMISTRY PAPER-I (OLD SCHEME) TIME ALLOWED: 20 Minutes
GROUP-I **OBJECTIVE** MAXIMUM MARKS: 17

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

Q.No.1

(1) Mass of 6.02×10^{23} electrons is:- (A) $1.008\,mg$ (B) $0.55\,mg$ (C) $1.184\,mg$ (D) $1.673\,mg$

(2) The largest number of Molecules are present in:-

(A) $2.8\,g$ of CO (B) $4.8\,g$ of C_2H_6O (C) $3.6\,g$ of H_2O (D) $5.4\,g$ of N_2O_5

(3) The comparative rates at which the solutes move in paper chromatography, depend upon:-

(A) Temperature of solvent (B) Size of chromatographic tank

(C) Size of chromatographic paper (D) Retardation factor

(4) The partial pressure of Hydrogen (H_2) gas in a mixture of 2g Hydrogen and 16g Oxygen (O_2)

gases is proportional to:- (A) $\dfrac{1}{4}$ (B) $\dfrac{1}{6}$ (C) $\dfrac{2}{3}$ (D) $\dfrac{2}{16}$

(5) The critical temperature of non-ideal gas:- (A) Depends on its critical pressure

(B) Depends on its intermolecular forces (C) Does not depend on nature of gas (D) Does not exist

(6) HF is the weakest acid among Hydrides of Halogens, due to:- (A) High electronegativity of fluorine

(B) London dispersion forces (C) Dipole-dipole attraction (D) Hydrogen bonding

(7) One atmospheric pressure at sea-level is:-

(A) 760 torr (B) 760 Nm^{-2} (C) 760 cm Hg (D) 1000 Pascal

(8) Maximum number of electrons in an orbital is:- (A) 2 (B) 6 (C) 10 (D) 14

(9) Quantum numbers of $3f$ subshell are:-

(A) $n = 3,\ \ell = 0$ (B) $n = 3,\ \ell = 1$ (C) $n = 0,\ \ell = 3$ (D) $n = 3,\ \ell = 3$

(10) Geometry of Ethyne (C_2H_2) molecule is:-

(A) Tetrahedral (B) Trigonal planar (C) Linear (D) Non-linear

(11) Among the halides of Hydrogen _____ has highest ionic character.

(A) HBr (B) $HC\ell$ (C) HF (D) HI

(12) The heat of reaction at a particular temperature and at constant volume is:-

(A) Enthalpy Change (B) Heat Capacity (C) Internal Energy (D) Internal Energy Change

(13) _____ statement about the following equation is correct.

$$2SO_{2(g)} + O_{2(g)} \rightleftharpoons 2SO_{3(g)},\ \ \Delta H = -188\,kJ$$

(A) The value of Kp falls with rise in temperature (B) The value of Kp falls with increase in pressure

(C) The catalyst V_2O_5 increase the extent of reaction (D) Value of Kp is equal to value of Kc

(14) The concentration of pure water is close to:- (A) 18 M (B) 55.5 M (C) 18 m (D) 55.5 ppm

(15) The relative lowering of vapour pressure, when 18.0g $C_6H_{12}O_6$ is dissolved in 90.0 g H_2O is:-

(A) $\dfrac{1}{51}$ (B) $\dfrac{1}{5}$ (C) 5.1 (D) 1.5

(16) If Copper strip is placed in an aqueous solution of $FeSO_4$:- (A) Copper will be precipitated out

(B) Iron will be precipitated out (C) Both Copper and Iron will dissolve (D) No reaction will occur

(17) Order of reaction is 3 for $A + B \rightarrow C$, rate law would be:- (A) Rate $= K[A][B][C]$

(B) Rate $= K[A]^3$ (C) Rate $= K[A]^2[B]^2$ (D) Rate $= K[A]^3[B]^3[C]^3$