

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.

1. 1 - 18 g glucose is dissolved in 90 g of water. The relative lowering of vapour pressure is equal to
(A) $\frac{1}{51}$ (B) $\frac{1}{5}$ (C) 5.1 (D) 6
- 2 - The unit of the rate constant is the same as that of the rate of reaction in
(A) first order reaction (B) second order reaction (C) third order reaction (D) zero order reaction
- 3 - The crystal system of sulphur is
(A) cubic (B) hexagonal (C) triclinic (D) monoclinic
- 4 - An excess of aqueous silver nitrate is added to aqueous barium chloride and precipitate is removed by filtration. What are the main ions in the filtrate?
(A) Ag^+ and NO_3^- only (B) Ba^{2+} and NO_3^- only
(C) Ag^+ and Ba^{2+} and NO_3^- (D) Ba^{2+} and NO_3^- and Cl^-
- 5 - Which of the hydrogen halide has the highest percentage of ionic character?
(A) HCl (B) HBr (C) HI (D) HF
- 6 - The value of quantum number is $n = 1, 2, 3, 4, 5, \dots$ for
(A) principal quantum number (B) azimuthal quantum number
(C) magnetic quantum number (D) spin quantum number
- 7 - Equal masses of methane and oxygen are mixed in an empty container at 25°C . The fraction of total pressure exerted by oxygen is
(A) $\frac{1}{3}$ (B) $\frac{8}{9}$ (C) $\frac{1}{9}$ (D) $\frac{16}{17}$
- 8 - Number of isotopes of oxygen is
(A) two (B) three (C) four (D) five
- 9 - The type of hybridization in NH_3 is
(A) sp (B) sp^2 (C) sp^3 (D) dsp^2
- 10 - Stronger the oxidizing agent, greater is the
(A) oxidation potential (B) reduction potential (C) redox potential (D) E.M.F. of cell
- 11 - Law of mass action states that the rate at which the reaction proceeds is directly proportional to the product of the active masses of
(A) reactants (B) products (C) concentration (D) equilibrium
- 12 - A limiting reactant is the one which
(A) is taken in lesser quantity in grams as compared to other reactants
(B) is taken in lesser quantity in volume as compared to the other reactants
(C) gives the maximum amount of the product which is required
(D) gives the minimum amount of the product under consideration
- 13 - The comparative rates at which the solutes move in paper chromatography depend on
(A) the size of paper (B) R_f values of solutes
(C) temperature of the experiment (D) size of the chromatographic tank used
- 14 - One calorie is equivalent to
(A) 0.4184 J (B) 4.184 J (C) 41.84 J (D) 418.4 J
- 15 - Oxygen molecule is heavier than hydrogen by
(A) 1 time (B) 8 times (C) 16 times (D) 32 times
- 16 - Acetone and chloroform are soluble in each other due to
(A) intermolecular hydrogen bonding (B) ion-dipole interaction
(C) instantaneous dipole (D) all of these
- 17 - The nature of the positive rays depends on
(A) the nature of electrode (B) the nature of the discharge tube
(C) the nature of the residual gas (D) all of these