

Note : Four possible choices A, B, C, D to each question are given. Which choice is correct fill that circle in front of that Question No. Use Marker or Pen to fill the circles. Cutting or filling two or more circles will result in Zero Mark in that Question.

- Q.No.1
- (1) A Filtration Process could be very time consuming if it were not aided by a gentle suction which is developed :
 (A) If the paper covers upto its circumference of funnel
 (B) If the Paper has got small sized pores in it
 (C) If Stem of the funnel is so large that it dips into the filtrate (D) If the paper fits tightly
- (2) The largest number of Molecules are present in :
 (A) 4.8 g of C_2H_5OH (B) 3.6 of H_2O (C) 2.8 g of CO (D) 5.4 g of N_2O_5
- (3) Phenomenon of Isotropy was first discovered by :
 (A) Millikan (B) J. Perin (C) Soily (D) J.J Thomson
- (4) Temperature and quantity of a gas remains constant in :
 (A) Charles's Law (B) Avogadro's Law (C) Boyle's Law (D) Dalton's Law
- (5) In Order to raise the boiling point of water upto $110^\circ C$, the external pressure should be :
 (A) Between 760 Torr and 200 Torr (B) Between 760 Torr and 1200 Torr
 (C) 765 Torr (D) Any Value of Pressure
- (6) Acetone and Chloroform are soluble in each other due to :
 (A) Instantaneous Dipole (B) Ion Dipole Interaction
 (C) Intermolecular Hydrogen bonding (D) London Dispersion Forces
- (7) S.I. Unit of Pressure is : (A) Torr (B) mm of Hg (C) Pound inch⁻² (D) Nm⁻²
- (8) The nature of the positive rays depend on :
 (A) Nature of Anode (B) Nature of Cathode (C) Nature of the residual Gas (D) Nature of Discharge Tube
- (9) The term which is not a State Function : (A) Volume (B) Enthalpy (C) Work (D) Internal Energy
- (10) For the reaction $NaOH + HCl \rightarrow NaCl + H_2O$ the change in Enthalpy called :
 (A) Heat of Reaction (B) Heat of Neutralization
 (C) Heat of Combustion (D) Heat of Formation
- (11) Which of the given do not obey Octet Rule : (A) CH_4 (B) NH_3 (C) Cl_3 (D) H_2O
- (12) The reaction for synthesis of NH_3 , the value of Δn is : $N_2 + 3H_2 \rightleftharpoons 2NH_3$
 (A) +2 (B) -1 (C) +1 (D) +4
- (13) The Oxidation Number of Sulphur in SO_4^{2-} is : (A) 4 (B) 3 (C) 6 (D) 0
- (14) With Increase of 10° Celsius temperature rate of reaction double, this increase of rate is due to :
 (A) Decrease in Activation Energy
 (B) Decrease in the Number of Collision between Reactants Molecules
 (C) Increase in the number of effective collisions
 (D) Increase in Energy of Activation
- (15) An excess of Aqueous Silver Nitrate is added to aqueous Barium Chloride and precipitate is removed by filtration. What are main ions in Filtrate :
 (A) Ag^+ and NO_3^- (B) Ag^+ , Ba^{2+} and NO_3^-
 (C) Ba^{2+} and NO_3^- (D) Ba^{2+} , NO_3^- and Cl^-
- (16) If Salt Bridge is not used between two Half Cells then Voltage :
 (A) Decrease Rapidly (B) Decrease Slowly (C) Drops to Zero (D) Does not change
- (17) A solution of 10% w/v of Glucose, the volume in which its 1 gram mole is dissolved will be :
 (A) $1 dm^3$ (B) $1.8 m^3$ (C) $200 cm^3$ (D) $900 cm^3$

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