

PAPER CODE = 6485

Note : Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1	The study of heat changes accompanying a chemical reactions is known as : (A) Electrochemistry (B) Physical chemistry (C) Analytical chemistry (D) Thermochemistry
2	Which of the following has hydrogen bonding : (A) CH_4 (B) CCl_4 (C) NH_3 (D) $NaCl$
3	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 Ba^{2+} and NO_3^- (B) Ag^+ and NO_3^- only (C) Ba^{2+} and NO_3^- only (D) Ba^{2+} and NO_3^- and Cl^-
4	Mass in grams of 2.74 moles of $KMnO_4$: (A) 0.715 g (B) 1416.2 g (C) 432.92 g (D) 294 g
5	The unit of the rate constant is the same as that of the rate of reaction in : (A) Zero Order Reaction (B) First Order Reaction (C) Second Order Reaction (D) Third Order Reaction
6	Splitting of spectral lines when atoms are subjected to strong electric field is called : (A) Stark effect (B) Zeeman effect (C) Photoelectric effect (D) Compton effect
7	The partial pressure of oxygen in air is : (A) 116 torr (B) 159 torr (C) 110 torr (D) 160 torr
8	Isotopes differ in : (A) Arrangement of electrons in orbitals (B) Properties which depend upon mass (C) Chemical properties (D) The extent to which they may be affected in electromagnetic field
9	Calorie is equivalent to : (A) 0.4184 J (B) 4.184 J (C) 41.84 J (D) 418.4 J
10	Stronger the oxidizing agent, greater is the : (A) Oxidation potential (B) Reduction potential (C) Redox potential (D) E.M.F of cell
11	Which of the following hydrogen halides has the highest percentage of ionic character : (A) HF (B) HCl (C) HBr (D) HI
12	Pressure remaining constant, at which temperature the volume of a gas will become twice of what it is at $0^\circ C$: (A) $546^\circ C$ (B) $200^\circ C$ (C) 546 K (D) 273 K
13	Cathode in Nickel Cadmium cell is : (A) Zn (B) NiO_2 (C) Cd (D) Ag_2O
14	Ionic solids are characterized by : (A) Low melting points (B) High vapour pressures (C) Good conductivity in solid state (D) Solubility in polar solvents
15	Solvent extraction is an equilibrium process and is controlled by : (A) Law of mass action (B) Distribution law (C) The amount of solvent used (D) The amount of solute
16	The optimum pressure in ammonia synthesis by Haber's process is : (A) 100 – 400 atm (B) 250 – 400 atm (C) 200 – 300 atm (D) 150 – 450 atm
17	A solution of glucose is 10% w/v. The volume in which 1 g mole of it is dissolved will be : (A) $1 dm^3$ (B) $200 cm^3$ (C) $900 cm^3$ (D) $1.8 dm^3$