

Chemistry (Objective)

(Group-I)

Time: 20 Minutes Marks : 17

Note: Write Answers to the Questions on the objective answer sheet provided. Four possible answers A, B, C and D to each question are given. Which answer you consider correct, fill the corresponding circle A, B, C or D given in front of each question with Marker or Pen ink on the answer sheet provided.

- 1.1 The mass of one mole of electron is:
(A) 1.008 mg (B) 0.55 mg (C) 0.184 mg (D) 1.673 mg
2. In organic phase color of Iodine is:
(A) Brown (B) Purple (C) Colorless (D) Green
3. Pressure remaining constant at which temp. The volume of a gas will become twice of it is at 0°C:
(A) 546°C (B) 200°C (C) 546 k (D) 273 k
4. Ionic crystals are characterized by:
(A) Solubility in polar solvents (B) Low melting point (C) High vapour pressure (D) Conductivity in solid state
5. Number of crystal systems are:
(A) 7 (B) 6 (C) 5 (D) 4
6. When 6 d orbital is complete, the entering electron goes to:
(A) 7f (B) 7s (C) 7p (D) 7d
7. Dipole moment of CS₂ is:
(A) 3.2D (B) 2.2D (C) 1.3D (D) Zero Debye
8. The net heat change in a chemical reaction is same whether it is brought about in two or more different ways in one or more than one steps, it's known as:
(A) Henry's law (B) Joule's principle (C) Hess's law (D) Law of conservation of energy
9. Which of the following solution have P_H less than 7?
(A) NaOH (B) NaCl (C) Ca(OH)₂ (D) HCl
10. The boiling point constant is the ratio of the elevation in boiling point to:
(A) Molarity (B) Mole fraction of solvent (C) Molality (D) Mole fraction of solute
11. Cathode reaction in the electrolysis of dil H₂SO₄ with Pt electrodes is:
(A) Oxidation (B) Reduction (C) Both oxidation & reduction (D) Neither oxidation nor reduction
12. The unit of 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
13. Number of isotopes of tin are:
(A) 8 (B) 10 (C) 6 (D) 11
14. Which of the following is sublime?
(A) Iodine (B) Calcium (C) NaCl (D) Benzene
15. S.I unit of pressure is:
(A) N.m⁻¹ (B) Torr (C) mm of Hg (D) Psi
16. Positive rays are also called as:
(A) Cathode rays (B) Canal rays (C) X-rays (D) Magnetic rays
17. Octet rule is not obeyed by the molecule:
(A) NF₃ (B) CF₄ (C) PF₅ (D) CO₂