



Roll No _____ to be filled in by the candidate

(For All Sessions)
(Group-I)

Time: 20 Minutes

Marks : 17

Chemistry (Objective)

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 bond order of N_2 is (A) 2 (B) 1 (C) 0 (D) 3
2. In endothermic reaction, heat content of:
(A) Product is more than that of reactant (B) Reactant is more than that of product
(C) Surrounding increases (D) Reactants and products are equal
3. Which of the following is not a state function:
(A) Enthalpy (B) Temperature (C) Work (D) Internal energy
4. Dilution increases the degree of dissociation, is the statement of which of the following law or principle.
(A) Le-Chatelier principle (B) Law of mass action (C) Ostwald dilution law (D) Hess's law
5. PH of the soft drink is: (A) 2.0 (B) 3.0 (C) 5.8 (D) 4.6
6. Molarity of pure water is: (A) 1 (B) 18 (C) 55.6 (D) 6
7. Stronger the oxidizing agent, greater is the :
(A) Oxidation potential (B) Reduction potential (C) Redox potential (D) E.m.f of the cell
8. Which of the following gas is bubbled through standard hydrogen electrode at one atmospheric pressure?
(A) HCl gas (B) Pure H_2 gas (C) Chlorine gas (D) O_2 gas
9. The unit of rate constant is same as that of rate of reaction in:
(A) 1st Order Reaction (B) 2nd Order Reaction (C) Zero Order Reaction (D) 3rd Order Reaction
10. The mass of 10 moles of electrons is:
(A) 10.08 mg (B) 5.5 mg (C) 1.84 mg (D) 16.73 mg
11. The number of moles of CO_2 which contains 16 g of oxygen
(A) 1.0 moles (B) 0.50 moles (C) 2.0 moles (D) 3.0 moles
12. A complete quantitative determination generally consists of how many steps?
(A) 4 steps (B) 5 steps (C) 2 steps (D) 6 steps
13. 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
14. The scientist who identified plasma is:
(A) William Crookes (B) Vander Waal (C) Rutherford (D) Boyle
15. When water freezes at $0^\circ C$, its density decreases due to:
(A) Cubic structure of ice (B) Empty spaces present in the structure of ice
(C) Change of bond lengths (D) Change of bond angles
16. Total number of Bravais lattices are: (A) 7 (B) 10 (C) 12 (D) 14
17. The nature of positive rays depends upon:
(A) The nature of electrode (B) The nature of residual gas
(C) The nature of discharge tube (D) The length of discharge tube