

**Note:** You have 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 with marker or pen. Cutting or filling two or more circles will result in zero mark in that question.

**Q.1: Answer all the following Multiple Choice Questions.**

1. Stronger the oxidizing agent, greater is the :

- (A) Oxidation potential (B) Reduction potential  
(C) Redox potential (D) E.m.f of the cell

2. Which of the following gas is bubbled through standard hydrogen electrode at one atmospheric pressure?

- (A) HCl gas (B) Pure H<sub>2</sub> gas (C) Chlorine gas (D) O<sub>2</sub> gas

3. The unit of rate constant is same as that of rate of reaction in:

- (A) 1<sup>st</sup> Order Reaction (B) 2<sup>nd</sup> Order Reaction  
(C) Zero Order Reaction (D) 3<sup>rd</sup> Order Reaction

4. The mass of 10 moles of electrons is:

- (A) 10.08 mg (B) 5.5 mg (C) 1.84 mg (D) 16.73 mg

5. The number of moles of CO<sub>2</sub> which contains 16 g of oxygen:

- (A) 1.0 moles (B) 0.50 moles (C) 2.0 moles (D) 3.0 moles

6. A complete quantitative determination generally consists of how many steps?

- (A) 4 steps (B) 5 steps (C) 2 steps (D) 6 steps

7. Pressure remaining constant, at which temperature the volume of a gas will become twice of what it is at 0°C

- (A) 546 °C (B) 200 °C (C) 546 k (D) 273 k

8. The scientist who identified plasma is:

- (A) William Crookes (B) Vander Waal (C) Rutherford (D) Boyle

9. When water freezes at 0°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

10. Total number of Bravais lattices are:

- (A) 7 (B) 10 (C) 12 (D) 14

11. 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

12. The bond order of N<sub>2</sub> is:

- (A) 2 (B) 1 (C) 0 (D) 3

13. 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

14. Which of the following is not a state function:

- (A) Enthalpy (B) Temperature (C) Work (D) Internal energy

15. 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

16. PH of the soft drink is:

- (A) 2.0 (B) 3.0 (C) 5.8 (D) 4.6

17. Molarity of pure water is:

- (A) 1 (B) 18 (C) 55.6 (D) 6