MSQs for class 9 chemistry



Chapter 1: Fundamentals of Chemistry

- 1. Which branch of chemistry deals with the study of carbon compounds?
 - A) Physical Chemistry
 - B) Organic Chemistry
 - C) Inorganic Chemistry
 - D) Analytical Chemistry
- 2. The smallest particle of an element that can take part in a chemical reaction is:
 - A) Molecule
 - B) Atom
 - C) Ion
 - D) Proton
- 3. The symbol 'Na' stands for:
 - A) Nitrogen
 - B) Sodium
 - C) Nickel
 - D) Neon
- 4. Which of the following is a compound?
 - A) Air
 - B) Water
 - C) Oxygen
 - D) Nitrogen
- 5. The process of separating mixtures into pure components is called:
 - A) Condensation
 - B) Distillation
 - C) Filtration
 - D) Sublimation



Chapter 2: Structure of Atoms

- 1. The nucleus of an atom contains:
 - A) Electrons only
 - B) Protons and neutrons

- C) Protons and electrons
- D) Neutrons only
- 2. Who discovered the electron?
 - A) Rutherford
 - B) J.J. Thomson
 - C) Bohr
 - D) Dalton
- 3. Atomic number is equal to the number of:
 - A) Neutrons
 - B) Electrons
 - C) Protons
 - D) Both protons and neutrons
- 4. The charge on a neutron is:
 - A) Positive
 - B) Negative
 - C) Neutral
 - D) Variable
- 5. The mass number of an atom is the sum of:
 - A) Protons and electrons
 - B) Electrons and neutrons
 - C) Protons and neutrons
 - D) Neutrons only

Chapter 3: Periodic Table and Periodicity of Properties

- 1. The modern periodic table was given by:
 - A) Mendeleev
 - B) Moseley
 - C) Dalton
 - D) Thomson
- 2. Elements in the same group have:
 - A) Same number of neutrons
 - B) Same number of protons
 - C) Same number of valence electrons
 - D) Same atomic masses

- 3. The horizontal rows in the periodic table are called:
 - A) Groups
 - **B)** Periods
 - C) Columns
 - D) Families
- 4. The element with atomic number 1 is placed in:
 - A) Group I-A
 - B) Group II-A
 - C) Group VII-A
 - D) Group VIII
- 5. The most electronegative element is:
 - A) Fluorine
 - B) Oxygen
 - C) Chlorine
 - D) Nitrogen

△ Chapter 4: Structure of Molecules

- 1. Chemical bond is formed due to:
 - A) Sharing or transfer of electrons
 - B) Exchange of protons
 - C) Attraction of neutrons
 - D) Movement of nuclei
- 2. Covalent bond is formed by:
 - A) Transfer of electrons
 - B) Sharing of electrons
 - C) Donation of electrons
 - D) Neutralization
- 3. Ionic bond is formed between:
 - A) Metal and metal
 - B) Metal and non-metal
 - C) Non-metal and non-metal
 - D) Two gases
- 4. The molecule of water (H₂O) is:
 - A) Linear

	B) Angular
	C) Planar
	D) Tetrahedral
5.	The bond between hydrogen and chlorine in HCl is:
	A) Ionic
	B) Covalent
	C) Metallic

Chapter 5: Physical States of Matter

- 1. Which state of matter has definite shape and volume?
 - A) Solid

D) Coordinate

- B) Liquid
- C) Gas
- D) Plasma
- 2. The movement of particles is fastest in:
 - A) Solids
 - B) Liquids
 - C) Gases
 - D) Metals
- 3. The process of changing solid directly into gas is called:
 - A) Melting
 - B) Condensation
 - C) Sublimation
 - D) Evaporation
- 4. The pressure of a gas increases when:
 - A) Volume increases
 - B) Temperature decreases
 - C) Volume decreases
 - D) Temperature remains constant
- 5. Boyle's law relates:
 - A) Pressure and temperature
 - B) Pressure and volume

- C) Volume and temperature
- D) Mass and volume

6 Chapter 6: Solutions

- 1. A homogeneous mixture is called:
 - A) Suspension
 - B) Colloid
 - C) Solution
 - D) Compound
- 2. The substance that dissolves is called:
 - A) Solute
 - B) Solvent
 - C) Solution
 - D) Mixture
- 3. Water is called a universal solvent because:
 - A) It is colorless
 - B) It dissolves many substances
 - C) It has low boiling point
 - D) It is neutral
- 4. Concentration of a solution is expressed in:
 - A) Moles
 - B) Litres
 - C) Grams
 - D) Percentage
- 5. The solubility of solids in liquids increases with:
 - A) Decrease in temperature
 - B) Increase in temperature
 - C) Increase in pressure
 - D) Decrease in pressure

Chapter 7: Electrochemistry

- 1. The flow of electric current through a solution is due to:
 - A) Electrons

- B) lons
- C) Molecules
- D) Atoms
- 2. The process of chemical decomposition by passing current is called:
 - A) Ionization
 - **B)** Electrolysis
 - C) Neutralization
 - D) Oxidation
- 3. In electrolysis, the positive electrode is called:
 - A) Anode
 - B) Cathode
 - C) Electrode
 - D) Battery
- 4. The ion which moves toward cathode is:
 - A) Anion
 - B) Cation
 - C) Neutral atom
 - D) Electron
- 5. The unit of electric current is:
 - A) Volt
 - B) Ampere
 - C) Ohm
 - D) Joule



A Chapter 8: Chemical Reactivity

- 1. Metals are generally:
 - A) Electron acceptors
 - **B)** Electron donors
 - C) Non-reactive
 - D) Insulators
- 2. Non-metals form:
 - A) Basic oxides
 - **B)** Acidic oxides

- C) Amphoteric oxides
- D) Neutral oxides
- 3. Reactivity of metals decreases from:
 - A) Top to bottom
 - B) Bottom to top
 - C) Left to right
 - D) Right to left
- 4. Sodium reacts vigorously with:
 - A) Water
 - B) Nitrogen
 - C) Sulfur
 - D) Oxygen
- 5. The most reactive non-metal is:
 - A) Fluorine
 - B) Oxygen
 - C) Nitrogen
 - D) Chlorine

Answers Key



- 1. B) Organic Chemistry
- 2. B) Atom
- 3. B) Sodium
- 4. B) Water
- 5. B) Distillation

Chapter 2: Structure of Atoms

- 1. B) Protons and neutrons
- 2. B) J.J. Thomson
- 3. C) Protons

- 4. C) Neutral
- 5. C) Protons and neutrons
- Chapter 3: Periodic Table and Periodicity of Properties
 - 1. B) Moseley

2. C) Same number of valence electrons

- 3. B) Periods
- 4. A) Group I-A
- 5. A) Fluorine
- **♦** Chapter 4: Structure of Molecules
 - 1. A) Sharing or transfer of electrons
 - 2. B) Sharing of electrons
 - 3. B) Metal and non-metal
 - 4. B) Angular
 - 5. B) Covalent
- Chapter 5: Physical States of Matter
 - 1. A) Solid
 - 2. C) Gases
 - 3. C) Sublimation
 - 4. C) Volume decreases
 - 5. B) Pressure and volume
- 6: Solutions

- 1. C) Solution
- 2. A) Solute
- 3. B) It dissolves many substances
- 4. D) Percentage
- 5. B) Increase in temperature

© Chapter 7: Electrochemistry

- 1. B) lons
- 2. B) Electrolysis
- 3. A) Anode
- 4. B) Cation
- 5. B) Ampere



A Chapter 8: Chemical Reactivity

- 1. B) Electron donors
- 2. B) Acidic oxides
- 3. B) Bottom to top
- 4. A) Water
- 5. A) Fluorine