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CHEMISTRY
MCQ PRACTICE SERIES

Daily Questions for Competitive Exam - 01 Feb 2026 to 15 Feb 2026 MCQs

GoPract

Revision Cycle – Class 12 Chemistry MCQs 15 Feb 2026

Chapter: Solutions

1. Which law states that the partial pressure of a gas is directly proportional to its mole fraction in solution?

- A) Raoult's law
- B) Henry's law
- C) Dalton's law
- D) Boyle's law

2. The colligative properties of a solution depend on:

- A) Nature of solute
- B) Nature of solvent
- C) Number of solute particles
- D) Chemical formula of solute

3. Which of the following will show the highest elevation in boiling point for the same concentration?

- A) Glucose
- B) NaCl
- C) $CaCl_2$
- D) Urea

4. Osmotic pressure of a solution is measured using:

- A) Barometer
- B) Manometer
- C) Osmometer
- D) Calorimeter

5. For a dilute solution, the relation between osmotic pressure (π) and molarity (M) is:

- A) $\pi = MRT$
- B) $\pi = RT/M$
- C) $\pi = M/RT$
- D) $\pi = RT$

Answer Key

1. B
2. C
3. C
4. C
5. A

Expert Tip – Solutions

Remember this exam shortcut: **More particles → more effect**. Colligative properties depend only on number of particles, not their type. For electrolytes, always multiply by van't Hoff factor. Osmotic pressure follows $\pi = MRT$. These rules help solve most **chem mcq** from Solutions in NEET, JEE and MHT-CET quickly.

Revision Cycle – Class 12 Chemistry MCQs - 14 Feb 2026
Chapter: Solid State

1. Which of the following is an example of an amorphous solid?

- A) Sodium chloride
- B) Quartz
- C) Glass
- D) Diamond

2. The coordination number of atoms in a face-centred cubic (FCC) lattice is:

- A) 4
- B) 6
- C) 8
- D) 12

3. Which type of crystal conducts electricity in molten state but not in solid state?

- A) Molecular crystal
- B) Ionic crystal
- C) Covalent crystal
- D) Metallic crystal

4. The number of atoms present per unit cell in a body-centred cubic (BCC) lattice is:

- A) 1
- B) 2
- C) 4
- D) 6

5. Which defect increases the electrical conductivity of a semiconductor?

- A) Frenkel defect
- B) Schottky defect
- C) Metal excess defect
- D) Stoichiometric defect

Answer Key

1. C
2. D
3. B
4. B
5. C

Expert Tip – Solid State

Remember these easy exam rules: **Amorphous = no fixed shape**. **FCC → 12 neighbours**. **BCC → 2 atoms per unit cell**. Ionic solids conduct only when molten. Metal excess defects increase conductivity. These shortcuts help crack most **chem mcq** from Solid State in NEET, JEE and MHT-CET quickly.

Revision Cycle – Class 11 Chemistry MCQs - 13 Feb 2026
Chapter: Environmental Chemistry

1. Which gas is mainly responsible for acid rain?

- A) Carbon monoxide
- B) Sulphur dioxide
- C) Methane
- D) Ammonia

2. Which layer of the atmosphere contains the ozone layer?

- A) Troposphere
- B) Stratosphere
- C) Mesosphere
- D) Thermosphere

3. Photochemical smog is mainly formed due to reactions involving:

- A) SO_2 and CO
- B) NO_x and hydrocarbons
- C) CO_2 and methane
- D) Ozone and oxygen

4. Which chemical compound is mainly responsible for depletion of the ozone layer?

- A) Carbon dioxide
- B) Nitrogen dioxide
- C) Chlorofluorocarbons
- D) Sulphur dioxide

5. Which of the following is a secondary air pollutant?

- A) Carbon monoxide
- B) Sulphur dioxide
- C) Ozone
- D) Nitric oxide

Answer Key

1. B
2. B
3. B
4. C
5. C

Expert Tip – Environmental Chemistry

Use this simple exam memory set: **Acid rain → SO_2. Ozone layer → Stratosphere. Smog → NO_x + hydrocarbons. Ozone hole → CFCs**. This chapter gives direct NCERT-based **chem mcq**, so revise facts once and score easy marks in NEET, JEE and MHT-CET.

Revision Cycle – Class 11 Chemistry MCQs - 12 Feb 2026
Chapter: Some p-Block Elements

1. Which group 15 element shows maximum tendency to form multiple bonds?

- A) Nitrogen
- B) Phosphorus
- C) Arsenic
- D) Antimony

2. Which oxide of nitrogen is neutral in nature?

- A) N_2O
- B) NO
- C) NO_2
- D) N_2O_5

3. Which allotrope of phosphorus is the most reactive?

- A) White phosphorus
- B) Red phosphorus
- C) Black phosphorus
- D) Violet phosphorus

4. Which halogen has the highest electronegativity?

- A) Chlorine
- B) Bromine
- C) Fluorine
- D) Iodine

5. Which acid is formed when nitrogen dioxide reacts with water?

- A) Nitric acid only
- B) Nitrous acid only
- C) Both nitric and nitrous acids
- D) No acid is formed

Answer Key

1. A
2. B
3. A
4. C
5. C

Expert Tip – Some p-Block Elements

Remember these quick exam rules: **Nitrogen forms multiple bonds** due to small size. **White phosphorus is the most reactive**. **Fluorine is the most electronegative element**. Nitrogen dioxide gives a mix of nitric and nitrous acids with water. These points help solve most **chem mcq** from p-Block quickly in JEE, NEET and MHT-CET.

Revision Cycle – Class 11 Chemistry MCQs - 11 Feb 2026
Chapter: The s-Block Elements

1. Which alkali metal has the highest hydration enthalpy?

- A) Sodium
- B) Potassium
- C) Lithium
- D) Cesium

2. Which alkaline earth metal sulphate is insoluble in water?

- A) $MgSO_4$
- B) $CaSO_4$
- C) $SrSO_4$
- D) $BaSO_4$

3. The anomalous behaviour of lithium is mainly due to:

- A) High atomic mass
- B) Large atomic size
- C) Small size and high polarising power
- D) Presence of d-orbitals

4. Which compound is used in the Solvay process?

- A) NaOH
- B) NaCl
- C) $NaHCO_3$
- D) Na_2SO_4

5. Which alkaline earth metal shows maximum flame colour intensity?

- A) Magnesium
- B) Calcium
- C) Strontium
- D) Barium

Answer Key

1. C
2. D
3. C
4. C
5. D

Expert Tip – s-Block Elements

Use this quick exam memory rule: **Small size → high hydration** (Lithium). **Down the group → solubility of sulphates decreases**. Lithium behaves differently due to high polarising power. Remember these points and most **chem mcq** from s-Block become easy in JEE, NEET and MHT-CET.

Revision Cycle – Class 11 Chemistry MCQs - 10 Feb 2026

Chapter: Hydrogen

1. Which type of hydride is formed by alkali metals?

- A) Covalent hydride
- B) Ionic (saline) hydride
- C) Interstitial hydride
- D) Polymer hydride

2. Which metal is widely used to store hydrogen due to interstitial hydride formation?

- A) Sodium
- B) Magnesium
- C) Palladium
- D) Calcium

3. Heavy water (D_2O) is mainly used as:

- A) Oxidising agent
- B) Reducing agent
- C) Moderator in nuclear reactors
- D) Catalyst

4. The oxidation state of oxygen in hydrogen peroxide (H_2O_2) is:

- A) −2
- B) −1
- C) 0
- D) +1

5. Which property makes hydrogen peroxide a good bleaching agent?

- A) High acidity
- B) Strong reducing nature
- C) Strong oxidising nature
- D) High density

Answer Key

1. B
2. C
3. C
4. B
5. C

Expert Tip – Hydrogen

Remember this quick exam rule: **Alkali metals → ionic hydrides**. **Transition metals → interstitial hydrides**. Oxygen in H_2O_2 always has oxidation state −1. Hydrogen peroxide bleaches due to its oxidising power. These points help solve most **chem mcq** from Hydrogen in JEE, NEET and MHT-CET without confusion.

Revision Cycle – Class 11 Chemistry MCQs - 09 Feb 2026

Chapter: Redox Reactions

1. In the reaction $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$, which species gets reduced?

- A) Zn
- B) Zn^{2+}
- C) Cu^{2+}
- D) SO_4^{2-}

2. The oxidation number of sulphur in H_2SO_4 is:

- A) +4
- B) +5
- C) +6
- D) +2

3. Which of the following is a disproportionation reaction?

- A) $Zn + 2HCl \rightarrow ZnCl_2 + H_2$
- B) $2H_2O \rightarrow 2H_2 + O_2$
- C) $Cl_2 + 2OH^- \rightarrow Cl^- + ClO^- + H_2O$
- D) $Fe + CuSO_4 \rightarrow FeSO_4 + Cu$

4. Which substance acts as an oxidising agent in a redox reaction?

- A) Substance that loses electrons
- B) Substance that gains electrons
- C) Substance that releases heat
- D) Substance that forms a precipitate

5. In acidic medium, how many electrons are transferred per molecule when MnO_4^- changes to Mn^{2+}?

- A) 3
- B) 4
- C) 5
- D) 7

Answer Key

1. C
2. C
3. C
4. B
5. C

Expert Tip – Redox Reactions

Use this simple exam rule: **Oxidation = loss of electrons**, **Reduction = gain of electrons**. Oxidising agent always gets reduced. In acidic medium, remember: **MnO_4^- → Mn^{2+} needs 5 electrons**. These shortcuts help crack most **chem mcq** from Redox in JEE, NEET and MHT-CET.

Revision Cycle – Class 11 Chemistry MCQs - 08 Feb 2026
Chapter: Equilibrium

1. For a reaction at equilibrium, which statement is correct?

- A) Reaction stops completely
- B) Rate of forward reaction is zero
- C) Rate of forward and backward reactions are equal
- D) Concentration of reactants becomes zero

2. For the reaction $N_2(g) + 3H_2(g) \rightleftharpoons 2NH_3(g)$, decreasing pressure will shift the equilibrium:

- A) Towards ammonia
- B) Towards nitrogen and hydrogen
- C) No effect on equilibrium
- D) Only increases rate of reaction

3. Which of the following changes does NOT affect the value of equilibrium constant (K)?

- A) Change in temperature
- B) Addition of catalyst
- C) Change in concentration
- D) Change in pressure

4. If the value of K_c for a reaction is very large, it means:

- A) Reactants are favoured
- B) Products are favoured
- C) Reaction is very slow
- D) Reaction never reaches equilibrium

5. In acidic medium, pH of a solution is 2. The concentration of H^+ ions is:

- A) 10^{-2} mol L^{-1}
- B) 10^{-7} mol L^{-1}
- C) 2 mol L^{-1}
- D) 0.02 mol L^{-1}

Answer Key

1. C
2. B
3. B
4. B
5. A

Expert Tip – Equilibrium

Remember this exam rule: **Equilibrium = dynamic**, not static. Only **temperature** changes the value of K. Pressure shifts equilibrium only when gaseous moles change. For pH, use the shortcut: **pH = −log[H⁺]**. These rules solve most **chem mcq** from Equilibrium in JEE, NEET and MHT-CET.

Revision Cycle – Class 11 Chemistry MCQs - 07 Feb 2026
Chapter: Thermodynamics

1. Which of the following is a state function?

- A) Work
- B) Heat
- C) Enthalpy
- D) Path length

2. For an endothermic reaction carried out at constant pressure, which condition is correct?

- A) $\Delta H < 0$
- B) $\Delta H > 0$
- C) $\Delta G = 0$
- D) $\Delta S < 0$

3. The relation between enthalpy change and internal energy change for a gaseous reaction is:

- A) $\Delta H = \Delta U - \Delta nRT$
- B) $\Delta H = \Delta U + \Delta nRT$
- C) $\Delta H = \Delta U \times \Delta nRT$
- D) $\Delta H = \Delta U / \Delta nRT$

4. A reaction is spontaneous at all temperatures if:

- A) $\Delta H > 0$ and $\Delta S < 0$
- B) $\Delta H < 0$ and $\Delta S > 0$
- C) $\Delta H > 0$ and $\Delta S > 0$
- D) $\Delta H < 0$ and $\Delta S < 0$

5. The efficiency of a reversible heat engine depends only on:

- A) Nature of gas used
- B) Amount of heat supplied
- C) Temperatures of source and sink
- D) Time taken for the cycle

Answer Key

1. C
2. B
3. B
4. B
5. C

Expert Tip – Thermodynamics

Remember this exam shortcut: **$\Delta G = \Delta H - T\Delta S$**. If **$\Delta H$ is negative** and **ΔS is positive**, the reaction is spontaneous at all temperatures. State functions depend only on initial and final state, not the path. These rules solve most **chem mcq** from Thermodynamics in JEE, NEET and MHT-CET.

Revision Cycle – Class 11 Chemistry MCQs - 06 Feb 2026
Chapter: States of Matter (Gases & Liquids)

1. Which gas shows maximum deviation from ideal gas behaviour at low temperature?

- A) H_2
- B) He
- C) CO_2
- D) N_2

2. The value of compressibility factor (Z) for an ideal gas is:

- A) 0
- B) Less than 1
- C) Greater than 1
- D) Equal to 1

3. Which factor mainly causes real gases to deviate from ideal behaviour?

- A) Large molecular mass
- B) Intermolecular attraction
- C) High temperature
- D) Low pressure

4. At constant temperature, if pressure of a gas is reduced to half, the volume of the gas becomes:

- A) Half
- B) Double
- C) Four times
- D) Same

5. Which liquid has the highest surface tension at room temperature?

- A) Ethanol
- B) Benzene
- C) Water
- D) Acetone

Answer Key

1. C
2. D
3. B
4. B
5. C

Expert Tip – States of Matter

Use this simple exam rule: **Low temperature + high pressure = maximum deviation**. Ideal gas means **Z = 1**. Strong attraction increases deviation and surface tension. Remember these three points and most **chem mcq** from this chapter become easy in JEE, NEET and MHT-CET.

Revision Cycle – Class 11 Chemistry MCQs - 05 Feb 2026
Chapter: Chemical Bonding & Molecular Structure

1. Which molecule has zero dipole moment?

- A) NH_3
- B) H_2O
- C) CO_2
- D) SO_2

2. The shape of the ammonia (NH_3) molecule is:

- A) Tetrahedral
- B) Trigonal planar
- C) Trigonal pyramidal
- D) Linear

3. Which type of hybridisation is present in carbon dioxide (CO_2)?

- A) sp
- B) sp^2
- C) sp^3
- D) dsp^2

4. Which bond is the strongest among the following?

- A) Single bond
- B) Double bond
- C) Triple bond
- D) Hydrogen bond

5. According to VSEPR theory, lone pair–lone pair repulsion is:

- A) Less than bond pair–bond pair
- B) Equal to bond pair–bond pair
- C) Greater than bond pair–bond pair
- D) Negligible

Answer Key

1. C
2. C
3. A
4. C
5. C

Expert Tip – Chemical Bonding

Remember this exam rule: **Lone pair repulsion > Bond pair repulsion**. Shape depends on electron pairs, not atoms. Symmetrical molecules like CO_2 have zero dipole moment. If you fix shape first, most **chem mcq** from this chapter become easy in JEE, NEET and MHT-CET.

Revision Cycle – Class 11 Chemistry MCQs - 04 Feb 2026
Chapter: Classification of Elements & Periodicity

1. Which element has the highest first ionisation energy among the following?

- A) Beryllium
- B) Boron
- C) Carbon
- D) Nitrogen

2. Atomic radius generally decreases across a period because:

- A) Number of shells decreases
- B) Nuclear charge increases
- C) Shielding effect increases
- D) Electronegativity decreases

3. Which element shows the most negative electron gain enthalpy?

- A) Fluorine
- B) Chlorine
- C) Oxygen
- D) Sulphur

4. The basic character of oxides increases in which direction of the periodic table?

- A) Left to right in a period
- B) Right to left in a period
- C) Top to bottom in a group
- D) Both B and C

5. Which of the following elements shows variable oxidation states most commonly?

- A) Sodium
- B) Magnesium
- C) Aluminium
- D) Iron

Answer Key

1. D
2. B
3. B
4. D
5. D

Expert Tip – Periodicity (Easy Memory)

Use this simple exam rule: **Across period → size ↓, energy ↑. Down group → size ↑, energy ↓**. Chlorine beats fluorine in electron gain due to less crowding. Transition metals show variable oxidation states. These shortcuts help solve most **chem mcq** in JEE, NEET and MHT-CET quickly.

Revision Cycle – Class 11 Chemistry MCQs - 03 Feb 2026

Chapter: Structure of Atom

1. The maximum number of electrons that can be present in a subshell with l = 2 is:

- A) 2
- B) 6
- C) 10
- D) 14

2. Which of the following sets of quantum numbers represents a valid electron?

- A) n = 2, l = 2, m = 0, s = +1/2
- B) n = 3, l = 1, m = −1, s = −1/2
- C) n = 1, l = 1, m = 0, s = +1/2
- D) n = 2, l = 0, m = 1, s = −1/2

3. The number of orbitals present in the third shell (n = 3) is:

- A) 3
- B) 6
- C) 9
- D) 18

4. Which transition in a hydrogen atom will produce radiation of the highest energy?

- A) n = 2 → n = 1
- B) n = 3 → n = 2
- C) n = 4 → n = 3
- D) n = 5 → n = 4

5. According to Heisenberg uncertainty principle, it is impossible to accurately determine:

- A) Charge and mass of an electron
- B) Energy and speed of an electron
- C) Position and momentum of an electron
- D) Spin and size of an electron

Answer Key

1. C
2. B
3. C
4. A
5. C

Expert Tip – Structure of Atom

Remember these three exam rules: **Orbitals = n^2**, **Electrons = $2n^2$**, **Higher fall → higher energy**. Always check if **$l = 0$ to $(n - 1)$** before selecting quantum numbers. These rules solve most **chem mcq** from this chapter in JEE, NEET, and MHT-CET without calculation.

Revision Cycle – Class 11 Chemistry MCQs - 02 Feb 2026

Chapter: Some Basic Concepts of Chemistry

1. How many moles of oxygen atoms are present in 8.8 g of carbon dioxide (CO_2)?

- A) 0.2 mol
- B) 0.4 mol
- C) 0.6 mol
- D) 0.8 mol

2. The percentage by mass of hydrogen in water (H_2O) is closest to:

- A) 9%
- B) 11%
- C) 18%
- D) 33%

3. Which of the following has the maximum number of significant figures?

- A) 0.0025
- B) 2.500
- C) 250
- D) 2.50×10^2

4. If the empirical formula of a compound is CH_2 and its molar mass is 42 g mol^{-1}, the molecular formula is:

- A) C_2H_4
- B) C_3H_6
- C) C_4H_8
- D) C_6H_{12}

5. Which of the following quantities is expressed in the SI unit mole?

- A) Mass
- B) Volume
- C) Amount of substance
- D) Density

Answer Key

1. B
2. A
3. B
4. B
5. C

Expert Tip – Some Basic Concepts of Chemistry

Use this simple rule for exams: **Mass → Mole → Atoms**. Always convert given mass into moles first. For formulas, remember: **Molecular mass ÷ Empirical mass = multiplier**. If you follow this order, most **chem mcq** from this chapter become easy in JEE, NEET, and MHT-CET.

NEET Chemistry MCQs – Chemistry in Everyday Life - 1 Feb 2026

1. Which of the following is an example of an analgesic?

- A) Paracetamol
- B) Penicillin
- C) Chloramphenicol
- D) Aspirin (as antacid)

2. Which drug is used to reduce acidity in the stomach?

- A) Antibiotic
- B) Antiseptic
- C) Antacid
- D) Analgesic

3. Which of the following is a broad spectrum antibiotic?

- A) Penicillin
- B) Streptomycin
- C) Chloramphenicol
- D) Sulphur

4. Which chemical is commonly used as an antiseptic?

- A) Dettol
- B) Soap
- C) Urea
- D) Glucose

5. Artificial sweeteners are used mainly because they:

- A) Give more energy
- B) Increase appetite
- C) Have low calorie value
- D) Act as preservatives

Answer Key

1. A
2. C
3. C
4. A
5. C

Expert Tip – Chemistry in Everyday Life (Easy Memory)

Remember this simple NEET trick: **Analgesic → pain relief**, **Antacid → acidity relief**, **Antibiotic → kills bacteria**. Artificial sweeteners give sweetness without calories. This chapter gives direct **chem mcq** in exams, so read NCERT lines carefully and revise daily.