ICSE Class 10 Chemistry – Mock Board Examination (2026)

Time Allowed: 2 Hours
Maximum Marks: 80

General Instructions

1. Answers to this paper must be written on separate answer sheets.
2. You are not allowed to write during the first 15 minutes.
3. This paper has **Section I** and **Section II**.
4. Attempt **all questions** from Section I.
5. Attempt **any four questions** from Section II.
6. The intended marks for questions or parts of questions are given in brackets `[ ]`.
7. Use log tables if required.

Section I (40 Marks)

Attempt all questions

Question 1

Choose the correct answer for each of the following: `[10 × 1 = 10]`

1. The gas evolved when dilute hydrochloric acid reacts with zinc is:
   (a) Oxygen (b) Hydrogen (c) Chlorine (d) Sulphur dioxide
2. The process of coating iron with zinc is called:
   (a) Alloying (b) Electroplating (c) Galvanization (d) Vulcanization
3. The valency of sulphate radical (SO „) is:
   (a) 1 (b) 2 (c) 3 (d) 4
4. Which of the following is an example of a strong acid?
   (a) Acetic acid (b) Carbonic acid (c) Hydrochloric acid (d) Formic acid
5. The pH of a neutral solution at 25°C is:
   (a) 0 (b) 7 (c) 10 (d) 14
6. The bond in NaCl is mainly:
   (a) Covalent (b) Ionic (c) Coordinate (d) Metallic
7. The compound CH ƒCOOH belongs to:
   (a) Alkanes (b) Alcohols (c) Carboxylic acids (d) Esters
8. During electrolysis of acidified water, gas at cathode is:
   (a) Oxygen (b) Hydrogen (c) Nitrogen (d) Chlorine
9. The ore of aluminium is:
   (a) Haematite (b) Bauxite (c) Zinc blende (d) Calamine
10. The reducing agent among the following is:
    (a) O , (b) Cl , (c) H , (d) HNO ƒ

Question 2

Fill in the blanks: `[5 × 1 = 5]`

1. The formula of ammonium sulphate is _____.
2. The common name of calcium oxide is _____.
3. The gas that turns lime water milky is _____.
4. The process of loss of electrons is called _____.
5. Rust is chemically _____.

Question 3

State whether the following statements are True or False: `[5 × 1 = 5]`

1. All covalent compounds conduct electricity in molten state.
2. Blue litmus turns red in acidic solution.
3. Graphite is a good conductor of electricity.
4. Hydrogen is less reactive than copper.
5. Distillation can be used to obtain pure water from salt solution.

Question 4

Match Column A with Column B: `[5 × 1 = 5]`

Column A	Column B
(i) NaOH	(a) Bleaching powder preparation
(ii) CaOCl ,	(b) Caustic soda
(iii) H ,SO „	(c) Oil of vitriol
(iv) NH „OH	(d) Laboratory reagent for alkalis
(v) Phenolphthalein	(e) Turns pink in base

Question 5

Answer briefly: `[5 × 3 = 15]`

1. Define oxidation and reduction in terms of electron transfer. Give one example each. `[3]`
2. Write balanced chemical equations for: `[3]`
   - (i) Magnesium + Oxygen
   - (ii) Zinc + Dilute sulphuric acid
3. Name two differences between ionic and covalent compounds. `[3]`
4. Why is concentrated sulphuric acid called a dehydrating agent? Give one chemical example. `[3]`
5. What is electroplating? Mention two applications. `[3]`

Section II (40 Marks)

Attempt any four questions

Question 6 `[10]`

1. Define acids, bases, and salts with one example each. `[3]`
2. What do you understand by pH? State the pH range for: `[3]`
   - (i) acidic solution
   - (ii) basic solution
   - (iii) neutral solution
3. Explain with equations how sodium chloride can be converted to: `[4]`
   - (i) Sodium hydroxide
   - (ii) Hydrogen chloride gas

Question 7 `[10]`

1. Differentiate between: `[4]`
   - (i) Endothermic and exothermic reactions
   - (ii) Combination and decomposition reactions
2. Explain displacement reaction with one equation involving iron and copper sulphate. `[3]`
3. Write ionic equation for neutralization of hydrochloric acid with sodium hydroxide. `[3]`

Question 8 `[10]`

1. What is metallurgy? Name the main steps in extraction of metals from ores. `[4]`
2. Explain why aluminium extraction is done by electrolysis and not by carbon reduction. `[3]`

3. Give reasons: `[3]`
   - (i) Gold is found in native state.
   - (ii) Zinc is used for galvanization.
   - (iii) Alloying improves properties of metals.

Question 9 `[10]`

1. Draw electron dot structures for: `[4]`
   - (i) H ,O
   - (ii) NH *f*
2. Define valency and oxidation number. `[2]`
3. Calculate molecular mass of: `[4]`
   - (i) CaCO *f*
   - (ii) H ,SO „

Question 10 `[10]`

1. Name and give one use of the following organic compounds: `[4]`
   - (i) Ethanol
   - (ii) Ethanoic acid
   - (iii) Methane
   - (iv) Propanone
2. What is homologous series? Give any four characteristics. `[4]`
3. Differentiate between saturated and unsaturated hydrocarbons with one example each. `[2]`

Internal Choice Practice (Optional)

- Explain Haber process briefly with conditions. `[5]`
- Explain contact process briefly with equations. `[5]`

Suggested Answer Key (Section I Objective)

Q1: 1-b, 2-c, 3-b, 4-c, 5-b, 6-b, 7-c, 8-b, 9-b, 10-c
Q2: (1) (NH „) ,SO „ (2) Quicklime (3) Carbon dioxide (4) Oxidation (5) Hydrated iron(III) oxide
Q3: 1-F, 2-T, 3-T, 4-F, 5-T

If you want, I can also generate:
1. **Solved version** (full detailed answers),
2. **Printable PDF style format**,
3. **3 more mock papers** (Easy/Moderate/Hard).