ICSE EXAMINATION 2026

CHEMISTRY - SCIENCE Paper 2

Mock Board Question Paper

Time allowed: Two Hours **Maximum Marks: 80**

General Instructions:

1. Answers to this paper must be written on separate answer sheets provided.
2. You are not allowed to write during the first 15 minutes.
3. This paper has two sections: 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/parts are given in square brackets [ ].
7. All working, including rough work, must be clearly shown.

SECTION I (40 Marks)

Attempt all questions from this section.

Question 1 [10 x 1 = 10]

Choose the correct answer for each of the following:

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 (SO4) is: (a) 1 (b) 2 (c) 3 (d) 4
4. Which of the following is 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

Question 2 [5]

Fill in the blanks:

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 [5]

State whether True or False:

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 [5]

Match Column A with Column B.

Column A: NaOH, CaOCl2, H2SO4, NH4OH, Phenolphthalein

Column B: (a) Bleaching powder preparation (b) Caustic soda (c) Oil of vitriol (d) Reagent for alkalis (e) Turns pink in base

Question 5 [15]

Answer briefly:

1. Define oxidation and reduction in terms of electron transfer with one example each.

2. Write balanced equations for: (i) Magnesium + Oxygen (ii) Zinc + Dilute sulphuric acid.
3. State two differences between ionic and covalent compounds.
4. Why is concentrated sulphuric acid called a dehydrating agent? Give one example.
5. What is electroplating? Mention two applications.

SECTION II (40 Marks)

Attempt any four questions from this section.

Question 6 [10]

(a) Define acids, bases and salts with one example each.

(b) What is pH? State pH range for acidic, basic and neutral solutions.

(c) Explain with equations how NaCl can be converted to (i) NaOH and (ii) HCl gas.

Question 7 [10]

(a) Differentiate: (i) Endothermic and exothermic reactions (ii) Combination and decomposition reactions.

(b) Explain displacement reaction using iron and copper sulphate.

(c) Write ionic equation for neutralization of HCl by NaOH.

Question 8 [10]

(a) What is metallurgy? Name the main steps in extraction of metals from ores.

(b) Why is aluminium extracted by electrolysis and not by carbon reduction?

(c) Give reasons: (i) Gold occurs in native state (ii) Zinc is used for galvanization (iii) Alloying improves metal properties.

Question 9 [10]

(a) Draw electron dot structures for H2O and NH3.

(b) Define valency and oxidation number.

(c) Calculate molecular mass of (i) CaCO3 (ii) H2SO4.

Question 10 [10]

(a) Name and one use each of: ethanol, ethanoic acid, methane, propanone.

(b) What is a homologous series? State four characteristics.

(c) Differentiate saturated and unsaturated hydrocarbons with one example each.

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