# CBSE Class 12 Chemistry 2026

## Question Paper

Set 56/3/3 · Section A · Detailed step-by-step solutions

### General Instructions

**(i)** This question paper contains 10 questions. All questions are compulsory.

**(ii)** It comprises 10 single-correct multiple-choice questions.

**(iii)** Attempt every question; detailed solutions are provided in the companion solutions booklet.

**1.** According to Werner's theory, the primary valencies of the central metal atom :

(A) are satisfied by neutral molecules or negative ions.

(B) are equal to its coordination number.

(C) are satisfied by negative ions.

(D) are non-ionisable.

**2.** The oxidation number of Pt in $[Pt(en)_2Cl_2]^{2+}$ is :

(A) + 3

(B) + 4

(C) + 2

(D) + 6

**3.** Which of the following product is formed when salicylic acid is treated with $(CH_3CO)_2O$ in the presence of acid ?

(A) o-$C_6H_4(COOCH_3)(OH)$ — methyl 2-hydroxybenzoate

(B) o-$C_6H_4(OCOCH_3)(OH)$

(C) o-$C_6H_4(COCH_3)(COOH)$

(D) o-$C_6H_4(OCOCH_3)(COOH)$ — aspirin (acetylsalicylic acid)

**4.** Which reagent is used to distinguish between primary, secondary and tertiary amines ?

(A) $C_6H_5SO_2Cl$

(B) $C_6H_5COCl$

(C) $CHCl_3$ + ethanolic KOH

(D) NaOH + $I_2$

**5.** On electrolysis of very dilute aqueous solution of NaCl using platinum electrodes :

(A) $H_2$ gas is evolved at anode.

(B) Na is produced at anode.

(C) $O_2$ gas is evolved at anode.

(D) $H_2$ gas is evolved at cathode.

**6.** The correct order of decreasing basic strength in aqueous solution of the following is :

(A) $(C_2H_5)_3N > C_2H_5NH_2 > (C_2H_5)_2NH$

(B) $(C_2H_5)_2NH > C_2H_5NH_2 > (C_2H_5)_3N$

(C) $C_2H_5NH_2 > (C_2H_5)_2NH > (C_2H_5)_3N$

(D) $(C_2H_5)_2NH > (C_2H_5)_3N > C_2H_5NH_2$

**7.** The mole fraction of a solute in 2.0 molal aqueous solution is :

(A) 1.87

(B) 0.347

(C) 0.0347

(D) 0.00347

**8.** Which of the following transition metals shows +1 and +2 oxidation states ?

(A) Mn

(B) Zn

(C) Cu

(D) Sc

**9.** On hydrolysis, which of the following carbohydrates gives only β-glucose ?

(A) Starch

(B) Sucrose

(C) Maltose

(D) Cellulose

**10.** Consider the following compounds : Chlorobenzene (I), 2,4,6-trinitrochlorobenzene (II), 2,4-dinitrochlorobenzene (III), 4-nitrochlorobenzene (IV). The correct order of increasing ease of nucleophilic substitution reactions of these compounds is :

(A) I < IV < III < II

(B) I < III < IV < II

(C) II < III < IV < I

(D) IV < III < II < I