

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.

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2. The oxidation number of Pt in $[\text{Pt}(\text{en})_2\text{Cl}_2]^{2+}$ is :

- (A) + 3
- (B) + 4
- (C) + 2
- (D) + 6

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3. Which of the following product is formed when salicylic acid is treated with $(\text{CH}_3\text{CO})_2\text{O}$ in the presence of acid ?

- (A) $\text{o-C}_6\text{H}_4(\text{COOCH}_3)(\text{OH})$ — methyl 2-hydroxybenzoate
(B) $\text{o-C}_6\text{H}_4(\text{OCOCH}_3)(\text{OH})$
(C) $\text{o-C}_6\text{H}_4(\text{COCH}_3)(\text{COOH})$
(D) $\text{o-C}_6\text{H}_4(\text{OCOCH}_3)(\text{COOH})$ — aspirin (acetylsalicylic acid)

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

- (A) $\text{C}_6\text{H}_5\text{SO}_2\text{Cl}$
(B) $\text{C}_6\text{H}_5\text{COCl}$
(C) $\text{CHCl}_3 + \text{ethanolic KOH}$
(D) $\text{NaOH} + \text{I}_2$

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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.

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

- (A) $(\text{C}_2\text{H}_5)_3\text{N} > \text{C}_2\text{H}_5\text{NH}_2 > (\text{C}_2\text{H}_5)_2\text{NH}$
(B) $(\text{C}_2\text{H}_5)_2\text{NH} > \text{C}_2\text{H}_5\text{NH}_2 > (\text{C}_2\text{H}_5)_3\text{N}$
(C) $\text{C}_2\text{H}_5\text{NH}_2 > (\text{C}_2\text{H}_5)_2\text{NH} > (\text{C}_2\text{H}_5)_3\text{N}$
(D) $(\text{C}_2\text{H}_5)_2\text{NH} > (\text{C}_2\text{H}_5)_3\text{N} > \text{C}_2\text{H}_5\text{NH}_2$

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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

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

- (A) Mn
- (B) Zn
- (C) Cu
- (D) Sc

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

- (A) Starch
- (B) Sucrose
- (C) Maltose
- (D) Cellulose

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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) $IV < III < II < I$