# CUET 2026 May 11 Shift 1 Chemistry

## Question Paper (Memory-Based)

Conducted by National Testing Agency (NTA)

### General Instructions

**(i)** The examination will be conducted in Computer-Based Test (CBT) mode.

**(ii)** Each question carries +5 marks for correct answer and -1 mark for wrong answer.

**(iii)** The total number of questions are 50.

**(iv)** Duration of the exam is 1 hour (60 minutes).

**1. When blood cells are placed in 1% (w/v) NaCl aqueous solution:**

(a) Cell will burst
(b) Cell will shrink
(c) Cell will swell
(d) Cell remains as such

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**2. A solution of copper sulphate cannot be stored in a zinc vessel because**

(a) Copper is more reactive than zinc
(b) Reduction potential of copper is less than zinc
(c) Oxidation potential of copper is higher than zinc
(d) Reduction potential of copper is higher than zinc

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**3. The rate of the reaction, $2NO + Cl_2 \rightarrow 2NOCl$ is given by the rate equation, rate $= k[NO]^2[Cl_2]$. The value of the rate constant can be increased by**

(a) increasing the concentration of NO.

(b) increasing the temperature.

(c) increasing the concentration of the $Cl_2$.

(d) doing all of these.

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**4. Identify the product C in the series.**

$$C_6H_5NO_2 \xrightarrow{Fe/HCl} A \xrightarrow{NaNO_2+HCl,\ 273\ K} B \xrightarrow{H_2O,\ 283\ K} C$$

(a) $C_6H_5OH$

(b) $C_6H_5CH_2OH$

(c) $C_6H_5CHO$

(d) $C_6H_5NH_2$

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**5. Which of the following is the strongest base?**

(a) Aniline

(b) N-methyl aniline

(c) O-methyl aniline

(d) Benzylamine

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**6. At the state of dynamic equilibrium, for solute + solvent gives solution.**

(a) Rate of dissolution = Rate of unsaturation.

(b) Rate of dissolution = Rate of crystallization

(c) Rate of dissolution = Rate of saturation

(d) Rate of crystallization = Rate of saturation.

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**7. Which of the following expression correctly represents molar conductivity?**

(a) $\Lambda_m = \frac{K}{C}$

(b) $\Lambda_m = \frac{KA}{1}$

(c) $\Lambda_m = KV$

(d) all of these

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**8. For the given Nernst equation**

$E_{\text{cell}} = E^{\circ}_{\text{cell}} - \frac{RT}{nF} \ln\left[\frac{[Mg^{2+}]}{[Ag^{+}]}\right]$

**Which of the following representation is correct?**

(a) $Ag^{+}|Ag||Mg^{2+}|Mg$

(b) $Mg^{2+}|Mg||Ag|Ag^{+}$

(c) $Mg|Mg^{2+}||Ag^{+}|Ag$

(d) $Mg|Mg^{2+}||Ag|Ag^{+}$

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**9. The oxidation potentials of A and B are +2.37 V and +1.66 V respectively. In chemical reactions**

(a) A will be replaced by B

(b) A will replace B

(c) A will not replace B

(d) A and B will not replace each other

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**10. The rate of the reaction, $2NO + Cl_2 \rightarrow 2NOCl$ is given by the rate equation, rate = $k[NO]^2[Cl_2]$. The value of the rate constant can be increased by**

(a) increasing the concentration of NO.

(b) increasing the temperature.

(c) increasing the concentration of the $Cl_2$.

(d) doing all of these.

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