

# CUET 2026 May 19 Shift 2 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. Which has the lowest boiling point at 1 atm pressure?

- (1) 0.1 M  $KCl$
- (2) 0.1 M urea
- (3) 0.1 M  $CaCl_2$
- (4) 0.1 M  $AlCl_3$

2. Which of the following solutions has highest osmotic pressure?

- (1) 1 M  $NaCl$
- (2) 1 M  $MgCl_2$
- (3) 1 M urea
- (4) 1 M glucose

3. The molal freezing point constant for water is  $1.86^\circ C$ . The freezing point of 0.1 m  $NaCl$  solution is expected to be:

- (1)  $-1.86^\circ C$
- (2)  $-0.372^\circ C$
- (3)  $-0.186^\circ C$
- (4)  $0.372^\circ C$

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4. The average osmotic pressure of human body is 7.8 bar at 37°C. What is the concentration of an aqueous solution of NaCl that could be used in bloodstream?

- (1)  $0.15 \text{ mol L}^{-1}$
  - (2)  $0.30 \text{ mol L}^{-1}$
  - (3)  $0.60 \text{ mol L}^{-1}$
  - (4)  $0.45 \text{ mol L}^{-1}$
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5. The vapor pressures of two liquids P and Q are 80 torr and 60 torr respectively. The total vapor pressure of the solution obtained by mixing 3 mol of P and 2 mol of Q would be:

- (1) 68 torr
  - (2) 140 torr
  - (3) 72 torr
  - (4) 20 torr
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6. The 5% solution of cane sugar (molecular weight = 342) is isotonic with 1% solution of substance X. The molecular weight of X is:

- (1) 342
  - (2) 171.2
  - (3) 68.4
  - (4) 136.8
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7. Which of the following solutions shows positive deviation from Raoult's law?

- (1) Acetone + Aniline
  - (2) Acetone + Ethanol
  - (3) Water + Nitric acid
  - (4) Chloroform + Benzene
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8. How many coulombs are required for the oxidation of 1 mole of  $H_2O$  to  $O_2$ ?

- (1)  $1.93 \times 10^5 \text{ C}$
- (2)  $9.65 \times 10^4 \text{ C}$

- (3)  $3.86 \times 10^5 C$   
(4)  $4.825 \times 10^5 C$
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**9. Which of the following is a secondary cell?**

- (1) Leclanche cell  
(2) Lead storage battery  
(3) Concentration cell  
(4) All of these
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**10. Cell reaction is spontaneous when:**

- (1)  $E_{\text{red}}^{\circ}$  is negative  
(2)  $\Delta G^{\circ}$  is negative  
(3)  $E_{\text{oxidation}}^{\circ}$  is positive  
(4)  $\Delta G^{\circ}$  is positive
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