

PART 1 - CHEMISTRY

Topic : Solutions

SECTION-B : (Maximum Marks : 4)

This section contains **ONE** question.

The answer to each question is a **NUMERICAL VALUE**.

For each question, enter the correct numerical value of the answer (in decimal notation, truncated / rounded-off to the **SECOND DECIMAL PLACE**; e.g. 6.25, 7.00, -0.33, -.30, 30.27, -127.30) in the place designated to enter the answer.

Answer to each question will be evaluated according to the following marking scheme :

Full Marks : +4 If **ONLY** the correct answer is entered;

Zero Marks : 0 In all other cases.

1. At 300 K, an ideal dilute solution of a macromolecule exerts osmotic pressure that is expressed in terms of the height (h) of the solution (density = 1.00 g cm^{-3}) where h is equal to 2.00 cm. If the concentration of the dilute solution of the macromolecule is 2.00 g dm^{-3} , the molar mass of the macromolecule is calculated to be $X \times 10^4 \text{ g mol}^{-1}$. The value of X is _____.

Use: Universal gas constant (R) = $8.3 \text{ J K}^{-1} \text{ mol}^{-1}$ and acceleration due to gravity (g) = 10 m s^{-2}

[JEE Advanced 2025 Paper 2]

Scan or tap for the
full solution



Space for Rough Work

**JEE ADVANCED SOLUTIONS — OSMOTIC PRESSURE
— MOLAR MASS — PYQS**

Test Pattern : JEE (Advanced)

ANSWER KEY**SECTION-B**

Ques.	1										
Ans.	2.4 to 2.55										