

JEE MAIN SOLUTIONS — TYPES OF SOLUTIONS AND CONCENTRATION TERMS — PYQS

Max. Marks: 8
Questions: 2

Section A (MCQ) — 1 question

- Q.1** What is the mole fraction of water in 10% by weight (w/w) of aqueous urea solution?
 [Given: Molar mass of H, O, C and N are 1, 16, 12 and 14 g mol⁻¹ respectively.]

[JEE Main 2026 (Online) 5th April Morning Shift]

- (1) 0.825 (2) 0.032 (3) 0.867 (4) 0.967

Scan or tap for the
full solution



Section B (Numerical) — 1 question

- Q.2** Sea water, which can be considered as a 6 molar (6 M) solution of NaCl, has a density of 2 g mL⁻¹. The concentration of dissolved oxygen (O₂) in sea water is 5.8 ppm. Then the concentration of dissolved oxygen (O₂) in sea water, in terms of molality, is $x \times 10^{-4}$ m.

$x =$ _____. (Nearest integer)

Given: Molar mass of NaCl is 58.5 g mol⁻¹

Molar mass of O₂ is 32 g mol⁻¹

[JEE Main 2025 (Online) 4th April Evening Shift]

Scan or tap for the
full solution



ANSWER KEY

Section A (MCQ) — 1 question

Ques.	1																		
Ans.	4																		

Section B (Numerical) — 1 question

Ques.	2																		
Ans.	2																		