

Worksheet: Solutions

IB · Class 12 · Chemistry · 5 questions · 13 marks

Name: _____

Date: _____

Score: _____ / 13

Q1. Calculate the molality of a solution of 10 g glucose ($M = 180$) in 250 g water. [2 marks]

Q2. Calculate the osmotic pressure of 0.1 M glucose solution at 27 C. [2 marks]

Q3. Pure water has vapour pressure 23.76 mm Hg at 25 C. Find the vapour pressure of a solution of 10 g urea ($M = 60$) in 100 g water. [3 marks]

Q4. 0.5 g of a non-electrolyte in 50 g water gives a freezing point of -0.186 C ($K_f = 1.86$). Find the molar mass. [3 marks]

Q5. A 0.1 M KCl solution has $\Delta T_f = 0.335$ C ($K_f = 1.86$). Find the van't Hoff factor. [3 marks]
