1st Monday Unit Test Chemistry 2026

Time : 1hour. **M.marks**

NOTE : ANSWER THE FOLLOWING QUESTIONS

1. When and why is molality preferred over molarity in handling solutions in che

2. Which solution has higher concentration,1 molar or 1 molal solution of the sar

3. **Give reasons for the following :**

a) Why oxygen mixed with helium is used by deep sea divers ?

b) Aquatic species are more comfortable in cold water than warm water.

c) At higher altitudes, people suffer from anoxia resulting in inability to think.

. (a) Two liquids A and B on mixing produce awarm solution. Which type of d
now ?

) Why does a solution of ethanol and cyclohexane show positive deviation fr

After removing the outer shell of two eggs in dil. HCI, one is placed in disti

the other is placed in a saturated solution of NaCl. What will you observe ar

What is de-icing agent ? How does it work ?

Explain why equimolar aqueous solutions of sodium chloride and sodium s
they produce different total concentrations of
What type of azeotropic mixture will be formed by a solution of acetone ar

the basis of strength of intermolecular interactions that develop in the solu

a) What is the effect of temperature on the solubility of glucose in water?

Ibrahim collected a 10 mL each of fresh water and ocean water. He observ
e at 0°C while the other "Q" at – 1.3°C. Ibrahim forgot which of two, P c
ntify which container contains ocean water, giving rationalization for you

Calculate Van't Hoff factor for an aqueous solution of $K_3[Fe(CN)_6]$ if the
t will be boiling point of this solution if its concentration is 1 molal ? (K

(a) What type of deviation from Raoult's Law is expected when phenol
r? What change in the net volume of the mixture is expected? Graphica

he vapour pressure of pure water at a certain temperature is 23.80 mm
electrolytic solute is dissolved in 100 g water, calculate the resultant va

Based Questions

E : Colligative properties depend upon the number of particles of