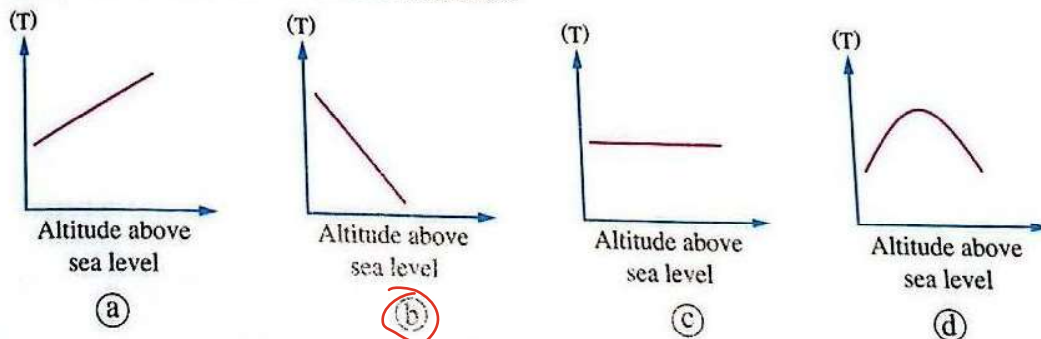


- 8 When does the liquid reach the dynamic equilibrium state?
 (a) When the evaporation rate is higher than the condensation rate.
 (b) When the evaporation rate is equal to the condensation rate.
 (c) When the condensation rate is greater than the evaporation rate.
 (d) When evaporation continues and condensation vanishes.
- 9 What are the consequences of using salt or sugar in preserving some beverages?
 (a) Increasing the liquid vapor pressure. (b) Decreasing the liquid vapor pressure.
 (c) Improving the taste only. (d) Decreasing the liquid boiling point.
- 10 Which of the following factors doesn't affect the boiling point of the solution?
 (a) Atmospheric pressure. (b) Concentration of the solution.
 (c) Volume of the solution. (d) The number of solute ions.
- 11 What is the effect of increasing the number of solute molecules in the solution on the solution boiling point and its osmotic pressure respectively?
 (a) Increases / Increases. (b) Decreases / Decreases.
 (c) Increases / Decreases. (d) Decreases / Increases.
- 12 Which of the following sugar solutions has the highest boiling point?
 (a) Solution of concentration 10 g/L. (b) Solution of concentration 5 g/L
 (c) Solution of concentration 9 g/L (d) Solution of concentration 1 g/L
- 13 Which of the following graphs represents the relation between the boiling point of pure water (T) and the altitude above sea level?



- 14 * If the freezing point of a pure solvent is 0°C , what will be the freezing point if 5g of salt is dissolved in it?
 (a) Less than 0°C (b) Higher than 0°C (c) Equals 0°C (d) $0^{\circ}\text{C} : 4^{\circ}\text{C}$
- 15 If the boiling point of a solution at a mountaintop is 108°C , therefore the boiling point of the same solution on the Earth's surface is
 (a) 106°C (b) 104°C (c) 108°C (d) 110°C
- 16 What is the reason for the depression in the freezing point of an aqueous solution comparing to the freezing point of pure water?
 (a) The attraction forces between the solute molecules and water molecules obstruct the freezing.
 (b) Pure water contains a larger number of dissolved molecules.
 (c) Dissolved salts in the solution reduce its osmotic pressure.
 (d) Decreasing the vapor pressure of pure water.