NAT I Engineering Chemistry

Sr	Questions	Answers Choice
1	The osmotic pressure of solution increases if	A. Temperature is decreased B. Solution constant is increased C. Number of solute molecules are increased D. Volume is increased
2	Which of the following is a colligative property?	A. Melting point B. Osmotic pressure C. Freezing point D. Sublimation temperature
3	In cold countries ethylene glycol is added to water in radiators of cars during winter It result in	A. Lowering in b.pt. B. Reducing viscosity C. Reducing specific heat D. Lowering in freezing pt.
4	The freezing point of 1 molal NaCl solution assuming NaCl to be 100% dissociated in water in	A. -1.86°C B. -3.72°C C. +1.86°C D. +3.72°C
5	When pressure is applied to the equilibrium system Ice Water Which of the following phenomenon will happen?	A. More ice will be formed B. Water will evaporate C. More water will be formed D. Equilibrium will not be formed
6	For the reaction $2A(g) + B(g) \rightleftharpoons 3C(g) + D(g)$ two moles each of A and B were taken into a flask The following must always be true when the system attained equilibrium	A. [A] = [B] B. [A] < [B] C. [B] = [C] D. [A] > [B]
7	A chemical reaction A B is said to be in equilibrium when	A. Complete conversion of A to B has taken place B. Conversion of A to B is only 50% complete C. Only 10% conversion of A to B has taken place D. The rate of transformation of A to B is just equal to rate of transformation of B to A in the system
8	The equilibrium constant in a reversible chemical reaction at a given temperature	A. Depends on the initial concentration of the reactants B. Depends on the concentration of one of the products at equilibrium C. Does not depend on the initial concentrations of recatants D. Is not characteristic of the reaction
9	Which of the following will not change the concentration of ammonia in the equilibrium $N_2(g) + 3H_2(g) \rightleftharpoons 2NH_3(g)$: ΔH = -kj	A. Increase of pressure B. Increase of temperature C. Decrease of volume D. Addition of catalyst
10	In a reversible chemical reaction having two reactants in equilibrium if the concentration of the reactants are doubled then the equilibrium constant will	A. Also be doubled B. Be halved C. Becomes one fourth D. Remains the same