

ECAT Physics Chapter 11 Heat & Thermodynamics Online Test

Sr	Questions	Answers Choice
1	If R is gas constant for 1 gram mole, C_p and C_v are specific heat for a solid then	<p>A. $C_p - C_v = R$</p> <p>B. $C_p - C_v = R$</p> <p>C. $C_p - C_v = 0$</p> <p>D. $C_p - C_v = R$</p>
2	Triple point of water is	<p>A. 273.16°F</p> <p>B. 372.16K</p> <p>C. 273.16°F</p> <p>D. 273.16</p>
3	Rate of diffusion is	<p>A. Faster in solids than in liquids and gases</p> <p>B. Faster in liquids than in solids and gases</p> <p>C. Equal to solids, liquids and gases</p> <p>D. Faster in gases than in liquids and solids</p>
4	Pressure of a gas at constant volume is proportion to	<p>A. Total energy of gas</p> <p>B. Average P.E to molecules</p> <p>C. Average K.E of molecules</p> <p>D. Total internal energy of gas</p>
5	According to kinetic theory of gases, molecules of a gas behave like	<p>A. Inelastic spheres</p> <p>B. Perfectly elastic rigid sphere</p> <p>C. Perfectly elastic non-rigid spheres</p> <p>D. Inelastic non-rigid spheres</p>
6	10 c.c. each of oxygen and hydrogen are kept in separate flasks. Then which of the following relations is correct?	<p>A. Each have same number of molecules</p> <p>B. Don't have same number of molecules</p> <p>C. Can't be predicted</p> <p>D. None</p>
7	An isochoric process is one which take place at	<p>A. Constant internal energy</p> <p>B. Constant entropy</p> <p>C. Constant volume</p> <p>D. Constant pressure</p>
8	Brownian motion increases due to	<p>A. Increase in size of Brownian particle</p> <p>B. Increase in temperature of medium</p> <p>C. Increase in density of medium</p> <p>D. Increase in viscosity of medium</p>
9	If the ratio of densities of two gases is 1:4, then the ratio of their rates of diffusion into one another is	<p>A. 2 : 1</p> <p>B. 4 : 1</p> <p>C. 1 : 4</p> <p>D. 3 : 4</p>
10	The volume of a gas will be double of what it is at 0°C (pressure remaining constant) at	<p>A. 546 K</p> <p>B. 273 K</p> <p>C. 546°C</p> <p>D. 273°C</p>
11	Energy gas behaves like an ideal gas at	<p>A. High temperature and low pressure</p> <p>B. Low temperature and high pressure</p> <p>C. Both A and B</p> <p>D. None</p>

12	R.M.S velocity of a particle is V at pressure P . If pressure increases by two times, then R.M.S velocity becomes	A. $\frac{1}{2}V$ B. $3V$ C. $0.5V$ D. V
13	Maximum density of H_2O is at the temperature	A. $32^\circ F$ B. $39.2^\circ F$ C. $42^\circ F$ D. $4^\circ F$
14	At $0^\circ K$ which of the following properties of a gas will be zero?	A. Kinetic energy B. Potential energy C. Vibrational energy D. Density
15	The product of the pressure and volume of an ideal gas is	A. A constant B. Approximately equal to the universal gas constant C. Directly proportional to its temperature D. Inversely proportional to its temperature