MDCAT Chemistry Chapter 3 Gases Online Test

Sr	Questions	Answers Choice
1	The pressure exerted by gas molecules is due to their	A. collisions B. densities C. masses D. kinetic energy
2	The temperature of a gas is directly proportional to its	A. average translational kinetic energy B. enthalpy C. internal energy D. hydration energy
3	The motion imparted to the gas molecules by gravity is	A. very small B. very large C. negligible D. appreciable
4	Theoretically, the temperature at which volume of gas become equal to zero is called	A. Boiling point of water B. Zero absolute C. Zero Kelvin D. both B and C
5	.The number of moles in 2.24 dm3 of H2 gas at STP is:	A. 1 B. 0.1 C. 10 D. 0.01
6	One dm3 of H2 and O2: has different masses but no. of particles are	A. same B. H2 has greater C. different D. O2 has greater
7	The pressure of gas at constant temperature in a container of 2dm3 is 10 atm what will be its final pressure if it is connected with 10 dm3 container	A. 2 atm B. 1.6 atm C. 5 atm D. I atm
8	Which one of the following statements is wrong for gases?	A. gases do not have a definite shape and volume B. volume of the gas is equal to volume of container confining the gas C. confirmed gas exerts uniform pressure on the walls of its container in which it is enclosed D. mass of gas cannot be determined by weighing a container in which it is enclosed
9	The root mean square velocity of a gas is doubled when the temperature is	A. reduced to half. B. reduced to one-fourth C. increased four times D. inereased two times
10	At constant volume, for a fixed number of moles of a gas the pressure of the gas increases with size of temperature due to	A. increase in average molecular speed B. increase in number of moles C. increase in molecular attraction D. decrease in the distance between the molecules
11	The molecular speed Crms of gas is	A. Independent of temperature B. Proportional to the absolute temperature C. Proportional to the square root of absolute temperature D. Proportional to the square of absolute temperature
12	Which is not true in case of an ideal gas?	A. It cannot be converted into a liquid B. There is no interaction between the molecules C. All molecules of the gas move with same speed D. At a given temperature P'V is proportional to the amount of the gas

13	According to kinetic theory of gases kinetic energy depends on	A. Temperature B. Collision C. Pressure D. Atomic number
14	Acording to the kinetic theory of gases	A. The pressure exerted by a gas is proportional to mean square velocity of the molecules B. The pressure exerted by the gas is proportional to the root mean square velocity of the molecules C. The root mean square velocity is inversely proportional to the temperature D. The mean translational KE of the molecule is directly proportional to the absolute temperature
15	An ideal gas expands according to PV=constant. On expansion, the temperature of gas	A. will rise B. will drop C. cannot be determined because the exteral pressure is not known D. will remain same
16	The density of neon will be highest at	A. STP B. 0°C, 2 atm C. 273°C, 1 atm D. 273°C, 2 atm
17	If a gas expands at constant temperature	A. The pressure decreases B. The Kinetic energy of the molecules remains the same C. The kinetic energy of the molecules decreases D. The number of molecules of the gas increase
18	What are the conditions under which the relation between volume (V) and number of moles (n) of gas is plotted? (Pressure; T-temperature)	A. constant P and T B. constant P and V C. constant T and V D. constant n and v
19	An ideal gas, obeying Kinetic theory of gases cannot be liquified, because	A. its critical temperature is above 0°C B. its molecules are relatively small in size C. It solidifies before becoming a liquid D. Forces acting between its molecules are negligible
20	If temperature is 73K and volume is 146 cm3 then calculate the value of K=V/T	A. 5 B. 4 C. 3 D. 2