

MDCAT Chemistry Chapter 3 Atomic Structure Online Test

Sr	Questions	Answers Choice
1	At higher temperature what is true for gases	A. pressure is decreased B. volume is decreased C. number of moles are decreased D. KE is increased
2	The number of molecules in 22.4 dm ³ of gas at 0°C and 1 atm are	A. 6.02×10^{23} B. 6.02×10^{25} C. 6.02×10^{22} D. 6.02×10^{21}
3	The volume of given mass of gas is directly proportional to absolute temperature when pressure is kept constant this is called	A. Boyle's law B. Charles's law C. Graham's law D. Dalton's law
4	Which type of motion is exhibited by gases?	A. Vibrational B. Transitional C. Rotational D. All of them
5	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
6	Charles's law is only obeyed at which temperature scale	A. Celsius B. Kelvin C. Fahrenheit D. both A&B
7	For an ideal gas, number of mole in terms of its pressure P, temperature T and gas constant is	A. PT/R B. PRT C. PV/RT D. RT/P
8	The volume of gas depends upon the----- molecules	A. Size of B. Space between C. Molecular weight D. both a and b
9	One dm ³ of H ₂ and O ₂ : has different masses but no. of particles are	A. same B. H ₂ has greater C. different D. O ₂ has greater
10	Which of the following is the correct equation to calculate relative molecular mass of a gas	A. $M = mPRTV$ B. $M = mPR/VT$ C. $M = PV/mRT$ D. $M = mRT/PV$
11	At absolute zero the molecules of hydrogen gas will have	A. Only translational motion B. Only vibrational motion C. Only rotational motion D. All the motion are ceased
12	The mono atomic gases are	A. Halogens B. Noble gases C. 6h group elements D. Nitrogen and oxygen
13	Density of a gas increases by	A. increasing value of R B. decreasing value of R C. increasing T D. decreasing T
14	The volume of a real gas	A. is constant B. increases with T decrease C. becomes zero at absolute zero D. never becomes zero
15	At higher temperature isotherm of Boyle's law moves away from both axis, is due to increase in:	A. pressure B. No. of moles C. Volume D. All

D. All

16	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
17	The pressure of gas at constant temperature in a container of 2dm ³ is 10 atm what will be its final pressure if it is connected with 10 dm ³ container	A. 2 atm B. 1.6 atm C. 5 atm D. 1 atm
18	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
19	The temperature of a gas is directly proportional to its	A. average translational kinetic energy B. enthalpy C. internal energy D. hydration energy
20	The actual volume of gas molecules is considered negligible at following pressures	A. 2atm B. 4atm C. 6 atm D. 8 atm