MDCAT Chemistry Chapter 3 Atomic Structure Online Test

Sr	Questions	Answers Choice
1	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
2	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
3	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
4	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
5	At absolute zero the molecules of hydrogen gas will have	A. Only translatioral motion B. Only vibrational motion C. Only rotational motion D. All the motion are ceased
6	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
7	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 of these
8	The relationship between density and molar mass of a gas is	A. Directly proportional B. ^{Inversly proportional} C. Straight line D. Stoichiometric
9	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
10	If volume of an ideal gas at 0°C 536cm3, what is volume at 1°C	A. 373 cm3 B. 646 cm3 C. Becomes 0cm3 D. 746 cm3
11	Helium atom is two times heavier than a hydrogen molecule. At 298 K, the average kinetic energy of a helium atom is	A. same as that of a hydrogen molecule B. half that of a hydrogen molecule C. two times that of a hydrogen molecule D. four times that of hydrogen molecule
12	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

13	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
14	Which of the statement is applicable for both ideal and real gases molecules?	A. Have no forces of attraction B. Collisions between the molecules is elastic C. Molecules are in random movement D. The actual volume of gas is negligible as compared to the volume of gas
15	The number of molecules in 22.4 dm3 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)
16	Charles's law is only obeyed at which temperature scale	A. Celsius B. Kelvin C. Fahrenheit D. both A&B
17	Density of a gas increases by	A. increasing value of R B. decreasing value of R C. increasing T D. decreasing T
18	The motion imparted to the gas molecules by gravity is	A. very small B. very large C. negligible D. appreciable
19	The pressure exerted by gas molecules is due to their	A. collisions B. densities C. masses D. kinetic energy
20	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