

MDCAT Chemistry Chapter 3 Atomic Structure Online Test

Sr	Questions	Answers Choice
1	The mono atomic gases are	A. Halogens B. Noble gases C. 6h group elements D. Nitrogen and oxygen
2	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. $M = mRT/PV$
3	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
4	The relationship between density and molar mass of a gas is	A. Directly proportional B. ^{<sup>} Inversly proportional</sup> C. Straight line D. Stoichiometric
5	Under which condition CO has the maximum molar volume	A. high T and P B. Low T and High p C. high T and low P D. Low T and low P
6	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
7	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
8	The volume of a real gas	A. is constant B. increases with T decrease C. becomes zero at absolute zero D. never becomes zero
9	.The number of moles in 2.24 dm ³ of H ₂ gas at STP is:	A. 1 B. 0.1 C. 10 D. 0.01
10	Under which condition CO has the maximum molar volume.	A. high T and P B. Low T and High p C. high T and low pressure D. Low T and low P
11	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
12	If increase in temperature and volume of an ideal gas is two times, then the initial pressure P changes to	A. 4P B. P C. 2P D. 3P
13	An ideal gas expands according to $PV = \text{constant}$. On expansion, the temperature of gas	A. will rise B. will drop C. cannot be determined because the external pressure is not known D. will remain same
14	Which type of motion is exhibited by gases?	A. Vibrational B. Transitional C. Rotational D. All of them

15	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
16	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
17	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
18	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
19	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
20	If volume of an ideal gas at 0C° 536cm ³ , what is volume at 1°C	A. 373 cm ³ B. 646 cm ³ C. Becomes 0cm ³ D. 746 cm ³