

ECAT Chemistry Chapter 3 Gases

Sr	Questions	Answers Choice
1	Pressure remaining constant, at which temperature volume of gas will become twice of what it is at 0°C ?	<p>A. 546K</p> <p>B. 200</p> <p>C. 546K</p> <p>D. 273K</p>
2	The deviation of a gas from ideal behavior is maximum at :	<p>A. -10°C and 5.0 atm</p> <p>B. -10°C and 2.0 atm</p> <p>C. 100°C and 2.0 atm</p> <p>D. 0°C and 2.0 atm</p>
3	The intramolecular forces in gases are	<p>A. Weak</p> <p>B. Normal</p> <p>C. Very weak</p> <p>D. Strong</p>
4	The relations b/w volume of given amount of gas and prevailing conditions of temperature and pressure are :	<p>A. Charles's law</p> <p>B. Graham's law</p> <p>C. Boyle's law</p> <p>D. Gas law</p>
5	The rate of diffusion of a gas in	<p>A. Inversely proportional to its density</p> <p>B. Inversely proportional to square root of its molecular mass</p> <p>C. Directly proportional to molecular mass</p> <p>D. Directly proportional to its density</p>
6	How should condition be changed to prevent the volume of a given gas from expanding when its mass is increased ?	<p>A. Temperature is lowered and pressure is increased</p> <p>B. Temperature is increased and pressure is lowered</p> <p>C. Temperature and pressure both are lowered</p> <p>D. Temperature and pressure both are increased</p>
7	Absolute temperature of a gas is proportional to	<p>A. Rotational kinetic energy</p> <p>B. Translational kinetic energy</p> <p>C. Vibrational kinetic energy</p> <p>D. Potential energy</p>
8	Equal masses of methane and oxygen are mixed in an empty container at 25°C. The fraction of total pressure exerted by oxygen is :	<p>A. 1/2</p> <p>B. 8/9</p> <p>C. 1/9</p> <p>D. 16/17</p>
9	Gases show uniform behavior toward their :	<p>A. Internal conditions</p> <p>B. External conditions</p> <p>C. Internal and external conditions</p> <p>D. None of above</p>
10	The product of pressure and volume remains constant when temperature and quantity of gas is	<p>A. zero</p> <p>B. variable</p> <p>C. kept constant</p> <p>D. ...</p>

D. None of these

11	Which of the following will have the same number of molecules at STP ?	<p>A. 280 CM^3 of CO_2 and 280 CM^3 of N_2</p> <p>B. 11.2 dm^3 of O_2 and 32 g of O_2</p> <p>C. 44 g of CO_2 and 11.2 dm^3 of CO</p> <p>D. 28 g of N_2 and 5.6 dm^3 of oxygen</p>
12	The movement of molecules from a region of high pressure to vacuum is called :	<p>A. Evaporation</p> <p>B. Effusion</p> <p>C. Conduction</p> <p>D. Diffusion</p>
13	Boyle's law does not fail even	<p>A. Temperature is extremely high</p> <p>B. Pressure is extremely high</p> <p>C. Mixture of gases is taken</p> <p>D. all of above</p>
14	Gases of air always remain in random motion and do not settle due to :	<p>A. Difference in molecular masses of air gases.</p> <p>B. Difference in partial pressure of gas molecules.</p> <p>C. Unequal number of different gas molecules.</p> <p>D. Elastic collision of gas molecules.</p>
15	The rate of diffusion of a gas is :	<p>A. Inversely proportional to its density</p> <p>B. Inversely proportional to square root of its molecular mass</p> <p>C. Directly proportional to molecular mass</p> <p>D. Directly proportional to its density</p>
16	Keeping the temperature constant, if the gas is expanded	<p>A. kinetic energy of molecules will increase</p> <p>B. Number of gas molecules increases</p> <p>C. Temperature will increase</p> <p>D. Pressure will decrease</p>
17	For a gas obeying Boyle's law if pressure is doubled, the volume becomes :	<p>A. Remain constant</p> <p>B. Double</p> <p>C. One half</p> <p>D. None of above</p>
18	Cooling happens under the Joule Thomson Effect due to sudden :	<p>A. Contraction</p> <p>B. Absorption</p> <p>C. Expansion</p> <p>D. All of above</p>
19	Boyle's law doesn't fail even :	<p>A. Temperature is extremely high</p> <p>B. Pressure is extremely high</p> <p>C. Mixture of gas is taken</p> <p>D. All of above</p>
20	Gases of air, always remain in random motion and do not settle due to	<p>A. Difference in molecular masses of air gases</p> <p>B. Difference in partial pressure of gas molecules</p> <p>C. Unequal number of different gas molecules</p> <p>D. Elastic collision of gas molecules</p>