

ECAT Chemistry Chapter 3 Gases

Sr	Questions	Answers Choice
1	All gases can be compressed by :	A. Keeping constant pressure B. Decreasing pressure C. Increasing pressure D. None of the above
2	Gases exert pressure on walls of container because the gas molecules	A. Obey gas laws B. Have definite volume C. Collide with the walls of container D. Collide with each other
3	Gases shows uniform behavior toward their :	A. Internal conditions B. External conditions C. Internal and external conditions D. None of above
4	In Boyle's law which of the following pair remains constant :	A. Temperature and quality of a gas. B. Pressure and quality of a gas. C. Temperature and pressure D. Temperature and quantity of a gas.
5	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of the gas will be	A. Remain unchanged B. Doubled C. Reduced D. Increased four times
6	Number of molecules in one dm^3 of water is close to :	A. $6.02/22.4$ B. $12.04/22.4$ C. $18/22.4$ D. 55.6
7	The ratio of volume to temperature on Kelvin scale is constant according to	A. Charle's law B. Newton's law C. Coulomb's law D. Boyle's law
8	The relationships between volume of a given amount of gas and the prevailing conditions of temperature and pressure are	A. Charle's Law B. Graham's Law C. Boyle's Law D. Gas Laws
9	According to Boyle's law, which parameters give a straight line parallel to axis-s, when we plot a graph between:	A. V and T B. P and V C. P and 1/V D. P and PV
10	Gases of air always remain in random motion and do not settle due to :	A. Difference in molecular masses of air gases. B. Difference in partial pressure of gas molecules. C. Unequal number of different gas molecules. D. Elastic collision of gas molecules.
11	The order of the rate of diffusion of gases NH_3 , SO_2 , CL_2 , and CO_2 IS :	A. $\text{NH}_3 > \text{SO}_2 > \text{CL}_2 > \text{CO}_2$ B. $\text{NH}_3 > \text{CO}_2 > \text{CL}_2 > \text{SO}_2$ C. $\text{CL}_2 > \text{SO}_2 > \text{CO}_2 > \text{NH}_3$ D. $\text{NH}_3 > \text{CO}_2 > \text{CL}_2 > \text{SO}_2$
12	Pressure remaining constant, at which temperature volume of gas will become twice of what it is at 0°C ?	A. 546°C B. 200°C C. 546K D. 273K

13	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>
14	The movement of gas 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>
15	Which of the following is the simplest form of matter?	<p>A. Gaseous state</p> <p>B. Liquid State</p> <p>C. Solid State</p> <p>D. All of above</p>
16	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>
17	The density of a gas is directly and volume at constant temperature for a gas is	<p>A. Isobaric</p> <p>B. Isothermal</p> <p>C. Isotherm</p> <p>D. None of above</p>
18	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of gas will :	<p>A. remain unchanged</p> <p>B. increase four times</p> <p>C. reduce to $1/4$</p> <p>D. be doubled</p>
19	The intramolecular force in gases are :	<p>A. Weak</p> <p>B. Normal</p> <p>C. Very weak</p> <p>D. Strong</p>
20	In Boyle's law which of the following pair remains constant	<p>A. Temperature and quality of a gas</p> <p>B. Pressure and quality of a gas</p> <p>C. Temperature and pressure</p> <p>D. Temperature and quantity of a gas</p>