ECAT Chemistry Chapter 3 Gases Online Test

Sr	Questions	Answers Choice
1	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of gas will :	A. remain unchanged B. increase four times C. reduce to 1/4 D. be doubled
2	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of gas will :	A. remain unchanged B. increase four times C. reduce to 1/4 D. be doubled
3	Which of the following will have the same number of molecules at STP ?	A. 280 CM³ of CO² and 280 CM³ of N₂O<o:p></o:p> B. 11.2 dm3 of O₂ and 32 g of O₂ <o:p></o:p> C. 44 g of CO₂ and 11.2 dm³ of CO<o:p></o:p> D. 28 g of N2 and 5.6 dm³ of oxygen<o:p></o:p>
4	Number of molecules in one dm^3 of water is close to :	A. 6.02/22.4<o:p> </o:p> B. 12.04/22.4 *10^{23 <o:p></o:p>} C. 18/22.4*10²³ D. 55.6*6.02*10²³* 10²³
5	Pressure remaining constant, at which temperature volume of gas will become twice of what it is at 0°C ?	A. 546<o:p></o:p> B. 200 C. 546K D. 273K
6	At constant temperature when pressure of a gas is plotted against volume, the curve is	A. Slanting straight line B. Parabolic C. Staight line, parallel to pressure axis D. OF neither type
7	Keeping the temperature constant, if the gas is expanded	A. kinetic energy of molecules will increase B. Number of gas molecules increases C. Temperature will increases D. Pressure will decrease
8	The highest temperature at which a substance can exist as a liquid is called its	A. Critical temperature B. Zero temperature C. Absolute temperature D. None of above
9	Absolute temperature of a gas is proportional to	A. Rotational kinetic energy B. Translational kinetic energy C. Vibrational kinetic energy D. Potential energy
10	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
11	The density of a gas is directly proportional to pressure, inversely proportional to temperature and directly proportional to	A. Viscosity B. Molar mass C. Momentum D. All of above
12	The density of a gas is directly and volume at constant temperature for a gas is	A. Isobaric B. Isothermal C. Isotherm D. None of above

13	The graph between pressure and volume at constant temperature for a gas is	A. Isobaric B. Isothermal C. Isotherm D. None of above
14	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
15	The product of pressure and volume remains constant when temperature and quantity of gas is	A. zero B. variable C. kept constant D. None of these
16	A graph between P and PV at constant temperature and number of mole is parallel to	A. y axis B. z axis C. x axis D. pressure axis
17	A graph between P and 1/V at constant temperature and number moles of a gas meets the	A. y-axis B. x-axis C. origin D. none of above
18	Boyle's law does not fall even	A. Temperature is extremely high B. Pressure is extremely high C. Mixture of gases is taken D. all of above
19	According to Boyle's law. which parameters give a straight line parallel to x-axis, when we plot a graph between	A. V and T B. P and V C. P and 1/V D. P and PV
20	For a gas obeying Boyle's law if pressure is doubled, the volume becomes	A. Remains constant B. Double C. One half D. None of above
21	In Boyle's law which of the following pair is variable	A. Temperature and quantity of a gas B. Pressure and Volume C. Volume and quantity of a gas D. Pressure and quantity of a gas
22	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
23	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
24	The intramolecular forces in gases are	A. Weak B. Normal C. Very weak D. Strong
25	Liquids are less common than	A. Solids B. Plasmas C. Gases D. All of above
26	Gases show uniform behaviour towards their	A. Internal conditions B. External conditions C. Internal and external conditions D. None of above
27	Cooling happens under the Joule Thomson Effect due to sudden	A. Contraction B. Absorption C. Expansion D. All of above
28	In Solids, the temperature is the measure of	A. Rotational kinetic energies B. Translational kinetic energies C. Vibrational kinetic energies D. None of above
29	In gases and liquids, temperature is the measure of	A. Average translational kinetic energies of molecules B. Average vibrational kinetic energies of molecules C. Average rotational kinetic energies of molecules D. None of above

30	The rate of diffusion of a gas in	A. Inversely proportional to its density B. Inversely proportional to square root of its molecular mass C. Directly proportional to molecular mass D. Directly proportional to its density