

## ECAT Chemistry Chapter 3 Gases

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	A graph b/w P and 1/V at constant temperature and number of moles is parallel to :	A. None of above B. X-axis C. Z-axis D. Y-axis
3	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
4	Gases shows uniform behavior toward their :	A. Internal conditions B. External conditions C. Internal and external conditions D. None of above
5	At constant temperature when pressure of a gas is plotted against volume, the curve is	A. Slanting straight line B. Parabolic C. Straight line, parallel to pressure axis D. OF neither type
6	Cooling happens under the Joule Thomson Effect due to sudden	A. Contraction B. Absorption C. Expansion D. All of above
7	For a gas obeying Boyle's law if pressure is doubled, the volume becomes :	A. Remain constant B. Double C. One half D. None of above
8	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
9	Boyle's law doesn't fail even :	A. Temperature is extremely high B. Pressure is extremely high C. Mixture of gas is taken D. All of above
10	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
11	All gases can be compressed by	A. Keeping constant pressure B. Decreasing pressure C. Increasing pressure D. None of above
12	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.
13	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
14		A. $\infty$ B. $\frac{1}{2}$ C. $\frac{1}{4}$ D. $\frac{1}{8}$

14	Boyle's law is represented as :	<p>B. <math>V</math> and <math>1/P</math></p> <p>C. <math>P &lt; \propto &lt; \text{span style='font-size: 18pt; line-height: 25.68px;'&gt;&gt; &lt; /span &gt; &lt; /b &gt; P</math></p> <p>D. <math>P &lt; \propto &lt; \text{span style='font-size: 18pt; line-height: 25.68px;'&gt;&gt; &lt; /span &gt; &lt; /b &gt; 1/P</math></p>
15	Liquids are less common than :	<p>A. Solids</p> <p>B. Plasmas</p> <p>C. Gases</p> <p>D. All of above</p>
16	A real gas obeying van der Waals' equation will resemble ideal gas if :	<p>A. both 'a' and 'b' are large</p> <p>B. both 'a' and 'b' are small</p> <p>C. 'a' is small and 'b' is large</p> <p>D. 'a' is large and 'b' is small</p>
17	The order of the rate of diffusion of gases $\text{NH}_3$ , $\text{SO}_2$ , $\text{CL}_2$ , and $\text{CO}_2$ IS :	<p>A. <math>\text{NH}_3 &gt; \text{SO}_2 &gt; \text{CL}_2 &gt; \text{CO}_2</math></p> <p>B. <math>\text{NH}_3 &gt; \text{CO}_2 &gt; \text{SO}_2 &gt; \text{CL}_2</math></p> <p>C. <math>\text{CL}_2 &gt; \text{SO}_2 &gt; \text{CO}_2 &gt; \text{NH}_3</math></p> <p>D. <math>\text{NH}_3 &gt; \text{CO}_2 &gt; \text{CL}_2 &gt; \text{SO}_2</math></p>
18	The intramolecular forces in gases are	<p>A. Weak</p> <p>B. Normal</p> <p>C. Very weak</p> <p>D. Strong</p>
19	Gases show uniform behaviour towards their	<p>A. Internal conditions</p> <p>B. External conditions</p> <p>C. Internal and external conditions</p> <p>D. None of above</p>
20	If absolute temperature of a gas is doubled and the pressure is reduced to one half, the volume of the gas will be	<p>A. Remain unchanged</p> <p>B. Doubled</p> <p>C. Reduced</p> <p>D. Increased four times</p>