


ECAT Chemistry Chapter 1 Basic Concepts

Sr	Questions	Answers Choice
1	Cl ₂ , N ₂ and O ₂ are:	<p>A. Diatomic molecules</p> <p>B. Hetero atomic molecules</p> <p>C. Poly-atomic molecules</p> <p>D. Mono-atomic molecules</p>
2	A molecular ion is formed by	<p>A. Passing a high energy electron beam through gaseous molecule</p> <p>B. Dissolving a salt in dilute acid</p> <p>C. Passing electric current through molten salt</p> <p>D. Passing electricity through aqueous solutions</p>
3	The number of isotopes of gold is	<p>A. 3</p> <p>B. 1</p> <p>C. 2</p> <p>D. 4</p>
4	Atoms can be evident by use of electron microscope, field ionization microscope and:	<p>A. x-rays</p> <p>B. Video camera</p> <p>C. Telescope</p> <p>D. Compound microscope</p>
5	C ₆ H ₁₂ O ₆ and C ₁₂ H ₂₂ O ₁₁ are:	<p>A. Mono-atomic molecules</p> <p>B. Diatomic molecules</p> <p>C. Poly-atomic molecules</p> <p>D. Hetero atomic molecules</p>
6	Which of the following compounds contains the highest percentage by mass of nitrogen?	<p>A. Ammonia, NH₃</p> <p>B. Ammonium carbamate, NH₂CO₂NH₄</p> <p>C. Ammonium carbonate, (NH₄)₂CO₃</p> <p>D. Hydrazine, N₂H₄</p>
7	Which one of the following compounds does not have the empirical formula CH ₂ O?	<p>A. Ethanoic acid, CH₃CO₂H</p> <p>B. Ethanol, CH₃CH₂OH</p> <p>C. Glucose, C₆H₁₂O₆</p> <p>D. Methanal, HCHO</p>
8	One mole of SO ₂ contains	<p>A. 6.02 x 10²³ atoms of oxygen</p> <p>B. 18.1 x 10²³ molecules of SO₂</p>

8	One mole of SO_2 contains	SO_2 C. 6.02×10^{23} atoms of sulphur D. 4 gram atoms of SO_2
9	X-ray work has shown that the diameters of atom are of the order of	A. 8×10^{-10} m B. 2×10^{-10} m C. 8×10^{-8} m D. 2×10^{-8} m
10	An ion bearing positive charge is called:	A. Cation B. Positron C. Anion D. None of above
11	The empirical formula of a compound is CH_2O . What may be the compound	A. $\text{C}_2\text{H}_5\text{OH}$ B. $\text{C}_6\text{H}_5\text{OH}$ C. HCOOH
12	A compound having empirical formula $\text{C}_3\text{H}_3\text{O}$ and its molecular mass is 110.02. Its molecular formula is	A. $\text{C}_3\text{H}_3\text{O}$ B. $\text{C}_6\text{H}_6\text{O}_2$ C. $\text{C}_9\text{H}_9\text{O}_3$ D. $\text{C}_3\text{H}_6\text{O}_2$
13	The relative abundance of Pb isotopes is 1.5% Pb^{204} , 23.6% Pb^{206} , 22.6% Pb^{207} , 52.3% Pb^{208} . The relative atomic mass of Pb is	A. 207.94 B. 208.24 C. 206.94 D. 207.24
14	A ring contains 3 gram diamond. The number of C-atoms which a ring contains is	A. 3.01×10^{23} B. 1.5×10^{23} C. 6.02×10^{24} D. 3.01×10^{24}
15	Al^{3+} is a symbol for aluminium	A. Atom B. Ion C. Cation D. Anion
16	The percentage of H is the highest in	A. CH_4 B. NH_3 C. H_2SO_4 D. $\text{C}_6\text{H}_{12}\text{O}_6$
17	How many moles of oxygen, O_2 are needed for the complete combustion of two moles of butane C_4H_{10} ?	A. 2 B. 8 C. 10 D. 13
18		A. 300 cm^3 B. 200 cm^3 C. 150 cm^3 D. 100 cm^3
19	The amount of products obtained from the balanced chemical equation is regarded as	A. Theoretical yield B. Actual yield C. % yield D. Experimental yield
20	The percentage of which element in the organic compound is determined by the difference method	A. Carbon B. Hydrogen C. Nitrogen D. Oxygen