ECAT Chemistry Chapter 1 Basic Concepts

Sr	Questions	Answers Choice
1	When nitrogen is 5.6 grams in NO_2. then number of moles of NO_2 is	A. 0.5 B. 0.4 C. 0.04 D. 0.05
2	Atoms and molecules can either gain or lose electrons, forming charge particles called:	A. Positrons B. Photons C. Ions D. Electrons
3	The branch of science dealing with structure, composition and changes in matter and laws and principles which govern these changes is called as	A. chesmistry B. Geology C. Physics D. Mechanics
4	When an electron is added to a uni positive ion we get:	A. Cation B. Molecule C. Neutral atom D. Anion
5	Isotopes of an element differ in	A. Number of protons B. Number of electrons C. Number of neutrons D. Number of electrons and protons
6	Question Image	A. 32 g B. 3.2 g C. 5.6 g D. 9.6 g
7	A species having positive or negative charge is called:	A. Electron B. Ion C. Proton D. Atom
8	Question Image	A. 300 cm^3 B. 200 cm^3 C. 150 cm^3 D. 100 cm^3
9	The number of subatomic particles in atoms sidcovered is more than:	A. 110 B. 100 C. 125 D. 90
10	Who one mole of each of the following is completely burned in oxygen, which gives the largest mass of carbon dioxide?	A. Carbon monoxide B. Diamond C. Ethane D. Methane
11	Which one of the following step is not involved in determination of empirical formula	A. Determination % of each element B. Determination of gram atom of each element C. Determination of isotopes of each element D. Determination of atomic ratio of element
12	What is the maximum mass of aluminium which can be obtained from 240g of aluminium oxide Al_2O_3?	A. 26 g B. 127 g C. 51 g D. 108 g
13	The quantitative relationship between the substances according to balanced equation describes	A. Reversible reactions B. Stoichiometry C. Limiting reacting D. Percentage composition
14	Two different hydrocarbon each contain the same percentage by mass of hydrogen. It follows that they have the same	A. Empirical formula B. Number of atoms in a molecules C. Number of isomers D. Relative molecular mass
		A. 85 grams $AgNO_3$

15	3.01×10^{22} Ag$^+$ions is present in	B. 0.85 g AgNO$_3$ C. 8.5 g AgNO$_3$ D. 18.5 g AgNO$_3$
16	Question Image	A. 99.2% B. 99.5% C. 90.5% D. 96.2%
17	The largest number of molecules are present in	A. 3.6 g of H$_2$O B. 4.8 g of C$_2$H$_5$OH C. 2.8 g of CO D. 5.4 g of N$_2$O$_5$
18	A compound having empirical formula C$_3$H$_3$O and its molecular mass is 110.02. Its molecular formula is	A. C$_3$H$_3$O B. C$_6$H$_6$O$_2$ C. C$_9$H$_9$O$_3$ D. C$_3$H$_6$O$_2$
19	Smallest particle of an element which may or may not have independent existence is known as:	A. A molecule B. An ion C. An atom D. An electron
20	The wave length of visible light is 500 nm. In S.I. unit this value is	A. 5 x 10^{-8}m B. 5 x 10^{-9}m C. 500 x 10^{-7}m D. 500 x 10^{-9}m