ECAT Chemistry Chapter 1 Basic Concepts

Sr	Questions	Answers Choice
1	One mole of ethanol and one mole of ethane have an equal	A. Mass B. Number of atoms C. Number of electrons D. Number of molecules
2	The pressure of vapours when sent to the ionization chamber in mass spectrometer is	A. 10⁻⁵to 10⁻⁶torr B. 10⁻⁶to 10⁻⁷torr C. 10⁻⁷to 10⁻⁸torr D. 10⁻³to 10⁻⁴torr
3	Objects of the size of an atom can be observed in	A. An electron microscope B. An x-ray spectrum C. Atomic absorption spectrum D. A visible spectrum
4	Isotopes differ in	A. properties which depend upon mass B. arrangement of electrons in orbitals C. chemical properties D. the extent to which they may be affected in electric fields
5	The negatively charged particles are called	A. Cation B. Radical C. Anion D. Positron
6	The wave length of visible light is 500 nm. In S.I. unit this value is	A. 5 x 10⁻⁸m B. 5 x 10⁻⁹m C. 500 x 10⁻⁷m D. 500 x 10⁻⁹m
7	Metal tend to lose electrons, becoming:	A. Metals<o:p></o:p> B. Positively charged<o:p></o:p> C. Negatively charged<o:p></o:p> D. (a) <!--[endif]-->And (c)<o:p> </o:p>
8	3.01 x 10^{22} Ag^{+} ions is present in	A. 85 grams AgNO₃ B. 0.85 g AgNO₃ C. 8.5 g AgNO₃ D. 18.5 g AgNO₃
9	Which statement about molecule is incorrect ?	A. Molecules of a substance are similar B. Hemoglobin is a homo atomic molecules C. Oxygen molecule is a macro molecule D. It exist independently
10	Which of the following statements is not true?	A. Isotopes with even atomic masses are comparatively abundant B. Isotopes with even atomic masses are comparatively abundant C. Isotopes with even atomic masses and even atomic numbers are comparatively abundant D. Isotopes with even atomic masses

		D. Isotopes with even atomic masses and odd atomic number are comparatively abundant
11	The amount of products obtained from the balanced chemical equation is regarded as	A. Theoretical yield B. Actual yield C. % yield D. Experimental yield
12	X-ray work has shown that the diameters of atom are of the order of	A. 8 x 10⁻¹⁰m B. 2 x 10⁻¹⁰m C. 8 x 10⁻⁸m D. 2 x 10⁻⁸m
13	A molecule of haemoglobin is made up if nearly	A. 10,000 atoms B. 50,000 atoms C. 2500 atoms D. 1500 atoms
14	0.5 mole of $CH_4$and 0.5 mole of SO_2gases have equal	A. Volume B. Mass is gram C. Total number of atoms D. Number of molecules
15	Covalent compound s mostly exist in the form of:	A. Protons<o:p></o:p> B. Atoms<o:p></o:p> C. <span style="font-size:11.0pt;line-height:107%; font-family:"Calibri","sans-serif";mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:"Times New Roman";mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">Neutrons D. Molecules<o:p></o:p>
16	Atoms can be evident by use of electron microscope, field ionization microscope and:	A. x-rays B. Video camera C. Telescope D. Compound microscope
17	One of the following statements is incorrect	A. Actual yeild is always less than the theoretical yield B. The formula of a compound is not definite C. Law of conservation of mass is applied in stoictiometry D. Boyles law is applied in stoichiometry
18	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
19	First atomic theory was put forward by an English school teacher:	A. Maxewell B. Newton C. Sanger D. John Dalton
20	A beaker contains 9 grams of water. The number of H-atoms is	A. 6.02 x 1023 B. 3.01 x 1023 C. 6.02 x 1024 D. 3.01 x 1024