ECAT Chemistry Chapter 1 Basic Concepts Online Test

Sr	Questions	Answers Choice
1	Ascorbic acid contains 40.92% carbon, 4.58%, hydrogen and 54.4% oxygen. The empirical formula is	A. $C_3H_4O_3$ B. $C_2H_4O_3$ C. $C_3H_5O_4$ D. $C_2H_3O_1$
2	The percentage of H is the highest in	A. CH_4 B. NH_3 C. H_2SO_4 D. $C_6H_{12}O_6$
3	Mass spectrometer measures the	A. Exact mass of an element B. Average mass of an element C. The number of elements present in a molecule D. m/e value of a positive ion
4	The relative atomic mass of chlorine is 35.5. What is the mass of 2 mol of chlorine gas	A. 142 g B. 71 g C. 35.5 g D. 18.75 g
5	Relative atomic mass of an element is the mass of the element relative to	A. 1/12 mass of carbon-12 B. 1/12 mass of carbon C. 1 mass of hydrogen atom D. 1/16 mass of oxygen
6	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
7	A molecular ion is formed by	A. Passing a high energy electron beam through gaseous molecule B. Dissolving a salt i dilute acid C. Passing electric current through molten salt D. Passing electricity through aqueous solutions
8	A beaker contains 9 grams of water. The number of H atoms is	A. 6.02×10^{23} B. 3.01×10^{23} C. 6.02×10^{24} D. 3.01×10^{24}
9	Where energy is released during a reaction it is	A. Exothermic reaction B. Endothermic reaction C. A free radical reaction D. A bond breaking reaction
10	Al^{3+} is a symbol for aluminium	A. Atom B. Ion C. Cation D. Anion
11	Which of the following statement is correct for a chemical reaction to occur molecules of substances must	A. Collide with each other B. Collide with energy more than activation energy C. Collide with energy less than activation energy D. Collide with high frequency
12	Each molecule of haemoglobin is 68000 times heavier than one atom of	A. C B. H C. N D. O
13	A molecule of haemoglobin is made up if nearly	A. 10,000 atoms B. 50,000 atoms C. 2500 atoms D. 1500 atoms
		A. A molecule is the smallest particle of an

14	Which one of the following statements is not correct	element which can exist independently B. He is a molecule of helium C. S_8 is a molecule of sulphur D. O_3 is a molecule of oxygen
15	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
16	The atomic mass is measured in atomic mass unit (a.m.u.) which is equal to	A. 1.661×10^{-27} Kg B. 1.661×10^{-24} Kg C. 1.661×10^{-27} g D. 1.661×10^{-24} mg
17	The wave length of visible light is 500 nm. In S.I. unit this value is	A. 5×10^{-8} m B. 5×10^{-9} m C. 500×10^{-7} m D. 500×10^{-9} m
18	Which of the sub-atomic particles is not charged	A. Electron B. Proton C. Neutron D. All of them
19	The atom of an element is	A. The smallest particle B. The fundamental particle C. The independent particle D. The charged particle