ECAT Chemistry Chapter 1 Basic Concepts Online Test

Sr	Questions	Answers Choice
1	Isotopes of an element differ in	A. Number of protons B. Number of electrons C. Number of neutrons D. Number of electrons and protons
2	The phenomenon of isotropy was first discovered by	A. Soddy B. Rutherford C. Bohr D. Dalton
3	The isotopes of an element	A. Possess same mass number B. Possess same number of protons C. Do not possess same chemical properties D. May or may not possess same chemical properties
4	The negatively charged particles are called	A. Cation B. Radical C. Anion D. Positron
5	Macromolecules are	A. organic molecules B. High molecular mass molecules C. Natural compounds D. Rarely occurring molecules
6	Question Image	A. 8 g B. 16 g C. 32 g D. 24 g
7	The number of moles of CO2which contain 8.0 g of oxygen	A. 0.25 B. 0.50 C. 1.0 D. 1.50
8	Question Image	A. 99.2% B. 99.5% C. 90.5% D. 96.2%
9	Question Image	A. 84.84 % B. 89.89% C. 81.81% D. 90.90%
10	0.5 mole of CH4and 0.5 mole of SO2gases have equal	A. Volume B. Mass in grams C. Total number of atoms D. Number of molecules
11	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
12	The quantitative relationship between the substances according to balanced equation describes	A. Reversible reactions B. Stoichiometry C. Limiting reacting D. Percentage composition
13	Question Image	A. N₂O₄is limiting reactant B. N₂H₄is the limiting reactant C. Reactants are completely converted to the products D. Reactions is reversible

14	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
15	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
16	1.12 $dm^3$of N_2gas at S.T.P. has mass of N_2gas	A. 2.8 g B. 2.4 g C. 1.4 g D. 14 g
17	Question Image	A. 32 g B. 3.2 g C. 5.6 g D. 9.6 g
18	The mass of Al_2S_3formed when 20 grams Al reacts completely with S is	A. 60 g B. 50 g C. 50.55 g D. 55.55 g
19	The mass of sulphur which combines with 24 grams oxygen to form SO_2	A. 32 gram B. 24 gram C. 8 gram D. 12 gram
20	A limiting reactant is one which according to the stoichiometric equation	A. Has excess mass B. Has least mass C. Has excess number of moles D. Has least number of moles
21	The amount of products obtained from the balanced chemical equation is regarded as	A. Theoretical yield B. Actual yield C. % yield D. Experimental yield
22	Question Image	
23	When 0.1 g of magnesium is treated with an excess of hydrochloric acid, what volume of gas at room temperature and pressure will be produced	A. 10 cm³ B. 25 cm³ C. 48 cm³ D. 100 cm³
24	If four moles of sulpur dioxide are oxidised to sulphur trioxide, how many moles of oxygen molecules are required	A. 0.5 B. 1.0 C. 1.5 D. 2.0
25	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
26	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
27	Question Image	A. 0 dm³ B. 3 dm³ C. 2 dm³ D. 3 dm³
28	Question Image	A. 300 cm³ B. 200 cm³ C. 150 cm³ D. 100 cm³
29	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
30	A limiting reactant is the one which	A. Is taken in lesser quantity in grams as compared to other reactants B. Is taken in lesser quantity in volume as compared to other reactants C. Gives the maximum amount of the product which is required D. Gives the minimum amount of the product under consideration