

ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Splitting of spectral lines when atoms are subjected to strong electron field is called	A. Zeeman effect B. Stark effect C. Photoelectric effect D. Compton effect
2	The radius of first orbit of hydrogen atom	A. 0.329 Å° B. 0.429 Å° C. 0.529 Å° D. 0.229 Å°
3	Which of the following is not charged particle	A. Proton B. Electron C. Neutron D. Hydrogen nucleus
4	Which of the following is not a sub-atomic particle	A. Electron B. Proton C. Neutron D. Deuteron
5	Which of the following is not a property of cathode rays	A. They can produce x-rays when they strike a heavy metal anode B. They can cause reduction reaction C. They produce fluorescence in rare earth and minerals D. They comprise neutral particles
6	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
7	The amount of products obtained from the balanced chemical equation is regarded as	A. Theoretical yield B. Actual yield C. % yield D. Experimental yield
8	Question Image	
9	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 cm ³ B. 25 cm ³ C. 48 cm ³ D. 100 cm ³
10	If four moles of sulphur 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
11	What is the maximum mass of aluminium which can be obtained from 240g of aluminium oxide Al ₂ O ₃ ?	A. 26 g B. 127 g C. 51 g D. 108 g
12	How many moles of oxygen, O ₂ are needed for the complete combustion of two moles of butane C ₄ H ₁₀ ?	A. 2 B. 8 C. 10 D. 13
13	Question Image	A. 0 dm ³ B. 3 dm ³ C. 2 dm ³ D. 3 dm ³
14	Question Image	A. 300 cm ³ B. 200 cm ³ C. 150 cm ³ D. 100 cm ³
15	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

16	A limiting reactant is the one which	<p>A. Is taken in lesser quantity in grams as compared to other reactants</p> <p>B. Is taken in lesser quantity in volume as compared to other reactants</p> <p>C. Gives the maximum amount of the product which is required</p> <p>D. Gives the minimum amount of the product under consideration</p>
17	The volume occupied by 1.4 g of N_2 at S.T.P is	<p>A. 2.24 dm^3</p> <p>B. 22.4 dm^3</p> <p>C. 1.12 dm^3</p> <p>D. 112 cm^3</p>
18	0.5 mole of CH_4 and 0.5 mole of SO_2 gases have equal	<p>A. Volume</p> <p>B. Mass is gram</p> <p>C. Total number of atoms</p> <p>D. Number of molecules</p>
19	What is the volume in cm^3 of 3.01×10^{23} molecules of O_2 gas at S.T.P	<p>A. 1000 cm^3</p> <p>B. 11000 cm^3</p> <p>C. 1120 cm^3</p> <p>D. 11200 cm^3</p>
20	The mass of one mole of proton is	<p>A. 1.008 g</p> <p>B. 0.184 g</p> <p>C. 1.673 g</p> <p>D. 1.008 mg</p>
21	The largest number of molecules are present in	<p>A. 3.6 g of H_2O</p> <p>B. 4.8 g of</p> <p>C. $2 \text{ H}_2\text{O}$</p> <p>D. 5.4 g of CO</p>
22	One mole of SO_2 contains	<p>A. 6.02×10^{23} atoms of oxygen</p> <p>B. 18.1×10^{23} molecules of SO_2</p> <p>C. 6.02×10^{23} atoms of sulphur</p> <p>D. 4 gram atoms of SO_2</p>
23	3.01×10^{22} Ag^+ ions is present in	<p>A. 85 grams AgNO_3</p> <p>B. 0.85 g AgNO_3</p> <p>C. 8.5 g AgNO_3</p> <p>D. 18.5 g AgNO_3</p>
24	When nitrogen is 5.6 grams in NO_2 . then number of moles of NO_2 is	<p>A. 0.5</p> <p>B. 0.4</p> <p>C. 0.04</p> <p>D. 0.05</p>
25	A ring contains 3 gram diamond. The number of C-atoms which a ring contains is	<p>A. 3.01×10^{23}</p> <p>B. 1.5×10^{23}</p> <p>C. 6.02×10^{24}</p> <p>D. 3.01×10^{24}</p>
26	One mole of $\text{C}_2\text{H}_5\text{OH}$ contains the number of H-atoms	<p>A. 6.02×10^{23}</p> <p>B. 3.61×10^{24}</p> <p>C. 1.81×10^{24}</p> <p>D. 6.02×10^{24}</p>
27	A balloon contains 0.02 gram of H_2 gas, it contains H_2 molecules	<p>A. 6.02×10^{23}</p> <p>B. 3.01×10^{22}</p> <p>C. 6.02×10^{21}</p> <p>D. 3.01×10^{21}</p>
28	How many moles of hydrogen atoms does 3.2 g of methane, CH_4 , contain?	<p>A. 0.02</p> <p>B. 0.2</p> <p>C. 0.4</p> <p>D. 0.8</p>
29	A compound contains 75% carbon and 25% hydrogen, by mass. What is the molecular formula of the compound/	<p>A. C_3H_8</p> <p>B. CH_4</p> <p>C. C_2H_4</p> <p>D. C_2H_6</p>
30	Two different hydrocarbon each contain the same percentage by mass of hydrogen. It follows that they have the same	<p>A. Empirical formula</p> <p>B. Number of atoms in a molecules</p> <p>C. Number of isomers</p> <p>D. Relative molecular mass</p>