ECAT Chemistry Online Test

Sr	Questions	Answers Choice
1	Elements have the tendency to attain 8 electrons in their valence shell. This is known as	A. Octer rule B. Hunds rule C. Pauli exclusion principle D. Auf ban principle
2	The driving force for making a bond is	A. To attain noble gas electronic configuration B. To make soled compounds C. To make different compounds D. To make gaseous substances
3	Which of the following molecules has a net dipole moments	A. CO₂ B. CS₂ C. SO₂ D. CCl₄
4	Which of the following molecules has unpaired electrons in anti-bonding molecular orbitals?	A. O₂ B. N₂ C. Br₂ D. F₂
5	The force which holds the atoms together to form a compound is called	A. A chemical bond B. Van der waal's force C. Dispersion force D. London force
6	The energy of ionization of an atom is the energy difference between orbital	
7	Four d-orbitals contain four lobes while fifth contains only two lobes the orbital is	A. dxy B. dxz C. dz² D. dx²- y²
8	When 6s orbital is complete then next electron goes to	A. 6p B. 6d C. 5d D. 4f
9	The arrangement of subshells in the ascending order of their energy on complete filing of 4f subshell the entering electrons goes to	A. 5s B. 5p C. 5d D. 5f
10	Electrons arranged in orbitals according to the increasing order of their n + l values, this rule is named as	A. Hund's rule B. Heisenberg's principle C. Paulit exclusion principle D. Auf bau principle
11	The degenerate orbitals p-sub shell are	A. 2 B. 3 C. 5 D. 7
12	An orbital can accommodate maximum two electrons with opposite spins according to	A. Heisenberg's principle B. Aufbau principle C. Hund's srule D. Pauli exclusion principle
13	Their e/m, ratio resembles with that of electrons	A. Alpha rays B. Beta rays C. Gamma rays D. X-rays
14	The orbitals having n + l = 5 are	A. 2p, 3d,3s B. 3p, 3d, 5s C. 3s, 4p, 4d D. 5s, 4p, 3d
15	For a 3P subshell the set of principle and azimuthal quantum number is	A. n = 1 , l = 2 B. n = 3, l = 0 C. n = 3, l = 1 D. n = 1, l = 3
		A. S-subshell

16	The total values of magnetic quantum number of subshell are five, the subshell is	B. P-subshell C. D-subshell D. F-subshell
17	The size of electronic shell is described by	A. Azimuthal Q. no B. Magnetic Q.No C. Spin Q. No D. Principle Q. No
18	Schrodinger wave equation describes electron completely because	A. It describes a set of four quantum number B. It describes the particle nature of electron C. It measures wavelength of electron D. It describes electron moving in specific orbit
19	The value of Plank's constant 'h' is	A. 6.625 x 10⁻³⁴ B. 6.625 x 10⁻³⁴J sec C. 6.625 x 10⁻³⁴KJ D. 6.625 x 10⁻³⁴K Cal
20	The uncertainty principle was stated only	A. De Brogilie B. Heinsenberg C. Einstein D. Schrodinger
21	Question Image	A. Plank's equations B. de Broglie's equations C. Heisenburg's equation D. None
22	The divisibility of atom was shown by	A. Stoney B. J.J. Thomson C. Millikan D. Rutherford
23	The wave number of the line emitted is $109.678 \times 10^{5} m^{-1}$ in the Lyman series when electron transition occurs	
24	Light emitted from a source has its wave length 500nm, then its wave number will be	A. 2 x 10⁶m⁻¹ B. 2 x 10⁷m⁻¹ C. 5 x 10⁸m⁻¹ D. 5 x 10⁹m⁻¹
25	In the ground state of an atom the electron is present	A. In the nucleus B. In the second shell C. Nearest to the nucleus D. Farthest from the nucleus
26	Splitting of spectral lines of the hydrogen atom under the influence or magnetic field is called	A. Stark effect B. Zeeman effect C. Compton effect D. Photoelectric effect
27	The limiting line of Blamer series in hydrogen spectrum lies in	A. Visible regions B. Ultraviolet region C. Infrared region D. x-rays region
28	When electron jumps from n_2= 2,3,4,5,.... orbit to n_1= 1 orbit in the hydrogen atom, the radiations emitted give the spectral lines	A. Lyman series B. Blamer series C. Paschen series D. Brackett series
29	In the atomic emission spectrum the lines which appear bright, appear dark in absorption spectrum because	A. The radiations emitted in emission spectrum are absorbed in absorption spectrum B. Atomic emission spectrum is continuous C. Atomic absorption spectrum is continuous D. Distance between the lines increases
30	Energy of electron in an orbit according to Bohr theory is negative due to	A. Repulsion of electrons in the same orb B. At infinity energy is zero ad a traction towards nucleus decreases energy C. Electron has negative charge D. Product of positive nuclear charge and negative charge is negative