ECAT Chemistry Chapter 5 Atomic Structure

Sr	Questions	Answers Choice
1	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.
2	In Millikan method the oil droplet falls under the force of gravity but it moves upward due to	A. Electric field B. Magnetic field C. Incident light D. X-rays
3	The range of visible spectrum is	A. 300 - 600 nm B. 600 - 900 nm C. 400 - 750 nm D. 100 - 300 nm
4	Proton was discovered by:	A. Chadwick B. J.J. Rhomson C. Millikan. D. Goldstein.
5	Balmer's series is in _____ region	A. Visible B. U V C. I. R. D. None
6	The number of neutrons in the element $^{9}_{4}Be$ is	A. 4 B. 5 C. 9 D. 13
7	The spectrum of helium is expected to be similar to that of	A. H B. Li⁺ C. Na D. He⁺
8	Maximum potential energy that an electron can have within the atom is:	A. Equal to zero. B. Less than zero. C. Greater than zero. D. Infinite
9	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
10	The limiting line of Blamer series in hydrogen spectrum lies in	A. Visible regions B. Ultraviolet region C. Infrared region D. x-rays region
11	The e.m value for positive rays maximum for:	A. Oxygen. B. Nitrogen. C. Helium. D. Hydrogen.
12	Consider the ground state of Cr atom (Z=24). The numbers of electrons with the azimuthal quantum numbers l = 1 and l = 2 are respectively	A. 12 and 4 B. 16 and 5 C. 16 and 4 D. 12 and 5
13	Quantum number value for 2p orbitals are:	A. n=2 ,l=1 B. n=1 ,l=2 C. n= ,l=0 D. n=2 ,l=0
14	The total number of orbitals in a shell with principal quantum number 'n' is	A. 2n B. 2n² C. n² D. n + 1

15	The wave number of light emitted by a certain source is 2 x 10^5m. The wavelength of this light will be:	A. 500 NM. B. 500 M. C. 200 NM. D. 5 x 10⁷m
16	Alpha rays consist of:	A. Neutrons. B. Helium nucleus. C. Protons. D. Hydrogen nucleus.
17	When the electron jumps form second third, fourth orbit to the fist orbit, the transitions are known as	A. Balmer series B. Lyman series C. Pfund series D. Brackett series
18	Question Image	A. Plank's equations B. de Broglie's equations C. Heisenburg's equation D. None
19	Pauli's principle is applicable to	A. Degenerate orbits B. Two electrons in the same orbital C. One electron D. None
20	The wave number of the light emitted by a certain source is 2 x $10^6 m^{-1}$. The wavelength of this light will be	A. 500 nm B. 500 m C. 200 nm D. 5 x 10⁷m