ECAT Chemistry Chapter 5 Atomic Structure

Sr	Questions	Answers Choice
1	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
2	The third line of the Balmer series, in the emission spectrum of the hydrogen atom,is due to the transition from the	A. Fourth Bohr orbit to the first Bohr orbit B. Fifth Bohr orbit to the second Bohr orbit C. Sixth Bohr orbit to the third Bohr orbit D. Seventh Bohr orbit to the third Bohr orbit
3	With the reference of w/m ratio of anode rays, the e/m ratio of cathode rays s:	A. Greater. B. same. C. Smaller. D. Not fixed.
4	When 6d orbital is complete, the entering electron goes into:	A. 7f. B. 7s. C. 7p. D. 7d.
5	What is the packet of energy called?	A. Electron B. Photon C. Positron D. Proton
6	When an electric current is passed through discharge tube at low pressure, cathode rays are emitted from cathode these rays consist of:	A. Alpha rays. B. Negative particles. C. Electromagnetic rays. D. Positive particles.
7	The energy of ionization of an atom is the energy difference between orbital	
8	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
9	The wave length of electron as wave is 0.5 nm. What is the wave length in meter	A. 5 x 10⁻⁹ B. 5 x 10⁻¹² C. 5 x 10⁻⁶ D. 5 x 10⁻¹⁰
10	The atomic number of an element is 35 what is the total number of electrons present in all the p-orbitals of the ground state atom of that element?	A. 6 B. 11 C. 17 D. 23
11	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
12	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
		A. <p class="MsoNormal"><span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">1.6 x 10 ⁻¹ C

13	The charge over mass ratio of electron is:	10⁻¹ C Kg⁻¹<o:p></o:p> B. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">9.1 x 10⁻³¹ C Kg⁻¹<o:p></o:p> C. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">1.7588 x 10¹¹ C Kg⁻¹<o:p></o:p> D. <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">6.62 x 10⁻³⁴ C Kg⁻¹<o:p></o:p>
14	For principle quantum number n=4, the total number of orbitals having l = 3 is	A. 3 B. 7 C. 5 D. 9
15	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.
16	Which of the following particles has longest wavelength, if they have same speed:	A. Proton. B. Neutron. C. Electron. D. Positron.
17	The value of charge on electron is	A. 1.602 x 10⁻¹⁹coulombs B. 1.602 x 10⁻¹⁸coulombs C. 1.602 x 10⁻¹⁷coulombs D. 1.602 x 10⁻¹⁶coulombs
18	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
19	Anode is the surface on which probability of finding electron is:	A. 50% B. Less than 10%. C. More than 95%. D. Zero.
20	Azimuthal quantum number of last electron of $_{11}Na$ is	A. 1 B. 2 C. 3 D. 0