ECAT Chemistry Chapter 5 Atomic Structure

Sr	Questions	Answers Choice
1	Alpha rays consist of:	A. Neutrons. B. Helium nucleus. C. Protons. D. Hydrogen nucleus.
2	Question Image	A. s B. p C. d D. f
3	Mass of simple electron is:	A. <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 kg<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 10⁻³⁰ kg<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;">1.66 x 10⁻³¹ kg<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;"><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;">9.1 x 10⁻³¹ kg<o:p> </o:p>
4	The electron in an atom	A. moves randomly around the nucleus B. has fixed space around the nucleus C. is stationary in various energy levels D. moves around its nucleus in definite energy levels
		A. The atom did o have a nucleus and electrons B. It did not account fro the attraction

5	Rutherford's model of atom failed because:	b/w protons and neutrons C. It did no account for the stability of the atom. D. There is actually no space b/w the nucleus ad the electrons.
6	For which of the following sets of quantum numbers and electron will have the highest energy?	A. 3,2,1,1/2 B. 4,2,-1,1/2 C. 4,1,0,-1/2 D. 5,0,0,1/2
7	The radius of first orbit of H-atom is	A. 4.75 A° B. 3.84 A° C. 8.4 A° D. 0.529 A°
8	The radius of second Bohr's orbit is	A. 0.053 nm B. 0.053/4 nm C. 0.053 x 4 nm D. 0.053 x 20 nm
9	Which have better penetrating power	A. Alpha rays B. Beta rays C. Gamma rays D. X-rays
10	In the ground state, an element has 13 electrons in its M shell. The element is	A. Copper B. Chromium C. Nickel D. Iron
11	Charge of an electron is:	A. <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 10⁻¹⁹ C<o:p></o:p> B. 9.1 x <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;">10⁻³⁴ C<o:p></o:p> C. 1.7588 x <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;">10¹¹ C<o:p></o:p> D. 6.62 x <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;">10⁻³⁴ C<o:p></o:p>
12	The quantum number which describe the orientation of the orbitals is	A. Spin quantum number B. Principle quantum number C. Azimathal quantum number D. Magnetic quantum number
13	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
14	Which quantum number is sufficient to describe the electron is hydrogen atom?	A. l B. n C. m

		D. s
15	Photons of yellow colour are _____ energetic than violet colour	A. More B. Less C. Equal D. None
16	Cathode rays drive a small paddle wheel placed in their path. This observation shows that	A. Cathode rays travel in straight lines B. Cathode rays are negatively charged C. Cathode rays produce x-rays D. Cathode rays are material particles having momentum
17	If the value of azimuthal quantum number is 3, then values of m the magnetic quantum no. will be	A. 0, 1, 2, 3 B. +3, +2, +1, -1, -2, -3 C. 0, -1, -2 ,-3 D. -3, 0, +3
18	Smallest charge of electricity that has been measured so far is	A. Charge on a-rays B. Charge on electron (1.602 x 10⁻¹⁹C) C. Charge on x-rays D. Charge on gamma rays
19	Orbitals having same energy are called	A. Hybrid orbitals B. Valence orbitals C. Degenerate orbitals D. D-orbitals
20	Neutrons was discovered by	A. Mosely B. Milliken C. Chadwick D. Ruherford