ECAT Chemistry Chapter 5 Atomic Structure

Sr	Questions	Answers Choice
1	Question Image	A. s B. p C. d D. f
2	The principle quantum number describes	A. The distance form the nucleus B. The shape of the orbital C. The orientation of the orbital D. The spin of the electron
3	The nature of positive ray depend on:	A. The nature of electrode. B. The nature of discharge tube. C. The nature of residual gas. D. All of above.
4	The radiations with wavelength shorter than violet light are called	A. Ultraviolet B. Infrared C. Microwave D. Radio frequency
5	The correct set of quantum numbers (n,l and m) respectively of the unpaired electron of chlorine atom is	A. 2,1,0 B. 2,1,1 C. 3,1,1 D. 3,2,1
6	The wave length of electron as wave is 0.5 nm. What is the wave length in meter	A. 5×10^{-9} B. 5×10^{-12} C. 5×10^{-6} D. 5×10^{-10}
7	The energy of the first electron is helium will be	A. -13.6 eV B. -54.4 eV C. -5.44 eV D. zero
8	The uncertainty principle was stated only	A. De Brogilie B. Heinsenberg C. Einstein D. Schrodinger
9	Electrons in degenerate orbitals are placed in separate orbitals with same spin according to	A. Hund's rule B. Pauli exclusion principle C. Aufbau principle D. Mosley's law
10	The four quantum numbers of the valency electron of potassium are	A. 4,1,1,1/2 B. 4,0,0,1/2 C. 4,1,0,1/2 D. 4,4,0,1/2
11	Orbital having same energy is called:	A. Hybrid orbital. B. Valence orbital. C. Degenerate orbital. D. D-orbital.
12	The wave number of light emitted by a certain source is 2×10^5m. The wavelength of this light will be:	A. 500 NM. B. 500 M. C. 200 NM. D. 5×10^7m
13	Which of the following has more unpaired d-electrons?	A. Zn^+ B. Fe^{2+} C. Ni^{3+} D. Cu^+
		A. <p class="MsoNormal">9.1 x

| 14 | Mass of simple electron is: | 10⁻³¹ kg<o:p></o:p></p>
B. <p class="MsoNormal">9.1 x 10⁻³⁰ kg<o:p></o:p></p>
C. <p class="MsoNormal">1.66 x 10⁻³¹ kg<o:p></o:p></p>
D. <p class="MsoNormal">9.1 x 10⁻³¹ kg<o:p></o:p></p> |

#	Question	Options
15	An electron has principal quantum number 3. The number of its 1 subshell and 2 orbitals would be respectively	A. 3 and 5 B. 3 and 7 C. 3 and 9 D. 2 and 5
16	If the value of principal quantum number is 3. the total possible values for magnetic quantum number will be	A. 1 B. 4 C. 9 D. 12
17	1 erg of energy corresponds to	A. 6.02×10^{23} J/mol B. 6.02×10^{16} J/mol C. 1 erg/mol D. 10^{-7} J/mol
18	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
19	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
20	The rules which describe the distribution of electron in atomic energy levels are Auf-ban principle, Pauli's exclusion principle. Hunds rule. The pauli exclusion principle refers to the	A. Orientation of orbital in space B. Fact that two electrons in the same orbital should have opposite spins C. Energy of the orbital D. Spin of the electron