ECAT Chemistry Chapter 5 Atomic Structure

Sr	Questions	Answers Choice
1	When the 6d orbital is completed the entering electron goes into	A. 7f B. 7 s C. 7 p D. 7 d
2	The e.m value for positive rays maximum for:	A. Oxygen. B. Nitrogen. C. Helium. D. Hydrogen.
3	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
4	The orbital in Rutherford's model is	A. Spiral B. Circular C. Both D. None
5	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
6	Find the magnetic moment of a divalent ion in aqueous solution if its atomic number is 25	A. 3.0 BM B. 4.9 BM C. 5.9 BM D. 6.9 BM
7	In Bohr model of hydrogen atom the distance between adjacent orbits increases away from the nucleus, the energy difference between the orbits	A. Increases B. Decreases C. Reaming same D. Orbits coincide
8	The number of spherical nodes in 3p orbitals are	A. One B. Three C. Non D. Two
9	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
10	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
11	E = hv is the	A. Spectral equation B. Plank's equation C. de Broglie's equation D. None of these
12	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
13	Orbital having same energy is called:	A. Hybrid orbital. B. Valence orbital. C. Degenerate orbital. D. D-orbital.
14	The degenerate orbitals p-sub shell are	A. 2 B. 3 C. 5 D. 7

15	Photons of yellow colour are _____ energetic than violet colour	A. More B. Less C. Equal D. None
16	Alpha rays consist of:	A. Neutrons. B. Helium nucleus. C. Protons. D. Hydrogen nucleus.
17	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
18	In the ground state, an element has 13 electrons in its M shell. The element is	A. Copper B. Chromium C. Nickel D. Iron
19	The size of electronic shell is described by	A. Azimuthal Q. no B. Magnetic Q.No C. Spin Q. No D. Principle Q. No
20	The maximum number of electrons in a subshell for which l = 3 is	A. 14 B. 10 C. 8 D. 4