ECAT Chemistry Chapter 5 Atomic Structure Online Test

Sr	Questions	Answers Choice
1	The experimental evidences for the existence of atomic nucleus comes from:	A. Line spectrum of hydrogen. B. Magnetic bonding of cathode rays. C. Millikan oil drop experiment. D. Scattering of alpha particles by thin metal foil.
2	Anode is the surface on which probability of finding electron is:	A. 50% B. Less than 10%. C. More than 95%. D. Zero.
3	Which one of the following statements is true about discovery of neutrons?	A. These particles were formed by the bombardment of Alpha-particles on Beryllium. B. These particles are formed by the spiting of alpha-particles. C. These particles were discovered by natural radioactivity. D. None of above.
4	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.
5	Negatively charged particle nature of cathode rays was first demonstrated in 1895 by:	A. Millikan. B. J. Perrin. C. Hittrof D. J.J. Thomson.
6	Which one of the following particles has amass 1/1836 time, that of hydrogen?	A. Neutron. B. Proton. C. Electron. D. Positron.
7	Proton was discovered by:	A. Chadwick B. J.J. Rhomson C. Millikan. D. Goldstein.
8	Charge on electron was discovered by:	A. Millikan. B. Crook. C. Neil Bohr. D. Rutherford.
9	The charge over mass ratio of 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 10⁻¹ 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>
10	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>
		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

11	Charge of an electron is:	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	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.
13	Charge to mass ratio of electron was discovered by:	A. Millika. B. Rutherford. C. J.J. Thomson. D. Chadwick.
14	Alpha rays consist of:	A. Neutrons. B. Helium nucleus. C. Protons. D. Hydrogen nucleus.
15	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
16	Which of the following particles has longest wavelength, if they have same speed:	A. Proton. B. Neutron. C. Electron. D. Positron.
17	Which of the following was discovered first:	A. Charge to mass ratio of electrons. B. Mass of electrons. C. Charge of electrons. D. All of above at same time.
18	The nature of positive rays depend on:	A. Nature of discharge tube. B. Nature of resident gas. C. Nature of electrode. D. All of above.
19	The e.m value for positive rays maximum for:	A. Oxygen. B. Nitrogen. C. Helium. D. Hydrogen.
20	Neutron was discovered by:	A. Chadwick. B. Bohr. C. Rutherford. D. Plank.
21	When 6d orbital is complete, the entering electron goes into:	A. 7f. B. 7s. C. 7p. D. 7d.
22	Orbital having same energy is called:	A. Hybrid orbital. B. Valence orbital. C. Degenerate orbital. D. D-orbital.
23	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
24	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.

25	Splitting of spectral lines when atoms are subjected to strong electric field is called:	A. Zeeman effect. B. Stark effect C. Photoelectric effect. D. Compton effect.
26	Bohr model of atom is contradicted by:	A. Planck's quantum theory B. Pauli's exclusion theory C. Heisenberg's uncertainty principle. D. All of above.
27	Rutherford's model of atom failed because:	A. The atom did o have a nucleus and electrons B. It did not account fro the attraction 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.
28	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 x 10⁷m
29	The velocity of photon is:	A. Independent of its wavelength. B. Depends on its wavelength. C. Equal to square of its amplitude D. Depends on its source.
30	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.