ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	The nuclei of an element having the same charge number but different mass numbers are called:	A. Isobars B. Isotopes C. Isomers D. Isobaric E. Isothermal
2	Nucleus of a hydrogen atom may contain:	A. One neutron only B. Two protons and one neutron C. Two protons and two neutrons D. Aany of above E. One proton only
3	The figure 1.007276μ shows the mass of an:	A. Atom B. Positron C. Electron D. Neutron E. Proton
4	Nucleon means:	A. Only electrons B. Only neutrons C. Only protons D. Both (A) and (C) E. Both (B) and (C)
5	Neutron was disvovered by:	A. Rutherford in 1920 B. Chadwick in 1922 C. Bohr in 1913 D. Compton in 1927 E. None of these
6	Neutron was suggested to be in the nucleus by:	A. Rutherford in 1920 B. Bohar in 1913 C. Dirac in 1928 D. Anderson in 1932 E. None of these
7	The lasing or active medium in He-Ne laser discharge tube is:	A. Nitrogen B. Helium C. Hydrogen D. Neon E. None of these
8	The spectrum emitted from hydrogen filled discharge tube is:	A. Line spectrum B. Discrete spectrum C. And spectrum D. Absorption spectrum E. Both (A) and (B)
9	The He-Ne laser discharge tube is filled with:	A. 85% He B. 15% He C. 50% He D. 60% He E. 85% Ne
10	A metastable stae:	A. Is an excited state B. Is that in which excited electron is stable C. Is that in which excited electron is usually unstable D. Means a time interval of 10⁻⁸second E. Both (A) and (C)
11	Laser is a beam of:	A. Visible light B. Infra red light C. Ultra violet light D. Violet light only E. yellow light only
12	By CAT scans, we can detect the density difference of the order of:	A. 1% B. 20% C. 30% D. 50% E. 70%

13	The shell closer to the nucleus is called:	A. N shell B. L shell C. K shell D. M shell E. O shell
14	An compared to solid matter, a crack or an air bubble allows:	A. Great amount of X-rays to pass B. Smallast amount of X-rays to pass C. Very samall amount of X-rays to pass D. Any of these E. None of these
15	X-rays can penetrate in a solid matte through a distance of several:	A. Kilo metres B. Metres C. Centimeters D. A few angstroms E. One micrometer
16	In case of braking radiations, when the rate of deceleration is very large, the emitted radiation corresponds to:	A. Short wavelength B. Large wavelength C. Very large wavelenth D. Low frequency E. Both (B) and (C)
17	Braking radiation causes:	A. Continuous spectrum B. Line Spectrum C. Band spectrum D. Discrete specturm E. All of these
18	The holes created in the L and M shells are occupied by transitions of:	A. Electrons from lower states B. Electrons from higher state C. Positrons from higher states D. Electrons from K shell E. Both (A) and (B)
19	The transitions of electrons in the hydrogen atom result in the emission of spectral lies in the:	A. Ultra red region B. Visible region C. Ultraviolet region D. Any of these E. None of these
20	Energy required by an electron revolving in certain orbit to jump to an excited state is called:	A. Ionization energy B. Ionization potential C. Excitation energy D. Excitation potential E. None of these
21	An electron of the hydrogen atom in the second orbit is called its:	A. Ground state B. Excited state C. Ionized state D. Any of these E. None of these
22	The formula of Brackett series can be obtained by putting in the general formula, the value of n equal to:	A. one B. two C. three D. four E. five
23	Lyman series in the spectrum of hydrogen exists in the :	A. Infra-red region B. Visible region C. Ultraviolet region D. Both(A) and (B) E. None of these
24	Tick the series which lie/s in. the infra-red region.	A. Pfund series B. Brackett series C. Paschen series D. All of these E. None of these
25	Tick the series which lies in the visible region:	A. Lyman series B. Balmer series C. Paschen series D. Brackett series E. P fund series
26	Spectrum represents the number of component colours present in certain light in terms of:	A. Wavelength B. Frequency C. Energy D. Both (A) and (B) E. All of these
27	The process of formation of spectrum is called:	A. Interference B. Spectroscopy C. Dispersion D. Reflection E. Both (A) and (D)

		E. Both (A) and (D)
28	The results of spectra obtained by Balmer were expressed in 1896 by:	A. Bohr B. Rydberg C. Planck D. Rutherford E. Coulomb
29	The natural arrangement of colours in the spectrum of white light spectrum is	A. VIBGYOR B. ROYBGIV C. ROYBIGV D. BIGROYV E. None of these
30	Balmer series lies in that region of electromagnetic wave spectrum which is called:	A. Visible region B. Invisible region C. Infra-red region D. ultraviolet region E. None of these