

## Physics ECAT Pre Engineering Chapter 20 Atomic Spectra Physics Online Test

Sr	Questions	Answers Choice
1	The lasing or active medium in He-Ne laser discharge tube is:	A. Nitrogen B. Helium C. Hydrogen D. Neon E. None of these
2	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)
3	The He-Ne laser discharge tube is filled with:	A. 85% He B. 15% He C. 50% He D. 60% He E. 85% Ne
4	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 $10^{-8}$ second E. Both (A) and (C)
5	Laser is a beam of:	A. Visible light B. Infra red light C. Ultra violet light D. Violet light only E. yellow light only
6	By CAT scans, we can detect the density difference of the order of:	A. 1% B. 20% C. 30% D. 50% E. 70%
7	The shell closer to the nucleus is called:	A. N shell B. L shell C. K shell D. M shell E. O shell
8	An compared to solid matter, a crack or an air bubble allows:	A. Great amount of X-rays to pass B. Smallest amount of X-rays to pass C. Very samall amount of X-rays to pass D. Any of these E. None of these
9	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
10	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)
11	Braking radiation causes:	A. Continuous spectrum B. Line Spectrum C. Band spectrum D. Discrete spectrum E. All of these
12	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)

13	The transitions of electrons in the hydrogen atom result in the emission of spectral lines in the:	A. Ultra red region B. Visible region C. Ultraviolet region D. Any of these E. None of these
14	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
15	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