

## ECAT Pre General Science Physics Chapter 20 Atomic Spectra

Sr	Questions	Answers Choice
1	Photons must have energy equal to	A. $ev$ B. $En$ C. $hf$ D. None of these
2	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
3	The first shell near the neucles is	A. L-shell B. X-shell C. N-shell D. M-shell
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	The inkjet printer eject a thin stream of:	A. Water B. Oil C. Ink D. Any above E. None of these
6	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)
7	The process of formation of spectrum is called:	A. Interference B. Spectroscopy C. Dispersion D. Reflection E. Botha (A) and (D)
8	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
9	The minimum wavelength of X-rays produced of 1KV potential difference is applied across the anode and cathode of the tube is	A. $1.24 \times 10^{-10}$ m B. $7.92 \times 10^{-20}$ m C. $2.78 \times 10^{-14}$ m D. $3.88 \times 10^{-11}$ m
10	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
11	Ultraviolet region lies in _____ series	A. Layman B. Balmer C. P fund D. B racket
12	The results of spectra obtained by Blamer were expressed in 1896 by	A. Bohr B. Rydberg C. Planck D. Rutherford E. Coulomb
13	Gaussian surface is always:	A. Rectangular B. Spherical C. Cylinder D. Box shape

		E. Any of these
14	The He-Ne laser discharge tube is filled with:	A. 85% He B. 15% He C. 50% He D. 60% He E. 85% Ne
15	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
16	Laser is a beam of:	A. Visible light B. Infra red light C. Ultra violet light D. Violet light only E. yellow light only
17	The electric field lines start from:	A. Positive charge B. Negative charge C. Either A and B D. Neutron E. An atom
18	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
19	X-ray are also known as	A. Roentgen rays B. Maxwell rays C. Plank range D. Einstein rays
20	Balmer series was identified in:	A. 1685 B. 1785 C. 1885 D. 1985 E. 1585