

ECAT Physics Chapter 20 Atomic Spectra

Sr	Questions	Answers Choice
1	If the distance between two charges is doubled, the force between them will become:	A. Double B. Half C. One third D. One fourth
2	Atoms of hydrogen gas can be excited by passing electric current through it when the gas is filled into the discharge tube at a pressure which is	A. Less than atmospheric pressure B. Much less than atmospheric pressure C. Greater than atmospheric pressure D. Much greater than atmospheric pressure E. Both C and D
3	Laser is a beam of:	A. Visible light B. Infra red light C. Ultra violet light D. Violet light only E. yellow light only
4	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)
5	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)
6	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 small amount of X-rays to pass D. Any of these E. None of these
7	X-rays can penetrate in a solid matter through a distance of several:	A. Kilo metres B. Metres C. Centimeters D. A few angstroms E. One micrometer
8	Static electricity is produced by the transfer of:	A. Electrons B. Protons C. One fluid D. Two fluid E. None of these
9	The value of the metastable state for Neon is	A. 20.66eV B. 20.61eV C. 19.23eV D. 18.70eV
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	A metastable state:	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)
12	The electric field lines start from:	A. Positive charge B. Negative charge C. Either A and B D. Neutron

		E. An atom
13	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
14	Balmer series was identified in:	A. 1685 B. 1785 C. 1885 D. 1985 E. 1585
15	The first shell near the nucleus is	A. L-shell B. K-shell C. N-shell D. M-shell
16	The life time of metastable state is equal to	A. Life time of excited state B. Greater than by excited state C. Zero D. Less than by excited state
17	The inkjet printer ejects a thin stream of:	A. Water B. Oil C. Ink D. Any above E. None of these
18	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
19	Which series lie/s in the infra-red region.	A. Pfund series B. Brackett series C. Paschen series D. All of these E. None of these
20	The minimum wavelength of X-rays produced of 1KV potential difference is applied across the anode and cathode of the tube is	A. 1.24×10^{-10} m B. 7.92×10^{-20} m C. 2.78×10^{-14} m D. 3.88×10^{-11} m