

ECAT Physics Chapter 20 Atomic Spectra

Sr	Questions	Answers Choice
SI	Questions	
1	Ultraviolet region lies in series	A. Layman B. Balmer C. P fund D. B racket
2	Consider a photon of continuous X-ray and a photon of characteristics X-ray of same wavelength. Which of the following is/are different for the two photons	A. Frequency B. Penetrating power C. Energy D. Method of creation
3	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
4	X-rays produced in a tube operating at 10 ⁵ V. The speed of X-rays produced is	A. 3 x 10 ⁸ m/s B. 3.1 x 10 ⁸ m/s C. 2.8 x 10 ⁸ m/s D. 1.88 x 10 ⁸ m/s
5	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
6	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
7	The process of formation of spectrum is called:	A. Interference B. Spectroscopy C. Dispersion D. Reflection E. Botha (A) and (D)
8	The formula of Brackett series can be obtained by putting in the general formula, the value of n equal to:	A. <div>one</div> B. two C. three D. four E. five
9	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
10	The value of the metastable state for Neon is	A. 20.66eV B. 20.61eV C. 19.23eV D. 18.70eV
11	By CAT scans, we can detect the density difference of the order of:	A. 1% B. 20% C. 30% D. 50% E. 70%
12	In helium Neon Laser Neon = 15% and Helium = 85% used. The lasing gas this unit is	A. Helium B. Neon C. Both D. None of these
13	Selenium is:	A. An insulator B. A conductor C. Both A and B D. Excellent conductor E. None of these
4.4		A. Nitrogen B. Helium

14	I he lasing or active medium in He-Ne laser discharge tube is:	C. Hydrogen D. Neon E. None of these
15	The photocopying process is called:	A. Geography B. Sonography C. Xerography D. Zerography E. None of these
16	Photons must have energy equal to	A. ev B. En C. hf D. None of these
17	Balmer series was identified in:	A. 1685 B. 1785 C. 1885 D. 1985 E. 1585
18	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)
19	The He-Ne laser discharge tube is filled with:	A. 85% He B. 15% He C. 50% He D. 60% He E. 85% Ne
20	The results of spectra obtained by Balmer were expressed in 1896 by:	A. <div>Bohr</div> B. Rydberg C. Planck D. Rutherford E. Coulomb