

Physics ECAT Pre Engineering Chapter 20 Atomic Spectra

Sr	Questions	Answers Choice
1	The electric field lines start from:	A. Positive charge B. Negative charge C. Either A and B D. Neutron E. An atom
2	The range of wavelengths of colours in the visible colours is	A. 140 nm to 456 nm B. 10 nm to 56 nm C. 410 nm to 656 nm D. 910 nm to 956 nm E. None of these
3	The process of formation of spectrum is called:	A. Interference B. Spectroscopy C. Dispersion D. Reflection E. Botha (A) and (D)
4	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
5	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
6	The results of spectra obtained by Blamer were expressed in 1896 by	A. Bohr B. Rydberg C. Planck D. Rutherford E. Coulomb
7	If the distance between two charges is doubled, the force between them will become:	A. Double B. Half C. One third D. One fourth
8	The lasing or active medium in He-Ne laser discharge tube is:	A. Nitrogen B. Helium C. Hydrogen D. Neon E. None of these
9	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
10	Selenium is:	A. An insulator B. A conductor C. Both A and B D. Excellent conductor E. None of these
11	Graph of Black body radiation is example of	A. Band spectra B. Continuo's spectra C. Line spectra D. All
12	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
13	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

14	The first shell near the nucleus is	A. L-shell B. X-shell C. N-shell D. M-shell
15	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
16	The shell closer to the nucleus is called:	A. N shell B. L shell C. K shell D. M shell E. O shell
17	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
18	Consider a photon of continuous X-ray and a photon of characteristic 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
19	As 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
20	Photons must have energy equal to	A. ev B. En C. hf D. None of these