

Physics ECAT Pre Engineering Chapter 20 Atomic Spectra

Cr.	Questions	Answers Choice
Sr	Questions	
1	Photons must have energy equal to	A. ev B. En C. hf D. None of these
2	The process of formation of spectrum is called:	A. Interference B. Spectroscopy C. Dispersion D. Reflection E. Botha (A) and (D)
3	The range of wavelengths of colurs 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
4	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
5	Balmer series was identified in:	A. 1685 B. 1785 C. 1885 D. 1985 E. 1585
6	The value of the metastable state for Neon is	A. 20.66eV B. 20.61eV C. 19.23eV D. 18.70eV
7	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
8	By CAT scans, we can detect the density difference of the order of:	A. 1% B. 20% C. 30% D. 50% E. 70%
9	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
10	The first shell near the neucles is	A. L-shell B. X-shell C. N-shell D. M-shell
11	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
12	The transitions of electrons in the hydrogen atom result in the emission of spectral lies in the:	A. Ultra red region B. Visible region C. Ultraviolet region D. Any of these E. None of these
13	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
		A. Water

14	The inkjet printer eject a thin stream of:	B. Oil C. Ink D. Any above E. None of these
15	Graph of Black body radiation is example of	A. Band spectra B. Continuo's spectra C. Line spectra D. All
16	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
17	The lasing or active medium in He-Ne laser discharge tube is:	A. Nitrogen B. Helium C. Hydrogen D. Neon E. None of these
18	Selenium is:	A. An insulator B. A conductor C. Both A and B D. Excellent conductor E. None of these
19	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 x 10 ⁻¹⁰ m B. 7.92 x 10 ⁻²⁰ m C. 2.78 x 10 ⁻¹⁴ m D. 3.88 x 10 ⁻¹¹ m
20	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)