

ECAT Pre General Science Physics Chapter 20 Atomic Spectra

Sr	Questions	Answers Choice
1	The results of spectra obtained by Balmer were expressed in 1896 by:	A. <div>Bohr</div> B. Rydberg C. Planck D. Rutherford E. Coulomb
2	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
3	The photocopying process is called:	A. Geography B. Sonography C. Xerography D. Zerography E. None of these
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	X-ray are also known as	A. Roentgen rays B. Maxwell rays C. Plank range D. Einstein rays
6	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
7	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
8	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
9	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
10	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
11	Ultraviolet region lies in series	A. Layman B. Balmer C. P fund D. B racket
12	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

13	X-rays can penetrate in a solid matte through a distance of several:	A. Kilo metres B. Metres C. Centimeters D. A few angstroms E. One micrometer
14	The lasing or active medium in He-Ne laser discharge tube is:	A. Nitrogen B. Helium C. Hydrogen D. Neon E. None of these
15	Braking radiation causes:	A. Continuous spectrum B. Line Spectrum C. Band spectrum D. Discrete specturm E. All of these
16	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
17	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
18	If the distance between two charges is doubled, the force between them will become:	A. Double B. Half C. One third D. One fourth
19	The inkjet printer eject a thin stream of:	A. Water B. Oil C. Ink D. Any above E. None of these
20	An compared to solid matter, a crack or an air bubble allows:	A. Great amount of X-rays to pass B. Smallast amount of X-rays to pass C. Very samall amount of X-rays to pass D. Any of these E. None of these