

## ECAT Physics Chapter 20 Atomic Spectra

Sr	Questions	Answers Choice
1	The holes created in the L and M shells are occupied by transitions of:	A. Electrons from lower states <b>B. Electrons from higher state</b> C. Positrons from higher states D. Electrons from K shell E. Both (A) and (B)
2	The electric field lines start from:	<b>A. Positive charge</b> B. Negative charge C. Either A and B D. Neutron E. An atom
3	An compared to solid matter, a crack or an air bubble allows:	<b>A. Great amount of X-rays to pass</b> 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
4	The natural arrangement of colours in the spectrum of white light spectrum is	<b>A. VIBGYOR</b> B. ROYBGIV C. ROYBIGV D. BIGROYV E. None of these
5	Balmer series was identified in:	A. 1685 B. 1785 <b>C. 1885</b> D. 1985 E. 1585
6	X-ray are also known as	<b>A. Roentgen rays</b> B. Maxwell rays C. Plank range D. Einstein rays
7	Tick the series which lies in the visible region:	A. Lyman series <b>B. Balmer series</b> C. Paschen series D. Brackett series E. P fund series
8	Tick the series which lie/s in. the infra-red region.	A. Pfund series B. Brackett series C. Paschen series <b>D. All of these</b> E. None of these
9	Lyman series in the spectrum of hydrogen exists in the :	A. Infra-red region B. Visible region <b>C. Ultraviolet region</b> D. Both(A) and (B) E. None of these
10	In case of braking radiations, when the rate of deceleration is very large, the emitted radiation corresponds to:	<b>A. Short wavelength</b> B. Large wavelength C. Very large wavelength D. Low frequency E. Both (B) and (C)
11	The life time of metastable state is equal to	A. Life time of excited state <b>B. Greater than by excited state</b> C. Zero D. Less than by excited state
12	Graph of Black body radiation is example of	A. Band spectra <b>B. Continuo's spectra</b> C. Line spectra D. All
13	The process of formation of spectrum is called:	A. Interference <b>B. Spectroscopy</b> C. Dispersion D. Reflection E. Botha (A) and (D)

14	The photocopying process is called:	A. Geography B. Sonography C. Xerography D. Zerography E. None of these
15	The minimum wavelength of X-rays produced of 1KV potential difference is applied across the anode and cathode of the tube is	A. $1.24 \times 10^{-10}$ m B. $7.92 \times 10^{-20}$ m C. $2.78 \times 10^{-14}$ m D. $3.88 \times 10^{-11}$ m
16	Photons must have energy equal to	A. $ev$ B. $En$ C. $hf$ D. None of these
17	Coulomb multiplied by volt by volt gives the unit called:	A. farad B. Ohm C. Second D. joule E. Watt
18	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
19	If the distance between two charges is doubled, the force between them will become:	A. Double B. Half C. One third D. One fourth
20	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