

MDCAT Physics Chapter 12 Atomic spectra Induction Online Test

Sr	Questions	Answers Choice
1	In which region of the electromagnetic spectrum does the Lyman series of hydrogen atom lie?	A. Infrared B. Visible C. Ultraviolet D. X-rays
2	A proton and an e^- are accelerated through same voltage, the ratio of their de- Broglie wavelength will be:	A. 1:2 B. $\sqrt{2}$: 1 C. $2\sqrt{2}$: 1 D. 2:1
3	The de-Broglie wavelength of the particle of mass m and energy E is:	B. h C. $\lambda = h\sqrt{2Em}$ D. $\lambda = \frac{h}{\sqrt{2Em}}$
4	Threshold wavelength for metal having work function ϕ is λ_0 . What is the threshold wavelength for metal having work function 2ϕ :	A. λ_0 B. 2 C. 4 D. $\lambda_0/2$
5	When ultraviolet rays are incident in metal plate, then photoelectric effect does not occur. It occurs by the incidence of:	A. x-rays B. Infrared rays C. Radio wave D. Greenhouse effect
6	The hydrogen atoms are excited to the stationary state designated by the principal quantum number $n=4$, the number of maximum spectral lines are observe:	A. 2 B. 3 C. 4 D. 6
7	A proton, accelerated through a p.d V has a certain de Broglie wavelength. In order to have the same de Broglie wavelength, an e^- -particles must be accelerated through a potential difference:	A. 4V B. 8V C. V/4 D. V/8
8	As the intensity of incident light increases:	A. Photoelectric current increases B. Photoelectric current decreases C. Kinetic energy of emitted photoelectrons increases D. Kinetic energy of emitted photoelectrons decreases
9	To find longest wavelength radiation in Ballmer series, the value of n used is:	A. 2 B. 3 C. 4 D. ∞
10	Maximum speed of electrons in X-rays tube which is producing X-rays photons of frequency f is	