

MDCAT Physics Chapter 15 Modern Physics Online Test

Sr	Questions	Answers Choice
1	Compton Effect makes the use of the law of conservation of:	A. Energy B. Momentum C. Charge D. Both (a) & (b)
2	The unit Compton wavelength is same as:	A. Compton wavelength B. Compton frequency C. Compton shift D. Both (a) & (b)
3	In Compton effect, it was considered that X-rays consist of:	A. Electrons B. Positrons C. Photons D. All of these
4	A.H Compton studied the scattering of X-rays by loosely bound electrons from a graph target in:	A. 1905 B. 1911 C. 1925 D. 1923
5	Photo cells is a device which convert light into:	A. Wave nature B. Particle nature C. Particle wave nature D. Dual nature
6	Photo cells are used for :	A. Security and counting system B. Automatic door system C. Automatic street lighting D. All of these
7	In a photocell, certain metal emits electrons for :	A. Visible light B. Infrared light C. Ultraviolet light D. All of these
8	In a photocell, cesium coated oxidized silver emits electrons for :	A. Visible light B. Infrared light C. Ultraviolet light D. All of these
9	In a photocell, sodium and potassium emit electrons for:	A. Visible light B. Infrared light C. Ultraviolet light D. All of these
10	A photo cell is based on:	A. Compton effect B. Pair production C. Photo cell D. All of these
11	The maximum kinetic energy of emitted photoelectrons depends upon:	A. The intensity of incident light B. Frequency of the incident light C. Temperature of the surface D. All of above
12	The minimum energy required by an electron to eject from metal surface is known as:	A. Photo energy B. Critical energy C. Threshold energy D. Work function
13	In photoelectric effect, electrons are emitted:	A. Slowly B. Intermittently C. Both (a) & (b) D. Instantly
14	In photoelectric effect, electrons are emitted with:	A. Same energy B. Different energies C. Both (a) & (b) D. Intermittent energies
15	The photoelectric effect was explained by:	A. Einstein B. Davison C. Hertz D. Planck

16	The stopping potential for a certain metal is 10 volt, the max. Energy of emitted electron is:	A. 10 J B. 100 J C. 1.6×10^{-18} J D. 1.6×10^{-19} J
17	There is a certain frequency below which no electrons are emitted from the metal surface, this frequency is known as:	A. Critical frequency B. Threshold frequency C. Maximum frequency D. Minimum frequency
18	The maximum energy of the photoelectrons depends upon:	A. Frequency of incident light B. Intensity of incident light C. Nature of metal D. Both (a) & (c)
19	The maximum energy of the photoelectrons can be determined by making the:	A. Anode positive B. Anode negative C. Cathode positive D. Both (b) & (c)
20	Moving photons possess:	A. Energy B. Momentum C. Wavelength D. All of these