

MDCAT Physics Chapter 15 Modern Physics MCQ's Test

Sr	Questions	Answers Choice
1	Davisson and Germer, in their experiment used:	A. Nickle crystal B. Lead crystal C. Graphite crystal D. Glass
2	In a photocell, sodium and potassium emit electrons for:	A. Visible light B. Infrared light C. Ultraviolet light D. All of these
3	A human eye can detect the electromagnetic radiations of the type:	A. Infrared radiations B. For- infrared radiations C. X-rays radiations D. Red radiations
4	Diffraction pattern has also been observed for:	A. Proton B. Neutron C. Hydrogen atom D. All of them
5	Potassium cathode in photocell emits electrons for a light:	A. Visible B. Infrared C. Ultraviolet D. X-rays
6	In a photocell, cesium coated oxidized silver emits electrons for :	A. Visible light B. Infrared light C. Ultraviolet light D. All of these
7	The unit of work function is	A. eV B. Volt C. Farad D. Herdz
8	In photoelectric effect, if we increase the frequency of the incident light then of the electrons increased	A. Number B. K.E C. P.E D. Frequency
9	Photo cells is a device which convert light into:	A. Wave nature B. Particle nature C. Particle wave nature D. Dual nature
10	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)
11	In photoelectric effect, electrons are emitted with:	A. Same energy B. Different energies C. Both (a) & (b) D. Intermittent energies
12	Interference and diffraction of light confirms its:	A. Particle nature B. Dual nature C. Wave nature D. Electromagnetic nature
13	G.P Thomson revealed:	A. Particle nature of electron B. Dual nature of electron C. Wave nature of electron D. Electromagnetic nature of electron
14	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
15	In order to increase the K.E of ejected photo electrons, there should be an increase in:	A. Intensity of radiation B. None C. Frequency of radiation D. Both (b) & (c)

16	Interference and diffraction confirm:	A. Particle nature B. Wave nature C. Dual nature D. None of these
17	De-Broglie received the Nobel prize on his work on:	A. Wave nature of particle B. Corpuscular nature of wave C. Dual nature of particle D. All of them
18	In a photocell, certain metal emits electrons for :	A. Visible light B. Infrared light C. Ultraviolet light D. All of these
19	The energy of photon of wavelength 620 nm is:	A. 0.5 eV B. 1.0 eV C. 1.5 eV D. 2.0 eV
20	The unit Compton wavelength is same as:	A. Compton wavelength B. Compton frequency C. Compton shift D. Both (a) & (b)