

## 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. 19251 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. Nonel C. Frequency of radiation D. Both (b) & (c)

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16 Interference and diffraction confirm:  
A. Particle nature  
B. Wave nature  
C. Dual nature  
D. None of these

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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

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18 In a photocell, certain metal emits electrons for :  
A. Visible light  
B. Infrared light  
C. Ultraviolet light  
D. All of these

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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

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20 The unit Compton wavelength is same as:  
A. Compton wavelength  
B. Compton frequency  
C. Compton shift  
D. Both (a) & (b)

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