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	Compton Effect makes the use of the law of conservation of:	A. Energy B. Momentum C. Charge D. Both (a) & (b)
3	The energy of photon of wavelength 1240 nm is:	A. 0.5 eV B. 1.0 eV C. 1.5 eV D. 2.0 eV
4	Photoelectric effect and Compton effect prove the:	A. Wave nature of light B. Particle nature of light C. Dual nature of light D. Dual nature of light
5	Davisson and Germer received the Nobel prize for their work on:	A. Wave nature of particle B. Corpuscular nature of wave C. Dual nature of particle D. All of them
6	Photo cells are used for :	A. Security and counting system B. Automatic door system C. Automatic street lighting D. All of these
7	Interference and diffraction confirm:	A. Particle nature B. Wave nature C. Dual nature D. None of these
8	Photo cells is a device which convert light into:	A. Wave nature B. Particle nature C. Particle wave nature D. Dual nature
9	The unit Compton wavelength is same as:	A. Compton wavelength B. Compton frequency C. Compton shift D. Both (a) & (b)
10	The dimensions of Planck’s constant “h” are same as that of:	A. Momentum B. Angular momentum C. Work D. Torque
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	In order to perform experiment, Davisson and Germer used accelerating voltage of:	A. 54V B. 120V C. 220V D. 400V
13	Diffraction pattern has also been observed for:	A. Proton B. Neutron C. Hydrogen atom D. All of them
14	De-Broglie received the Nobel prize in	A. 1929 B. 1937 C. 1928 D. 1924
15	The maximum kinetic energy of emitted photoelectrons depends upon:	A. The intensity of incident light B. Frequency of incident light C. Metal surface D. Both frequency of incident light

		and metal surface
16	Rest mass energy of electron is:	A. 1.02 MeV B. 0.51 MeV C. 931 MeV D. 200 MeV
17	J.J Thomson finds:	A. Particle nature of the electron B. Dual nature of electron C. Wave nature of electron D. Electromagnetic nature of electron
18	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
19	The reverse process of photo-electric effect is called:	A. Pair production B. Compton effect C. Annihilation of matter D. X-rays
20	In photoelectric effect, electrons are emitted with:	A. Same energy B. Different energies C. Both (a) & (b) D. Intermittent energies