MDCAT Physics Chapter 15 Modern Physics MCQ's Test

Sr	Questions	Answers Choice
1	G.P Thomson revealed:	A. Particle nature of electron B. Dual nature of electron C. Wave nature of electron D. Electromagnetic nature of electron
2	Photo cells is a device which convert light into:	A. Wave nature B. Particle nature C. Particle wave nature D. Dual nature
3	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
4	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)
5	In Compton effect, it was considered that X-rays consist of:	A. Electrons B. Positrons C. Photons D. All of these
6	Interference and diffraction of light confirms its:	A. Particle nature B. Dual nature C. Wave nature D. Electromagnetic nature
7	Compton Effect makes the use of the law of conservation of:	A. Energy B. Momentum C. Charge D. Both (a) & (b)
8	Interference and diffraction confirm:	A. Particle nature B. Wave nature C. Dual nature D. None of these
9	In photoelectric effect, electrons are emitted with:	A. Same energy B. Different energies C. Both (a) & (b) D. Intermittent energies
10	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
11	The dimensions of Planck's constant "h" are same as that of:	A. Momentum B. Angular momentum C. Work D. Torque
12	In photoelectric effect, electrons are emitted:	A. Slowly B. Intermittently C. Both (a) & (b) D. Instantly
13	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
14	Joule-second is the unit of:	A. Energy B. Heat C. Planck's constant D. None of these
15	De-Broglie received the Nobel prize in	A. 1929 B. 1937 C. 1928 D. 1924

16	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
17	Davisson and Germer, in their experiment used:	A. Nickle crystal B. Lead crystal C. Graphite crystal D. Glass
18	The energy of photon of energy 1 eV is:	A. 1240 nm B. 1040 nm C. 1000 nm D. 620 nm
19	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
20	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