ECAT Physics Chapter 19 Dawn of Modern Physics Online Test

Sr	Questions	Answers Choice
1	The photon of radio-waves has energy of about	A. 1 Me V B. 1 Ke v C. 10⁻¹⁰e v D. 10¹⁰e v
2	From the theory of relativity, momentum p of the photon is related to energy as	A. p = hfc B. p = hf/c C. p = f(hc,f) D. p = cf/h
3	Max plank received the Nobel Prize in physics for his discovery of energy quanta in	A. 1900 B. 1906 C. 1912 D. 1918
4	In photoelectric effect the energy of ejected electrons depend on	A. The frequency B. The intensity C. Both frequency and intensity D. None of these
5	The value of the plank's constant 'h' is given by	A. 1.6 x 10⁻¹⁹J B. 1.67 x 10⁻²⁷Kg C. 6.63 x 10³⁴Js D. 6.63 x 10⁻³⁴Js
6	A photon is considered to have	A. Momentum B. Energy C. Wavelength D. All of the above
7	S.I. unit of planks constant is	A. J-s⁻¹ B. J.s C. J.s⁻² D. J.s²
8	The energy of photon 'E' is proported to	A. The magnetic field H B. The electric field E C. Both the electric and magnetic field H and E D. Frequency
9	The energy of a photon is represented by	A. h/c² B. h/T C. hc² D. hf/c²
10	According to the Max plank, energy is redialed or absorbed in	A. discrete packets B. continuous waves C. either of them D. none of these
11	Max plank founded a mathematical model resulting in an equation that describes the shape of observed black body radiation curves exactly, in	A. 1890 B. 1895 C. 1900 D. 1905
12	The value of the Stephen's constant for black body radiations is given by	A. 5.6 x 10⁸Wm⁻²K⁻⁴ B. 5.67 x 10⁻⁸Wm⁻²K⁻⁴ C. 2.9 x 10⁻³mK D. 2.9 x 10³mK
13	The Stephen-Boltzmann law for the black body radiation is given by	A. E = T² B. E = -T² C. E = T⁴ D. E = -T⁴
14	The inside cavity of the black body is	A. painted white B. painted silver C. blackened with soot D. painted red
		A. an ideal absorber

15	A black body is	B. an ideal radiator C. both of them D. none of them