

Physics ECAT Pre Engineering Chapter 19 Dawn of Modern Physics Physics Online Test

Sr	Questions	Answers Choice
1	Victor de-Brogile received the Nobel prize in physics in	A. 1925 B. 1929 C. 1932 D. 1935
2	If the radius of first orbit of hydrogen atom is 0.53° A the radius of second orbit will be	A. 2.120 °A B. 0.212 °A C. 21.2 °A D. 0.14 ° <div>°<div>°</div></div>
3	A bar 1.0 m in length and located along x-axix moves with a speed of 0.75 c with respect to a stationary observer. The length of the bar as measured by the stationary observer is	A. 1.66 m B. 1.0 m C. 0.66 m D. 2.66 m
4	According to Einstein, with the great increase in the speed of the body, the relativistic mass of the body	A. Remains constant B. Decreases C. Increases to infinity D. Reduced to zero
5	In the compton's effect, it is found that the wavelength of incident x-rays is	A. greater than the wavelength of scattered x-rays B. equal to the wavelength of scattered x-rays C. less than the wavelength of scattered x-rays D. any one of these
6	When platinum wire is heated, then at the temperature of 500 °C, it becomes:	A. Yellow B. Orange red C. Dull red D. White E. Cherry red
7	When a platinum wire is heated, it appears orange red at	A. 500 °C B. 900 °C C. 1100 °C D. 1300 °C D. 1300 °C
8	Wave nature of particle was proposed by	A. Einstein B. Plank C. De-Brogile D. Max well
9	The emission of electrons from a metal surface when exposed to light of suitable frequency is called the	A. pair production B. Compton effect C. photoelectric effect D. relativity
10	The energy of the 4th orbit in hydrogen atom is	A. 2.5 ev B 3.5 ev C0.85 ev D13.6 ev
11	The inside cavity of the black body is	A. painted white B. painted silver

	•	O. Diackened with soot D. painted red
12	A photon is considered to have	A. Momentum B. Energy C. Wavelength D. All of the above
13	Converse of pair production is known as	A. Compton effect B. annihilation of matter C. photoelectric effect D. none of these
14	According to the special theory of relativity, time is	A. absolute quantity B. not absolute quantity C. constant quantity D. none of these
15	The Nobel Prize on the explanation of photoelectric effect was awarded to:	A. Max. Planck B. Maxwell C. Bohr D. Rutherford E. None of these
16	Electromagnetic radiation or photons interact with matter in	A. two distinct ways B. three distinct ways C. four distinct ways D. five distinct ways
17	S.I. unit of planks constant is	A. J-s ⁻¹ B. J.s C. J.s ⁻² D. J.s ²
18	Which of the following phenomenon proves the particle nature of light	A. interference B. diffraction C. photoelectric effect D. none of these
19	The special theory of relativity is based on:	A. Four postulates B. Three postulates C. Two postulates D. One postulate E. None of these
20	The way through which electromagnetic radiations or photons interact with matter depends upon their:	A. Wavelength B. Frequency C. Energy D. Temperature E. All of these