

ECAT Pre General Science Physics Chapter 19 Dawn of Modern Physics

Sr	Questions	Answers Choice
1	The idea of quantization of energy was proposed by:	A. Einstein B. Max. Planck C. Maxwell D. Bohr E. Rutherford
2	Wave nature of particle was proposed by	A. Einstein B. Plank C. De-Brogile D. Max well
3	S.I. unit of planks constant is	A. $J \cdot s^{-1}$ B. $J \cdot s$ C. $J \cdot s^{-2}$ D. $J \cdot s^2$
4	The inside cavity of the black body is	A. painted white B. painted silver C. blackened with soot D. painted red
5	Photoelectric effect takes place with a photon of:	A. Very high energy B. Very low energy C. Low energy D. High energy E. None of these
6	Electromagnetic radiation or photons interact with matter in	A. two distinct ways B. three distinct ways C. four distinct ways D. five distinct ways
7	Max Planck received the Nobel Prize for his discovery of energy quants in:	A. 1718 AD B. 1918 AH C. 1818 AD D. 1918 AD E. None of these
8	In process of annihilation of matter, the two photons produced move in opposite direction to converse	A. momentum B. charge C. energy D. mass
9	As compared to the distance measured by an observer on Earth, the distance from Earth to a star measured by an observer in a moving spaceship would seem:	A. Smaller B. Lerger C. Same D. Much larger E. None of these
10	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. $p = cf/h$
11	The special theory of relativity is based on the	A. one postulate B. two postulates C. three postulates D. four postulates
12	The concept of direction and position are purely	A. absolute B. relative C. absolute or relative D. none of these
13	The special theory of relativity is based on:	A. Four postulates B. Three postulates C. Two postulates D. One postulate E. None of these
14	Compton was awarded Nobel prize in physics in	A. 1921 B. 1923 C. 1925 D. 1927

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	Momentum is a parameter associated with	A. wave motion B. particle motion C. neither wave nor particle motion D. none of these
17	If you are moving at relativistic speed between two points that are a fixed distance apart, then the distance between the two points appears	A. larger B. shorter C. equal D. none of these
18	As the light shines on the metal surface, the electrons are ejected	A. slowly B. instantaneously C. either of these D. none of these
19	When monochromatic light is allowed to fall on cathode, it begins to emit electrons, these electrons are called	A. thermoionic electrons B. free electrons C. photoelectrons D. slow electrons
20	If a body reaches a speed equal to the speed of light, then its mass will become	A. zero B. very small C. infinity D. none of these