

ECAT Pre General Science Physics Chapter 19 Dawn of Modern Physics

Sr	Questions	Answers Choice
1	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
2	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
3	An inertial frame is that frame in which	A. $a > 0$ B. $a = 0$ C. $a < 0$ D. none of these
4	S.I. unit of planks constant is	A. $J \cdot s^{-1}$ B. $J \cdot s$ C. $J \cdot s^{-2}$ D. $J \cdot s^2$
5	Victor de-Broglie received the Nobel prize in physics in	A. 1925 B. 1929 C. 1932 D. 1935
6	The general theory of relativity treats problems involving	A. inertial frame of references B. accelerating frame of references C. both of these D. none of these
7	When a platinum wire is heated, it appears white at	A. $1600^{\circ}C$ B. $900^{\circ}C$ C. $1100^{\circ}C$ D. $1300^{\circ}C$
8	If A represents linear momentum and c, the velocity of light, then unit of pc in international system of units is:	A. Newton B. Joule C. Joule-Sec D. $Joule \cdot s^{-1}$ E. Watt
9	Which one of the following physical quantities changes with relativistic speed	A. Length B. Mass C. Time D. All of the above
10	Positron was discovered by Carl Anderson in	A. 1920 B. 1925 C. 1928 D. 1932
11	Which of the following phenomenon proves the particle nature of light	A. interference B. diffraction C. photoelectric effect D. none of these
12	The photon of radio-waves has energy of about	A. 1 MeV B. 1 KeV C. $10^{-10} eV$ D. $10^{10} eV$
13	G.P. Thomson observed experimentally that electrons and neutrons possess	A. particle-like properties B. wave-like properties C. neither particle nor wave like properties D. none of these

14	The nature of radiations emitted by a hot body depends upon its:	A. Material B. Temperature C. colour D. Volume E. Length
15	The energy of the 4th orbit in hydrogen atom is	A. 2.5 ev B. - 3.5 ev C. -0.85 ev D. -13.6 ev
16	The existence of position was predicted by Dirace in	A. 1920 B. 1925 C. 1930 D. 1928
17	Wave nature of particle was proposed by	A. Einstein B. Plank C. De-Brogile D. Max well
18	When the atomic particle are moving with velocities approaching that of light:	A. Newton's laws become valid B. Relativistic effects become prominent C. Both(A) and (B) are valid D. Neither (A)nor (B) E. There mass becomes zero.
19	The idea of quantization of energy was proposed by:	A. Einstein B. Max.Planck C. Maxwell D. Bohr E. Rutherford
20	According to the special theory of relativity	A. mass and energy are same entities B. mass and energy are same entities but interconvertible C. mass and energy are different entities but interconvertible D. mass and energy are different entities but non-interconvertible