

ECAT Physics Chapter 19 Dawn of Modern Physics

Sr	Questions	Answers Choice
1	The year when A.H. Compton was awarded Nobel Prize is:	A. 1923 B. 1927 C. 1931 D. 1935 E. None of these
2	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
3	The length contraction happens only	A. Opposite to the direction of motion B. along the direction of motion C. perpendicular to the direction of motion D. In any direction
4	According to the special theory of relativity, a moving clock	A. runs faster B. runs slower C. neither runs faster nor slower D. all of these
5	An inertial frame of reference is a frame of reference which is	A. at rest B. moving with uniform velocity C. either at rest or moving with uniform velocity D. none of these
6	Converse of pair production is known as	A. Compton effect B. annihilation of matter C. photoelectric effect D. none of these
7	According to the special theory of relativity, time is	A. absolute quantity B. not absolute quantity C. constant quantity D. none of these
8	S.I. unit of Planck's constant is	A. $J \cdot s^{-1}$ B. $J \cdot s$ C. $J \cdot s^{-2}$ D. $J \cdot s^2$
9	Max Planck 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
10	The value of threshold frequency for different metals is	A. different B. same C. may be different or may be same D. none of these
11	The special theory of relativity is based on:	A. Four postulates B. Three postulates C. Two postulates D. One postulate E. None of these
12	Albert Einstein got the Nobel prize in physics for his explanation of photoelectric effect in	A. 1916 B. 1919 C. 1921 D. 1923
13	When low energy photons interact with a metal, which of the following effects is likely to be taken place	A. pair production B. photoelectric C. Compton effect D. None of these
14	Electromagnetic radiation or photons interact with matter in	A. two distinct ways B. three distinct ways C. four distinct ways D. five distinct ways

15	The special theory of relatively treats the problems involving:	<ul style="list-style-type: none"> A. Inertial frames of reference B. Non-inertial frames C. Non-accelerated frame D. Botha (A) and (C) E. Both (B) and (C)
16	Photoelectric effect takes place with a photon of:	<ul style="list-style-type: none"> A. Very high energy B. Very low energy C. Low energy D. High energy E. None of these
17	An inertial frame is that frame in which	<ul style="list-style-type: none"> A. $a > 0$ B. $a = 0$ C. $a < 0$ D. none of these
18	Photocell is a device which converts	<ul style="list-style-type: none"> A. chemical energy into electrical energy B. electrical energy into light energy C. heat energy into electrical energy D. light energy into electrical energy
19	At the temperature, a body emits radiation which is principally	<ul style="list-style-type: none"> A. of long wavelengths in the visible region B. of long wavelengths in the invisible infrared region C. of short wavelength in invisible ultraviolet region D. none of these
20	When a high energy photon interact with a metal, which of the following effect is most likely to be taken place	<ul style="list-style-type: none"> A. pair production B. photoelectric effect C. Compton effect D. None of these