

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

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Sr	Questions	Answers Choice
1	Which of the following is not an example of intertial frame	A. a body placed on the surface of earth B. a body placed in a car moving with uniform velocity C. a body placed in a car moving with same acceleration D. none of these
2	According to Einstein, with the great increase in the speed of the body the relativistic length of the body	A. Remains constant B. Decreases C. Increases D. Reduces to zero
3	The special theory of relativity is based on the	A. one postulate B. two postulates C. three postulates D. four postulates
4	Which of the following phenomenon proves the particle nature of light	A. interference B. diffraction C. photoelectric effect D. none of these
5	the dilation of time applies to the timing processes which are:	A. Physical B. Chemical C. Biological D. All of these E. None of these
6	Pair production is the phenomenon in which	A. matter is converted into energy B. energy is converted into matter C. light is converted into electrical energy D. electrical energy is converted into light
7	According to the electromagnetic wave theory of light, increasing the intensity of incident light should increase the	A. number of photoelectrons B. size of the photoelectrons C. charge on photoelectrons D. K.E of photoelectrons
8	Strictly speaking, the earth is:	A. An accelerated frame of reference B. A non-inertial frame of reference C. An inertial frame of reference D. <sup>A non-accelerated frame of reference</sup> E. Both (A) and (B)
9	The stopping voltage for a certain metal is 100 volts, then the work function for the cathode plate is	A. 100 J B. 1.6 x 10 <sup>-17</sup> J C. 100 eV D. 1.6 x 10 <sup>-17</sup> eV
10	The special theory of relativity is based on:	A. Four postulates B. Three postulates C. Two postulates D. One postulate E. None of these
11	When a position comes close to an electron they annihilate into	A. one photon B. two photons which travel in the same direction C. two photons which travels in the opposite direction D. two photons which travel in any direction
12	An inertial frame is that frame in which	A. a>0 B. a=0 C. a<0 D. none of these
13	In process of annihilation of matter, the two photons produced move in opposite direction to converse	A. momentum B. charge C. energy

		D. mass
		A. an accelerated frame of reference
14	Newton's law of motion do not hold in	B. an unaccelerated frame of
		reference
		C. both of these
		D. none of these
	Wien's constant is measured in:	A. Metre per kelviin
		B. Metre kelvin
15		C. Kelvin per meter
		D. Joules
		E. Dynes
	The photon of radio-waves has energy of about	A. 1 Me V
^		B. 1 Ke v
6		C. 10 <sup>-10</sup> e v
		D. 10 <sup>10</sup> e v
	Converse of pair production is known as	A. Compton effect
_		B. annihilation of matter
7		C. photoelectric effect
		D. none of these
	If you are moving at relativistic speed between two points that are a fixed distance apart, then the distance between the two points appers	A. larger
^		B. shorter
18		C. equal
		D. none of these
	The positron was discovered by:	A. In cosmic radiation
		B. In 1932
9		C. By Carl Anderson
_		D. All above
		E. By direc
20	Position was discovered by Carl Anderson in	A. 1920
		B. 1925
		C. 1928
		D. 1932