Physics ICS Part 1 Chapter 11 Online Test

Sr	Questions	Answers Choice
1	The energy 'E' eqivalent to mass given by	A. Ec2 B. E/C2 C. E/C D. C2/E
2	The mass of an object will be doubled at the speed.	A. 2.6 x 10 ⁷ m/s B. 1.6 x 10⁸ m/s C. 2.6 x 10⁸ m/s D. None of these
3	Relativistic mechanics yields results different from classical mechanics for objects moving with.	A. Low velocity B. Velocity equal to that of sound waves C. Veloitiy geater than sound waves D. Velocity approaching that of lignt
4	If a space craft of rest legnth 'l_o' is movng with a speed equal to speed of light, then its relativstic legnth l , will be	A. l = l_o B. l = l_o/2 C. l = 0 D. All of these
5	Relativistic velocity is of the order of.	A. 1/15 of the velocity of light B. 1/20 of the velocity of light C. 1/10 of the velocity of light D. 1/25 of the velocity of light
6	A photon is particle of light. What is its mass when it moves with 0.9 C?	A. 9.1 x 10⁻³¹ kg B. 1.67 x 10⁻¹⁹ kg C. 1.67 x 10⁻²⁷ kg D. Zeri
7	A rod at rest appears to an observer just a mere point when he moves across it as speed.	A. Equal to the speed of light B. Double the speed of light C. Three-fourth the speed of light D. None of the above
8	If a material object moves with the speed of light 'c' its mass becomes	A. Equal to its rest mass B. Infinite C. Four times of its rst mass D. Double of its rest mass
9	If an observeris moving in the same direction as a sound wave, the velocity of the wave seems to be	A. Less B. More C. Constant D. Sum of the two velocities
10	Which one of the following physical quantities is indpednent of relativistic speed.	A. Charge B. Length C. Mass D. Time
11	The theory of relativity was proposed in	A. 1920 B. 1905 C. 1915 D. 1895
12	The speed of beam light of a car while moving with high speed as compared to its rest positionis	A. Greater B. Less C. Same D. Zero
13	A no intertial frame of reference.	A. Moves with some acceleration B. Is always rest on earth C. Moves with uniform velocity D. All of the above
		A. l = l_o [1 - V2/C2]

14	The length of rod at rest as measurd by an observer moving parallel to it with relativistic speed is given by	B. l = l₀ 1 -V2/C2 C. l = l_o / 1-V²C² D. l0 = l 1-V²/C²
15	it the rest mass of a particle m_o increased to m due to its high speed then its kinetic energy is.	A. (m - mo) c² B. 1/2 mv2 C. 1/2 mc² D. 1/2 (m -m_o0