

## ECAT Physics Online Test

Sr	Questions	Answers Choice
1	If the velocity of the body decreases non-uniformly then the slope of the velocity-time graph will have	A. different values B. same values C. zero values D. constant values
2	The mass 'm' of a body moving at 0.8 c (whose rest mass is $m_0$ ) becomes	A. 2 $m_0$ B. 1.67 $m_0$ C. 0.67 $m_0$ D. 2.67 $m_0$
3	The value of the input resistance of OP-AMP is of the order of	A. few ohms B. few hundred ohms C. several kilo ohms D. several maga ohms
4	The curve representing an adiabatic process is called	A. isotherm B. adiabat C. adiabale D. none of them
5	The Einstein's changes in length, mass and time are not observed in common life because	A. We dont observer then seriously B. The masses are too large C. Their speed is too small than the speed of right D. All of the above
6	Viscosity of water is _____ that of air but ____ that of plasma.	A. More, more B. Less, more C. Less, less D. More, less
7	The distance covered by the wave during one period is called its:	A. Wave number B. Frequency C. Wavelength D. Time period
8	Arsenic, antimony and phosphorus are the elements from	A. third group B. fourth group C. fifth group D. none of them
9	If a body reaches a speed equal to the speed of light, then its mass will became	A. zero B. very small C. infinity D. none of these
10	Referring to the above figure, the binding energy per nucleon increases upto mass number equal to:	A. 50 B. 100 C. 150 D. 200 E. 250
11	The sources of magnetic field are	A. isolated magnetic poles B. charges at rest C. charges in motion D. none of these
12	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 C. equal D. none of these
13	The straight current carrying conductor experiences maximum force in a uniform magnetic field when it is placed	A. parallel to the field B. Perpendicular to the field C. At an angle of 45 to the field D. None of the above
14	When a positron comes close to an electron they annihilate into photons such that	A. each photon has energy 0.51 Mev B. each photon has energy 1.02 Mev C. each photon has energy 0.25 Mev D. none of these

15	Linear momentum is a	A. fixed quantity B. constant quantity C. scalar quantity D. vector quantity
16	In the study of thermodynamics, which gas is considered as the working substance	A. real gas B. ideal gas C. any gas may be ideal or real D. none of them
17	The pattern of crystalline solid is:	A. One dimensional B. Two dimensional C. Three dimensional D. None of these E. Either (A) or (B)
18	The chemical properties of all the isotopes of an elements are	A. same B. different C. slightly different D. none of these
19	Ferromagnetic substances lose their magnetism when heated above a certain temperature, known as	A. critical temperature B. curie temperature C. high temperature D. fixed temperature
20	During the upward motion of the projectile, the vertical component of velocity:	A. Decreases B. Increases C. Remains constant D. None of these