

ECAT Pre General Science MCQ's Test For Physics Full Book

Sr	Questions	Answers Choice
1	The only significant motion possessed by the mono-atomic gas represented is:	A. Translatory B. Rotatory C. Vibratory D. None of these
2	If the time period a simple pendulum is 2 s, its frequency would be	A. 2 Hz B. 1.5 Hz C. 1.0 Hz D. 0.5 Hz
3	A point charge Q is placed at the mid-point of a line joining two charges. 4q and q. if the net force on charge q is zero. then Q must be equal to	A. -q B. +q C. -2q D. +4q
4	$F = I(L \times B)$ is a	A. vector B. scalar C. unit vector D. none of these
5	The motion of molecules in gases is:	A. Orderly B. Random C. Circular D. All of these
6	Radium was discovered by:	A. Becquerel B. Marie curie C. Pierre curie D. Rutherford E. Both (B) and (C)
7	The force exerted on a conductor of length L, carrying current I when placed in a magnetic field B is given by	A. $F=IB/L$ B. $F= L \times B/I$ C. $F = IL \times B$ D. $F = IL \cdot B$
8	The ratio of the diameter of two convex lenses is _____-the ratio of their focal lengths:	A. Greater than B. Less than C. Equal to D. None of these
9	For production of beats the two sources must have	A. Different frequencies and same amplitude B. Different frequencies C. Different frequencies, same amplitude and same phase D. Different frequencies and same phase
10	During the positive half-cycle in the half-wave rectification, the diode	A. does not conduct B. conducts C. either of these D. neither of these
11	The direction of induced current is always so as to oppose the cause which produces it. This is	A. Lenz's law B. Ampere's law C. Faraday's law D. Coulomb's law E. None of these
12	In the equation $E=mc^2$ value of c is:	A. 1,86,000 miles per hour B. 1,86,000 miles per sec C. 3×10^8 m/sec D. Both A and C E. Both B and C
13	Which one of the following can act approximately as a source of monochromatic light;	A. Neon lamp B. Fluorescent tube C. Sodium lamp D. None of these
14	When the shear stress and shear strain are involved, then their ratio is called	A. Young's modulus B. Bulk modulus C. Shear modulus D. " "

		D. all of them
15	A curie represents a very strong source of	<p>A. α-particle</p> <p>B. β-particle</p> <p>C. γ-particle</p> <p>D. none of these</p>
16	When a conductor is moved across a magnetic field:	<p>A. Emf induced is similar to that of a battery</p> <p>B. Emf induced gives rise to induced current</p> <p>C. An emf is induced across its ends</p> <p>D. All are correct</p> <p>E. None of these</p>
17	A square loop of wire is moving through a uniform magnetic field. The normal to the loop is oriented parallel to the magnetic field. The emf induced in the loop is:	<p>A. Zero</p> <p>B. Of smaller magnitude</p> <p>C. Of larger magnitude</p> <p>D. Sometimes B, sometimes C</p> <p>E. Neither of these</p>
18	Centripetal acceleration is also called _____ acceleration:	<p>A. Tangential</p> <p>B. Radial</p> <p>C. Angular</p> <p>D. None of them</p>
19	A mass difference of 0.0012 u is equivalent to and energy of:	<p>A. 0.5 MeV</p> <p>B. 1.13 MeV</p> <p>C. 5.13 MeV</p> <p>D. 1.13 keV</p> <p>E. 1.13 eV</p>
20	Another mean of electric potential energy per unit charge is given by:	<p>A. Electric intensity</p> <p>B. Potential gradient</p> <p>C. Electric Flux</p> <p>D. Potential difference</p> <p>E. None of these</p>