

Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	If electric and gravitational force on an electron in a uniform electric field will be	A. $E=mg/q$ B. $E=q/mg$ C. $E=g/q$ D. $E=qg/m$
2	Magnetic flux and flux density are related by	A. Flux density = flux x area B. Flux density = flux / area C. Flux density = flux - area D. None of these
3	If two forces of magnitudes 3.5 and 2.5 N act on a body such that the angle between the forces is zero, then magnitude of the resultant will be:	A. 1.0 N B. 6 N C. 3.5 N D. 12 N
4	The cause of mirage observed in deserts in bright sunlight is due to	A. Refraction of light B. Reflection of light C. Scattering of light D. Total internal reflection of light
5	Relativistic mechanics is a branch of physics, which deal with the bodies moving with velocities:	A. More than c B. Approaching c C. Equal to c D. Much less than c
6	At resonance frequency the impedance of parallel resonance circuit is	A. Maximum B. Minimum C. Zero D. None of the above
7	In equation $F=ma$, then mass 'm' is	A. rest mass B. variable mass C. inertial mass D. gravitational mass
8	If one of the pipes has a much smaller diameter than the other and are placed horizontally then form both sides of Bernoulli's equation, we can drop the term	A. P B. $\frac{1}{2} \rho v^2$ C. ρgh D. none of them
9	A body moving with uniform velocity has	A. positive acceleration B. negative acceleration C. infinite acceleration D. zero acceleration
10	Due to relative motion of observer and the frame of reference of events, time always:	A. Dilates itself B. Contracts itself C. Stretches itself D. Both (A) and (C) E. None of these
11	Which one of the following elasticities is possessed by fluids:	A. Young's elastic modulus (length) B. Bulk elastic modulus (volume) C. Modulus of rigidity (shape) D. None of these
12	The efficiency of petrol engine is usually not more than 25% to 30% because of	A. friction B. heat losses C. both of them D. none of them
13	The velocity of a projectile is maximum	A. at the point of projection B. just before striking the ground C. at none of them D. at both of them
14	When brakes are applied to a fast moving car, the passengers will be thrown:	A. Forward B. Backward C. Downward D. None of these
15	If n denotes the total number of molecules in cubic vessel such that m is mass of each molecule and l is length of each side of vessel, then $\frac{nm}{l^3}$ gives the:	A. Force B. Density C. Work done D. Pressure

D. Pressure

16	An airplane is flying horizontally with a velocity of 600 km/h and at a height of 1960 m. When it is vertically above a point A on the ground, a bomb is released from it. The bomb strikes the ground, at point B. The distance AB is	A. 1200 m B. 0.33 km C. 3.33 km D. 33 km
17	The study of physics involves?	A. Structure of space and time B. Interaction of electromagnetic radiation with matter C. Both of them D. Chemical changes E. None of them
18	Mathematical manipulation of the two quantized states can be best carried if they are represented by	A. high - low B. yes - no C. on - off D. 0 - 1
19	How much time, the α -particle more massive than an electron	A. 600 B. 7000 C. 5000 D. 15000
20	One electron volt is equal to	A. $1.6 \times 10^{19} \text{eV}$ B. $6.25 \times 10^{18} \text{eV}$ C. $1.6 \times 10^{18} \text{eV}$ D. $6.25 \times 10^{19} \text{eV}$