Physics ECAT Pre Engineering MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Centripetal acceleration is also called _____ acceleration:	A. Tangential B. Radial C. Angular D. None of them
2	The excess (equal in number) of electrons that must be placed on each of two small spheres spaced 3 cm apart, with force of repulsion between the spheres to be 10^{-19}N, is	A. 25 B. 225 C. 625 D. 1250
3	Example of vibratory motion is	A. mass suspended from a spring B. a bob of simple pendulum C. mass attached to a spring placed D. all of them
4	The decrease in velocity per unit time is called	A. deceleration B. acceleration C. uniform acceleration D. variable acceleration
5	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
6	If the ratio of densities of two gases is 1:4, then the ratio of their rates of diffusion into one another is	A. 2 : 1 B. 4 : 1 C. 1 : 4 D. 3 : 4
7	The mechanics, which deals with the objects moving with velocities approaching that of light is called:	A. Relativistic mechanics B. Wave mechanic C. Quantum mechanics D. Statics
8	Examples of moderators used in a fission reactor is/are:	A. Water B. Heavy water C. Carbon D. Hydrocarbon E. All of these
9	The percentage of available heat energy converted into work by a diesel engine is roughly	A. 35 %` B. 40 % C. 35 - 40 % D. 25 %
10	In an ideal gas, the molecules have:	A. Kinetic energy only B. Potential energy only C. Both KE and PE D. None of these
11	If there identical strings each of constant K are hooked together the spring constant of resultant spring will be:	A. 3 K B. 2 K C. K/4 D. K/3
12	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
13	The most abundant isotope of neon is	A. neon-20 B. neon-21 C. neon-22 D. neon-23
14	Neutron was discovered by	A. Curie B. Roentgen C. Chadwick D. Rutherford

15	In above figures, tell which set of graphs shows that a body is moving with uniform velocity:	A. (i) and (ii) B. (ii) and (iii) C. (iii) and (iv)
16	Heating effect of current utilized in:	A. Electric motor<o:p> </o:p> B. Electric toaster<o:p></o:p> C. Electroplating<o:p> </o:p> D. Electric kettle<o:p> </o:p> E. Both (B) and (D)<o:p></o:p>
17	When the pn-junction is connected reversed biased, its resistance is of the order of	A. few ohms B. few kilo-ohms C. few mega-ohms D. few mili-ohms
18	A ball is thrown upwards with a velocity of 100 m/s. It will reach the ground after	A. 10 s B. 20 s C. 5 s D. 40 s
19	The speed of sound in a medium depends on	A. The elastic property but not on the inertia property B. The inertia property but not on the elastic property C. The elastic property as well as the inertia property D. Neither the elastic property nor the inertia property
20	A device which converts Electrical energy into mechanical energy is called as	A. Transformer B. Generator C. Motor D. All of these