

ECAT Physics Online Test

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Sr	Questions	Answers Choice
1	When a mass 'm' is pulled slowly through a distance ' x_0 ' , the elastic potential energy of the spring would be	A. P.E=Kx ² _o B. P.E= 1/2kx _o C. P.E=1/2Kx ² _o D. P.E=Kx ² _o
2	The law of electromagnetic induction is related to:	A. Coulomb B. Ampere C. Faraday D. Lenz E. None of these
3	If one end of a rubber cord is fixed with a support and the other end is wiggled by hand, the waves generated on the card are:	A. Stationary waves B. Transverse waves C. Both of these D. None of these
4	The distance covered by the wave in one second is:	A. Wave number B. Wave length C. Frequency D. Wave speed
5	If an iron ball and a wooden ball of the same radius was released from a height 'h' in vacuum, then time taken by both of them to reach ground will be	A. Unequal B. Exactly equal C. Roughly equal D. Zero
6	Calculate the amount of charge flowing in 2 minutes in a wire of resistance 10 Ω when a potential difference of 20 V is applied between its ends	A. 120 C B. 240 C C. 20 C D. 4 C
7	An object undergoes S.H.M has maximum acceleration when its displacement form the means position	A. maximum B. zero C. half of the maximum value D. one third of the maximum value
8	Longitudinal waves are also called:	A. Congressional waves B. Transverse waves C. Radio waves D. None of them
9	As the current flow through the wire:	A. It generates heat in the wire<o:p>p></o:p> B. It produces sound in the wire<o:p></o:p> C. Resistanc of the wire decreases<o:p></o:p> D. Times New Roman" ," serif" ">Times New Roman" ," serif" Times New Roman" ," serif" ">Times New Roman" ," serif" ">Times
10	The bonding between the semi-conductor materials is	A. covalent B. ionic C. either of them D. none of them
11	If A represents linear momentum and c, the velocity of light, then unit of pc in	A. Newton B. Joule

11	international system of units is:	C. Joule-Sec D. Joule-s ⁻¹ E. Watt
12	The velocity given to a body to go out of the influence of earth's gravity is known as:	A. Terminal velocity B. Orbital velocity C. Escape velocity D. None of these
13	Three quarks make:	A. An electron B. A meson C. A baryon D. A photon E. None of these
14	A point charge A of charge +4 μ C and another B of charge -1 μ C are placed in air at a distance 1 m apart. Then the distance of the point on the line joining the charge B, where the resultant electric field is zero, is (in m)	A. 2 B. 1 C. 0.5 D. 1.5
15	Which of the following does not have the same units:	A. Work B. Heat C. Kinetic energy D. Power
16	What must be changing when a body is accelerating uniformly?	A. the force acting on a body B. the velocity of the body C. the mass of the body D. the speed of the body
17	In a metal, the valence electrons are:	A. Attached to individual atoms B. Not attached to individual atoms C. Free to move within the metal D. Both A and B E. Both A and C
18	The value of the Stephen's constant for black body radiations is given by	A. 5.6 x 10 ⁸ Wm ⁻² K ⁻⁴ B. 5.67 x 10 ⁻⁸ Wm ⁻² K ⁻⁴ C. 2.9 x 10 ⁻³ mK D. 2.9 x 10 ³ mK
19	Under the elastic region, the deformation produced in the material, the deformation produced in the material will be	A. permanent B. temporary C. either of them D. none of them
20	A conducting wire is drawn to double its length. Final resistivity of the material will be	A. Double of the original one B. Half of the original one C. One fourth of the original one D. Same as original one