

## Physics ECAT Pre Engineering Chapter 8 Waves Online Test

Sr	Questions	Answers Choice
1	Energy is dissipated and consequently the energy mass system do not oscillate indefinitely because of	A. very small energy B. very large energy C. frictional forces D. acceleration due to gravity
2	The total energy of spring mass system is	A. zero B. changing with time C. constant D. none of them
3	When the bob of simple pendulum is at mean position, its K.E will be	A. maximum B. minimum C. zero D. all of them
4	When the bob of simple pendulum is at extreme position, its K.E. will be	A. maximum B. minimum C. zero D. all of them
5	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 <sup>2</sup> <sub>o</sub> B. P.E= 1/2kx <sub>o</sub> C. P.E=1/2Kx <sup>2</sup> <sub>o</sub> D. P.E=Kx <sup>2</sup> <sub>o</sub>
6	When a mass 'm' is pulled slowly, the spring stretches by an amount $\mathbf{x}_0$ , then the work done will be	A. W=Kx <sub>o</sub> B. W=1/2Kx <sub>o</sub> C. W=1/2Kx <sup>2</sup> <sub>o</sub> D. W=4Kx <sub>o</sub>
7	When a mass 'm' is pulled slowly, the spring stretches by an amount $\mathbf{x}_0$ , then the average force would be	A. F= Kx <sub>0</sub> B. F=1/2Kx <sub>0</sub> C. F=2Kx <sub>0</sub> D. F=4Kx <sub>0</sub>
8	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
9	If the length of a simple pendulum is 0.25 m its time period would be	A. 1.0 s B. 2.0 s C. 3.0 s D. 4.0 s
10	Time period of simple pendulum is independent of	A. length B. mass C. acceleration due to gravity D. none of them
11	Time period of a simple pendulum depends upon the	A. length of the pendulum B. acceleration due to gravity C. none of them D. both of them
12	If the length of second pendulum becomes four times then its time period will become	A. Four time B. Two times C. Six times D. Eight times
13	The weight 'mg' of the bob is resolved into	A. one component B. two components C. three components D. four components
14	The bob of a simple pendulum is suspended by	A. string B. heavy inextensible string C. light extensible string D. light inextensible string

A. small light bob B. small heavy bob C. big light bob D. big heavy bob