Physics ECAT Pre Engineering Chapter 7 Oscillations Online Test

Sr	Questions	Answers Choice
1	The time period of a simple pendulum is independent of its:	A. Length B. Mass C. Value of g D. Both A and B
2	A body of mass 0.031 kg attached to one end of a spring of spring constant 0.3 N/m, then time period of spring mass system will be:	A. 1.5 sec B. 2.0 sec C. 2.3 sec D. 2.5 sec
3	Distance covered during one vibration of an oscillating body in terms of amplitude A is:	A. A B. 2 A C. 3 A D. 4 A
4	When quarter of a circle is completed, the phase of vibration is:	A. $90°$ B. $180°$ C. $45°$ D. $360°$
5	The body oscillates due to _____ accelerates and overshoots the rest position due to _____	A. Applied force, Inertia B. Restoring force, Friction C. Frictional force, Inertia D. Restoring force, Inertia
6	Amplitude in SHM is equivalent to _____ in circular motion	A. Diameter B. Radius C. Circumference D. None of these
7	The graph showing the variation of displacement with time is a	A. Sine curve B. Straight line C. Parabola D. None of these
8	When a body is vibrating, the displacement from mean position	A. Increases with time B. Decreases with time C. Changes with time D. None of these
9	The restoring force is _____ and opposite tot he applied force within _____	A. Equal, Elastic limit B. Different, The walls of the laboratory C. Different, Elastic limit

		C. Different, Elastic limit D. None of these
10	The SI unit of spring constant is identical with that of	A. Force B. Surface tension C. Pressure D. Loudness
11	Which one of the following is an example of SHM	A. Motion in a plane B. Motion in a swing C. Motion in a car D. None of these
12	The unit of spring constant is	A. J-sec B. Metre C. Nm^{-1} D. None of these
13	If time period of a pendulum is doubled by increasing its length, then its frequency will	A. Also be doubled B. Become half C. Become one fourth D. Becomes four times
14	Velocity of particle executing SHM will be maximum at	A. Extreme position B. Mean position C. b/w mean and extreme D. None
15	A particle executes SHM with frequency. The frequency with which its K.E oscillates is	A. f/2 B. 2f C. f D. 4f