

MDCAT Physics Chapter 5 Oscillations Online Test

Sr	Questions	Answers Choice
1	If L is length of a simple pendulum and T is its time period, then graph between different values of L and T^2 will be	A. A curve B. A straight line C. A sine curve D. None of these
2	The unit of spring constant is:	A. J-Sec B. Metre C. Nm^{-1} D. None of these
3	When the mass attached to a spring begins to move left or right from the equilibrium position, its P.E.	A. Increases B. Decreases C. Remain constant D. None of these
4	Which of the following is responsible for the motion of the bob of the simple pendulum:	A. $mg \sin \theta$ B. Tension T C. $mg \cos \theta$ D. mg
5	The length of second's pendulum at a place where $g=980 \text{ cm/sec}^2$ is:	A. 77 cm B. 88.1 cm C. 99.2 cm D. 100.3 cm
6	The time period of a simple pendulum is independent of its:	A. Length B. Mass C. Value of g D. Both A and B
7	Pendulums having same lengths will vibrate with:	A. Same frequency B. Different periods C. Different frequencies D. None of these
8	In SHM, the acceleration is _____ when velocity is _____.	A. Zero, smallest B. Smallest, zero C. Zero, Zero D. Zero, greatest
9	If length of the second's pendulum is denoted by L_1 then the length of a pendulum having a period of 1 second is:	A. $L/2$ B. $2L$ C. $L/4$ D. $4L$
10	Which of the following quantities /quantity becomes zero at any moment during oscillation.	A. Speed B. Acceleration C. Momentum D. All of these
11	if ratio of time periods of two pendulum is 1:2 then the ratio of their length will be:	A. 4 : 1 B. 1 : 2 C. 1 : 4 D. None of these
12	Which one of the following is an example of SHM.	A. Motion in a plane B. Motion in swing C. Motion in a car D. None of these
13	An oscillating body oscillates due to:	A. Applied force B. Restoring force C. Frictional force D. None of these
14	A mass attached to a spring vibrates with a frequency of 0.6 cycles/sec. Its angular velocity ω comes out to be :	A. 3.77 rad/sec B. 10.4 rad/sec C. 1.67 rad/sec D. None of these
15	Distance covered during one vibration of an oscillating body in terms of amplitude A is:	A. A B. $2A$ C. $3A$ D. $4A$

16	The tension T in the string of a simple pendulum acts:	A. Velocity down load B. Along the string C. Vertically upward D. None of these
17	To and fro motion of a body about its mean position is known as:	A. Translatory motion B. Vibratory motion C. Rotatry motion D. None of these
18	The string of simple pendulum should be:	A. Heavy B. Extensible C. Inextensible D. None of these
19	Time period of a simple pendulum at certain placed depends upon:	A. Mass of the bob B. Amplitude C. Material of the bob D. None of these
20	At what place , motion of a simple pendulum will be the slowest:	A. On the surface of the earth B. All of the centre of earth C. At the quarter D. Both B and C