

## MDCAT Physics Chapter 5 Oscillations Online Test

Sr	Questions	Answers Choice
1	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
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	The change in length of the spring in a spring -mass system is directly proportional to:	A. Frequency B. Applied force C. Velocity D. None of these
4	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
5	Half wavelength corresponds to:	A. $0^\circ$ B. $90^\circ$ C. $180^\circ$ D. $360^\circ$
6	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
7	When quarter of a cycle is completed , the phase of vibration is:	A. $90^\circ$ B. $180^\circ$ C. $45^\circ$ D. $360^\circ$
8	In case of spring-mass system, the ratio of the applied force to the displacement is called:	A. Planck's constant B. Decay constant C. Spring constant D. 4 Acceleration
9	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
10	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
11	In SHM there is always a constant ratio between displacement of a body and its:	A. Velocity B. Period C. Mass D. Acceleration
12	When a simple pendulum swings, which of the following quantities does not become zero throughout the oscillation?	A. Speed B. weight C. Acceleration D. Momentum
13	Pendulums having same lengths will vibrate with:	A. Same frequency B. Different periods C. Different frequencies D. None of these
14	The graph showing the variation of displacement with time is a:	A. Sine curve B. Straight line C. Parabola D. None of these
15	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

16	The time taken to complete one vibration is called:	A. Frequency B. Amplitude C. Time D. Time period
17	Hertz is unit of :	A. Time period B. Displacement C. amplitude D. Frequency
18	The SI unit of spring constant is identical with that of:	A. Force B. Surface tension C. Pressure D. Loudness
19	Which of the following quantities /quantity becomes zero at any moment during oscillation.	A. Speed B. Acceleration C. Momentum D. All of these
20	A mass attached to a spring vibrates with a frequency of 0.6 cycles/sec. Its angular velocity $\omega$ comes out to be :	A. 3.77 rad/sec B. 10.4 rad/sec C. 1.67 rad/sec D. None of these