

## 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	The time taken to complete one vibration is called:	A. Frequency B. Amplitude C. Time D. Time period
3	Pendulums having same lengths will vibrate with:	A. Same frequency B. Different periods C. Different frequencies D. None of these
4	An object in SHM will have maximum speed when its displacement from equilibrium position is :	A. Infinity B. Maximum C. Zero D. Minimum
5	Second's pendulum is the pendulum whose time period is:	A. 1 second B. 2 second C. 3 second D. None of these
6	A body complete 20 vibrations in one minute, its time period will be:	A. 0.05 sec B. 1.5 sec C. 3.0 sec D. 20 seconds
7	An oscillating body oscillates due to:	A. Applied force B. Restoring force C. Frictional force D. None of these
8	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
9	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
10	At which place simple pendulum will vibrate the slowest?	A. Muree B. Karachi C. Mount Everest D. None of these
11	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
12	A mass attached to a spring completes 60 vibrations in half minute. Its frequency is:	A. 120 Hertz B. 60 Hertz C. 30 Hertz D. 2 Hertz
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	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
15	While determining the time period of simple pendulum, we keep the amplitude:	A. Large B. Small C. Zero D. None of these

16	The string of simple pendulum should be:	A. Heavy B. Extensible C. Inextensible D. None of these
17	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
18	The time period of a simple pendulum is 1 second. If $g = 9.8 \text{ m/sec}^2$ , then length of the simple pendulum will be:	A. 380 m B. 0.25 m C. 2.5 m D. None of these
19	A second's pendulum completes 5 vibrations in:	A. 5 seconds B. 10 seconds C. 2.5 seconds D. 15 seconds
20	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