

MDCAT Physics Chapter 5 Oscillations Online Test

Sr	Questions	Answers Choice
1	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
2	Which of the following quantities /quantity becomes zero at any moment during oscillation.	A. Speed B. Acceleration C. Momentum D. All of these
3	At which place simple pendulum will vibrate the slowest?	A. Muree B. Karachi C. Mount Everest D. None of these
4	Hertz is unit of :	A. Time period B. Displacement C. amplitude D. Frequency
5	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
6	If a mass of 10 gm is suspended from a spring of $k= 9.8 \text{ Nm}^{-1}$, then the extension will be	A. 1 cm B. 1 m C. 10 mm D. None of these
7	When quarter of a cycle is completed , the phase of vibration is:	A. 90° B. 180° C. 45° D. 360°
8	If the waves produced in a microwave oven are of wave-length 12 cm, then their frequency will be:	A. 2500 MHz B. 0.25 MHz C. 2500 KHz D. None of these
9	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
10	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
11	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
12	An object in SHM will have maximum speed when its displacement from equilibrium position is :	A. Infinity B. Maximum C. Zero D. Minimum
13	Half wavelength corresponds to:	A. 0° B. 90° C. 180° D. 360°
14	A Complete circle is equivalent to:	A. Full wavelength B. Half wavelength C. Quarter wavelength D. None of these
15	Free oscillations are always produced by:	A. An applied force B. Gravitational force C. Restoring force and inertia D. Inertia only

16	A body complete 20 vibrations in one minute, tis time period wil be:	A. 0.05 sec B. 1.5 sec C. 3.0 sec D. 20 seconds
17	In SHM, the acceleration is _____ when velocity is_____.	A. Zero, smallest B. Smallest, zero C. Zero, Zero D. Zero, greatest
18	The time taken to complete one vibration is called:	A. Frequency B. Amplitude C. Time D. Time period
19	The unit of spring constant is:	A. J-Sec B. Metre C. Nm^{-1} D. None of these
20	The SI unit of spring constant is identical with that of:	A. Force B. Surface tension C. Pressure D. Loudness
