

MDCAT Physics Chapter 5 Oscillations Online Test

Sr	Questions	Answers Choice
1	The time taken to complete one vibration is called:	A. Frequency B. Amplitude C. Time D. Time period
2	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
3	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
4	Second pendulum is the pendulum whose time period is:	A. 1 second B. 2 seconds C. 3 seconds D. None of these
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	To and fro motion of a body about its mean position is known as:	A. Translatory motion B. Vibratory motion C. Rotatory motion D. None of these
7	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
8	A second's pendulum completes 5 vibrations in:	A. 5 seconds B. 10 seconds C. 2.5 seconds D. 15 seconds
9	When the bob of a simple pendulum is at extreme position, K.E.is _____ and P.E. is _____.	A. Maximum, zero B. Minimum, zero C. zero , maximum D. None of these
10	An object in SHM will have maximum speed when its displacement from equilibrium position is :	A. Infinity B. Maximum C. Zero D. Minimum
11	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
12	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
13	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
14	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
15	An angle of 180° in circular motion is equivalent to _____ in SHM.	A. Half the vibration B. One vibration C. 3/4th of a vibration D. None of these

16 The SI unit of spring constant is identical with that of:
A. Force
B. Surface tension
C. Pressure
D. Loudness

17 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

18 The frequency of second's pendulum is:
A. 0.5 Hz
B. 1.0 Hz
C. 1.5 Hz
D. 2 Hz

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 When quarter of a cycle is completed , the phase of vibration is:
A. 90°
B. 180°
C. 45°
D. 360°
