

ECAT Physics Chapter 7 Oscillations

Sr	Questions	Answers Choice
1	To and from motion of a body about its mean position is known as:	A. Translatory motion B. Vibratory motion C. Rotatory motion D. None of these
2	The graph showing the variation of displacement with time is a:	A. Sine curve B. Straight line C. Parabola D. None of these
3	Amplitude is the displacement of the vibrating body from:	A. One extreme position to the other extreme position B. Mean position any one extreme position C. Both A and B are correct D. None of these
4	A body with frequency would complete one vibration in:	A. f seconds B. $1/f$ seconds C. 1 second D. f^{2} second
5	The SI unit of spring constant is identical with that of:	A. Force B. Surface tension C. Pressure D. Loudness
6	An object in SHM will have maximum speed when its displacement from equilibrium position is:	A. Infinity B. Maximum C. Zero D. Minimum
7	Amplitude in SHM is equivalent to _____ in circular motion:	A. Diameter B. Radius C. Circumference D. None of these
8	In SHM, there is always a constant ratio between displacement if body and its:	A. Velocity B. Period C. Mass D. Acceleration
9	Which one of the following is an example of SHM	A. Motion in a plane B. Motion in a swing C. Motion in a car D. None of these
10	The unit of spring constant is:	A. J-sec B. Metre C. Nm^{-1} D. None of these
11	The restoring force is _____ and opposite to the applied force within _____	A. Equal, Elastic limit B. Different, The walls of the laboratory C. Different, Elastic limit D. None of these
12	A spring of constant $k = 0.4 \text{ N m}^{-1}$ is to be extended through 10 cm at a place where $g = 10 \text{ m sec}^{-2}$. The mass to be suspended should be:	A. 4 gms B. 0.4 gm C. 40 gms D. None of these
13	If there identical strings each of constant K are hooked together the spring constant of resultant spring will be:	A. 3 K B. 2 K C. $K/4$ D. $K/3$
14	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. Become four times
		A. 1 second

15	Second's pendulum is the pendulum whose time period is:	B. 2 second C. 3 second D. None of these
16	The number of vibration in two seconds can be expressed as _____ of frequency of vibration is f :	A. f B. $2f$ C. $3f$ D. $1/2f$
17	Amplitude in SHM is equivalent to _____ in circular motion	A. Diameter B. Radius C. Circumference D. None of these
18	The graph showing the variation of displacement with time is a	A. Sine curve B. Straight line C. Parabola D. None of these
19	A particle moving uniformly along circle its projection along diameter performs	A. Linear motion B. Projectile motion C. SHM D. Rotatory motion
20	The acceleration of body executing SHM is directly proportional to	A. Applied force B. Amplitude C. Displacement D. Frictional force