

ECAT Physics Chapter 7 Oscillations

Sr	Questions	Answers Choice
1	The body oscillates due to accelerates and overshoots the rest position due to	A. Applied force, Inertia B. Restoring force, Friction C. Frictional force, Inertia D. Restoring force, Inertia
2	The body oscillates due to accelerates and overshoots the rest position due to:	A. Applied force , inertia B. Restoring force, friction C. Frictional force, inertia D. Restoring force, inertia
3	The graph showing the variation of displacement with time is a:	A. Sine curve B. Straight line C. Parabola D. None of these
4	The acceleration of body executing SHM is directly proportional to	A. Applied force B. Amplitude C. Displacement D. Frictional force
5	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
6	Vibratory motion is always under	A. Applied force B. Restoring force C. Periodic force D. Gravitational force
7	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
8	If a mass of 10 gm is suspended from a spring of k = 9.8 Nm ⁻¹ , then the extension will be:	A. 1 cm B. 1 m C. 10 mm D. None of these
9	In SHM, there is always a constant ratio between displacement if body and its:	A. Velocity B. Period C. Mass D. Acceleration
10	If a force of 0.05 N produces an elongation of 20 mm in a string, then its spring constant will be:	A. 250 N m ⁻¹ B. 25 N m ⁻¹ C. 2.5 N m ⁻¹ D. None of these
11	Which of the following forces is responsible for SHM	A. Applied force B. Restoring force C. Fractional force D. Elastic force
12	Amplitude in SHM is equivalent to in circular motion:	A. Diameter B. Radius C. Circumference D. None of these
13	Which of the following quantity for particle executing SHM is non-zero at mean position	A. Force B. Acceleration C. Velocity D. Displacement
14	Hertz is unit of:	A. Time period B. Displacement C. Amplitude D. Frequency
15	Second's pendulum is the pendulum whose time period is:	A. 1 second B. 2 second C. 3 second D. None of these

16	A particle executes SHM with frequency. The frequency with which its K.E oscillates is	A. f/2 B. 2f C. f D. 4f
17	Distance covered during one vibration of an oscillating body in terms of amplitude A is:	A. A B. 2 A C. 3 A D. 4 A
18	When a body is vibrating, the displacement from mean position:	A. Increases with time B. Decreases with time C. Changes with time D. None of these
19	Free oscillations are always produced by:	A. An applied force B. Gravitational force C. Restoring force and inertia D. Inertia only
20	Amplitude in SHM is equivalent to in circular motion	A. Diameter B. Radius C. Circumference D. None of these