ECAT Pre General Science Physics Chapter 7 Oscillations Online Test

Sr	Questions	Answers Choice
1	When quarter of a cycle is completed, the phase of vibration is:	A. $90°$ B. $180°$ C. $45°$ D. $360°$
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	Amplitude in SHM is equivalent to_____ in circular motion:	A. Diameter B. Radius C. Circumference D. None of these
4	The graph showing the variation of displacement with time is a:	A. Sine curve B. Straight line C. Parabola D. None of these
5	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
6	The restoring force is _____ amd 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
7	The SI unit of spring constant is identical with that of:	A. Force B. Surface tension C. Pressure D. Loudness
8	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
9	The unit of spring constant is:	A. J-sec B. Metre C. Nm^{-1}

10	To and fro motion of a body is about its mean position is known as:	A. Translatory motion B. Vibratory motion C. Rotatory motion D. None of these
11	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
12	Free oscillations are always produced by:	A. An applied force B. Gravitational force C. Restoring force and inertia D. Inertia only
13	An object undergoes SHM. Its maximum equilibrium positions:	A. Maximum B. Half of its maximum value C. Zero D. None
14	Second's pendulum is the pendulum whose time period is:	A. 1 second B. 2 second C. 3 second D. None of these
15	The string of a simple pendulum should be:	A. Heavy B. Extensible C. In-extensible D. None of these
16	The time period of a simple pendulum is independent of its:	A. Length B. Mass C. Value of g D. Both A and B
17	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
18	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
19	When quarter of a circle is completed, the phase of vibration is:	A. 90° B. 180° C. 45° D. 360°
20	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

21	Amplitude in SHM is equivalent to _____ in circular motion	A. Diameter B. Radius C. Circumference D. None of these
22	The graph showing the variation of displacement with time is a	A. Sine curve B. Straight line C. Parabola D. None of these
23	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
24	The restoring force is _____ and opposite tot he applied force within _____	A. Equal, Elastic limit B. Different, The walls of the laboratory C. Different, Elastic limit D. None of these
25	The SI unit of spring constant is identical with that of	A. Force B. Surface tension C. Pressure D. Loudness
26	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
27	The unit of spring constant is	A. J-sec B. Metre C. Nm^{-1} D. None of these
28	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
29	Velocity of particle executing SHM will be maximum at	A. Extreme position B. Mean position C. b/w mean and extreme D. None
30	A particle executes SHM with frequency. The frequency with which its K.E oscillates is	A. f/2 B. 2f C. f D. 4f