

ECAT Physics Chapter 7 Oscillations

Sr	Questions	Answers Choice
1	Hertz is unit of:	A. Time period B. Displacement C. Amplitude D. Frequency
2	Which of the following forces is responsible for SHM	A. Applied force B. Restoring force C. Fractional force D. Elastic force
3	The S.I unit of frequency is	A. Vibrations s ⁻² B. Ms ⁻¹ C. Hertz D. s ⁻¹
4	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
5	If a given spring of spring constant K is cut into two identical segments, the spring constant of each segment is:	A. K/2 B. 2 K C. 4 K D. None of these
6	Free oscillations are always produced by:	A. An applied force B. Gravitational force C. Restoring force and inertia D. Inertia only
7	Which of the following is an example of SHM(in ideal situations)	A. Motion of simple pendulum B. Motion of horizontal spring man system C. Motion of violin string D. All of these
8	If a given spring of spring constant k is cut into two indentical segments, the spring constant of each segment is:	A. k/2 B. 2 k C. 4 k D. None of these
9	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
9	The restoring force is and opposite tot he applied force within The string of a simple pendulum should be:	B. Different, The walls of the laboratory C. Different, Elastic limit
		B. Different, The walls of the laboratory C. Different, Elastic limit D. None of these A. Heavy B. Extensible C. In-extensible
10	The string of a simple pendulum should be:	B. Different, The walls of the laboratory C. Different, Elastic limit D. None of these A. Heavy B. Extensible C. In-extensible D. None of these A. Motion in a plane B. Motion in a swing C. Motion in a car
10	The string of a simple pendulum should be: Which one of the following is an example of SHM	B. Different, The walls of the laboratory C. Different, Elastic limit D. None of these A. Heavy B. Extensible C. In-extensible D. None of these A. Motion in a plane B. Motion in a swing C. Motion in a car D. None of these A. Diameter B. Radius C. Circumference
10	The string of a simple pendulum should be: Which one of the following is an example of SHM Amplitude in SHM is equivalent to in circular motion	B. Different, The walls of the laboratory C. Different, Elastic limit D. None of these A. Heavy B. Extensible C. In-extensible D. None of these A. Motion in a plane B. Motion in a swing C. Motion in a car D. None of these A. Diameter B. Radius C. Circumference D. None of these A. J-sec B. Metre C. Nm ⁻¹

15	The time period of a simple pendulum is independent of its:	B. Mass C. Value of g D. Both A and B
16	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
17	The wave form of SHM is	A. Pulsed wave B. Square wave C. Triangular waved D. Sine wave
18	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
19	When quarter of a circle is completed, the phase of vibration is:	A. 90