ECAT Physics Chapter 7 Oscillations

Sr	Questions	Answers Choice
1	The unit of spring constant is:	A. J-sec B. Metre C. Nm^{-1} D. None of these
2	An object undergoes SHM. Its maximum equilibrium positions:	A. Maximum B. Half of its maximum value C. Zero D. None
3	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
4	When quarter of a circle is completed, phase of vibration is:	A. $90°$ B. $180°$ C. $45°$ D. $360°$
5	Acceleration of body executing SHM is always directed towards	A. Extreme position B. Mean position C. Along the direction of motion D. None
6	The time taken to complete one vibration is called:	A. Frequency B. Amplitude C. Time D. Time period
7	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
8	Amplitude in SHM is equivalent to _____ in circular motion:	A. Diameter B. Radius C. Circumference D. None of these
9	The graph showing the variation of displacement with time is a	A. Sine curve B. Straight line C. Parabola D. None of these
10	In SHM, the acceleration is _____ when velocity is _____:	A. Zero, smallest B. Smallest, zero C. Zero, zero

		C. Zero, zero D. Zero, greatest
11	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
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 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
14	A particle is moving along a circular path with uniform speed. Its projection will execute ___along the _____ of the circle:	A. Circular motion, circumference B. Vibratory, chord C. SHM, diameter D. SHM, circumference
15	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
16	Which of the following forces is responsible for SHM	A. Applied force B. Restoring force C. Fractional force D. Elastic force
17	When quarter of a circle is completed, the phase of vibration is:	A. 90° B. 180° C. 45° D. 360°
18	The displacement of body executing SHM is	A. $x_o\cos wt$ B. $x_o\sin wt$ C. $x_o\sin^2 wt$ D. Both A, B
19	Second's pendulum is the pendulum whose time period is:	A. 1 second B. 2 second C. 3 second D. None of these
20	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