

Physics ECAT Pre Engineering Chapter 7 Oscillations

Sr	Questions	Answers Choice
1	If a given spring of spring constant k is cut into two identical segments, the spring constant of each segment is:	<p>A. $k/2$ B. $2k$ C. $4k$ D. None of these</p>
2	Which one of the following is an example of SHM:	<p>A. Motion in a plane B. Motion in a swing C. Motion in a car D. None of these</p>
3	Amplitude in SHM is equivalent to _____ in circular motion:	<p>A. Diameter B. Radius C. Circumference D. None of these</p>
4	A particle is moving along a circular path with uniform speed. Its projection will execute _____ along the _____ of the circle:	<p>A. Circular motion, circumference B. Vibratory, chord C. SHM, diameter D. SHM, circumference</p>
5	The restoring force is _____ and opposite to the applied force within _____,:	<p>A. Equal, elastic limit B. Different, the walls of the laboratory C. Different, elastic limit D. None of these</p>
6	If there identical strings each of constant K are hooked together the spring constant of resultant spring will be:	<p>A. $3K$ B. $2K$ C. $K/4$ D. $K/3$</p>
7	The restoring force is _____ and opposite tot he applied force within _____	<p>A. Equal, Elastic limit B. Different, The walls of the laboratory C. Different, Elastic limit D. None of these</p>
8	Amplitude in SHM is equivalent to _____ in circular motion	<p>A. Diameter B. Radius C. Circumference D. None of these</p>
9	When quarter of a cycle is completed, the phase of vibration is:	<p>A. 90° B. 180° C. 45° D. 360°</p>

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| 10 | The time taken to complete one vibration is called: | A. Frequency
B. Amplitude
C. Time
D. Time period |
| 11 | The number of vibration in two seconds can be expressed as _____ of frequency of vibration is f: | A. f
B. 2 f
C. 3 f
D. 1/2 f |
| 12 | A particle executes SHM with frequency. The frequency with which its K.E oscillates is | A. f/2
B. 2f
C. f
D. 4f |
| 13 | 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 |
| 14 | In SHM, there is always a constant ratio between displacement of body and its: | A. Velocity
B. Period
C. Mass
D. Acceleration |
| 15 | A body with frequency of would complete one vibration in: | A. f seconds
B. 1/f seconds
C. 1 second
D. f ² second |
| 16 | Vibratory motion is always under | A. Applied force
B. Restoring force
C. Periodic force
D. Gravitational force |
| 17 | Amplitude in SHM is equivalent to _____ in circular motion: | A. Diameter
B. Radius
C. Circumference
D. None of these |
| 18 | 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 |
| 19 | The graph showing the variation of displacement with time is a | A. Sine curve
B. Straight line
C. Parabola
D. None of these |
| 20 | An object undergoes SHM. Its maximum equilibrium positions: | A. Maximum
B. Half of its maximum value
C. Zero
D. None |