

## Simple Harmonic Motion and Waves

Sr	Questions	Answers Choice
1	The time period of simple pendulum can be calculated by:	<p>A. <math>T = 2\pi\sqrt{L/g}</math>            B. <math>T = 2\pi\sqrt{m/k}</math>            C. <math>T = 2\pi\sqrt{g/L}</math>            D. <math>T = 2\pi\sqrt{k/m}</math></p>
2	If mass of bob of a simple pendulum is doubled, its time period.	<p>A. is doubled            B. become four times            C. remains same            D. none of the above</p>
3	Diffraction of wave can be observed clearly only when the size of slit or obstacle is nearly _____ to the wavelength of the wave:	<p>A. Two times            B. Equal            C. Four times            D. None of these</p>
4	The number of wavelength of waves passing through a point in one second is called:	<p>A. Time period            B. Cycle            C. Frequency            D. None of these</p>
5	Which of the following characteristics of a wave is independent of the others:	<p>A. speed            B. frequency            C. amplitude            D. wavelength</p>
6	Formula for time period of spring mass system is represented by:	<p>A. <math>T = 2\pi\sqrt{m/k}</math>            B. <math>T = 2\pi\sqrt{k/m}</math>            C. <math>T = 1/2\pi\sqrt{k/m}</math>            D. <math>T = 1/2\pi\sqrt{m/k}</math></p>
7	First voice signal was transmitted in the form of electrical signal in:	<p>A. 1870            B. 1875            C. 1876            D. 1880</p>
8	When a body moves to and fro about a point its motion is called:	<p>A. Random motion            B. Linear motion            C. Vibratory motion            D. Rotatory motion</p>
9	How many possible solutions are there for a problem?	<p>A. One            B. Two            C. Three            D. Multiple</p>
10	Floppy has a storage capacity	<p>A. 4-5 MB            B. 3-4 MB            C. 1-3 MB            D. 3-6 MB</p>
11	Wave transfer	<p>A. Energy            B. Frequency            C. Wavelength            D. Velocity</p>
12	The displacement produced in the spring directly proportional to force is called:	<p>A. Hook's law            B. Boyle's law            C. Newton's law            D. both 'b' and 'c'</p>
13	The force applied on the mass attached with a spring is represented by:	<p>A. <math>F = ax</math>            B. <math>F = cx</math>            C. <math>F = -kx</math>            D. <math>F = -sx</math></p>
14	The wave properties	<p>A. Reflection            B. Refraction            C. Diffraction            D. All of these</p>

15	The time period of mass attached with a spring can be calculated by:	A. $T = 2\pi\sqrt{L/g}$ B. $T = 1/T$ C. $T = 2\pi\sqrt{g/L}$ D. $T = 2\pi\sqrt{m/k}$
16	The speed of waves can be calculated by:	A. $Vt$ B. $d \times t$ C. $f \lambda$ D. $Tf$
17	The maximum displacement from mean position is called:	A. Maximum height B. Time period C. Amplitude D. Interval
18	Wave equation is defined as:	A. $f = T\lambda$ B. $f = V\lambda$ C. $V = 2f\lambda$ D. $V = f\lambda$
19	The relation between $v, f$ and $\lambda$ of a wave is:	A. $vf = \lambda$ B. $f\lambda = v$ C. $v\lambda = f$ D. $v = \lambda/f$
20	At mean position of pendulum, the potential energy of the pendulum is:	A. Maximum B. Minimum C. Much more D. Both a and c