

Simple Harmonic Motion and Waves

Sr	Questions	Answers Choice
1	The waves in which particle of the medium vibrate parallel to the direction of waves are called	A. Longitudinal waves B. Transverse waves C. Electromagnetic waves D. both b and c
2	The relation between v,f andλ of a wave is:	A. $vf=\lambda$ B. $f\lambda = v$ C. $v\lambda = f$ D. $v=\lambda/f$
3	Wave transfer	A. Energy B. Frequency C. Wavelength D. Velocity
4	A device which has two ways of communication is:	A. television B. radio C. hard disk D. mobile phone
5	Which rays are used to send or receive digital information along aptical fibre:	A. infrared B. alpha rays C. beta rays D. mechanical
6	If the length of a simple pendulum is halved its time period will become:	A. T/2 B. T = T/√2 C. √2T D. 2T
7	Shock absorbers in automobiles are one practical application of:	A. SHM B. Random motion C. Damped motion D. None of these
8	The ratio of external force applied on the spring to displacement is called:	A. Hook's law B. Constant C. Spring constant
9	The oscillations of a system in the presence of force are called amp oscillations:	A. Resistive force B. Attractive force C. Both of these D. None of these
10	The formula of time period of simple pendulum is:	A. $T = 2\pi \sqrt{L/g}$ B. $T = 2\pi (L/g)$ C. $T = 2\pi \sqrt{1/g}$ D. $T = 1/2\pi \sqrt{L/g}$
11	The waves in which particles of the medium vibrate perpendicular to the direction of propagation of waves are called:	A. Transverse waves B. Longitudinal waves C. Electromagnetic waves D. None of these
12	During S.H.M acceleration of the body is maximum at:	A. Mean position B. Extreme positions C. Between mean & D. None of these
13	It mean position kinetic energy of the ball is:	A. Minimum B. Zero C. Maximum D. None of these
		A. T = 2π√L/g B. T = 1/T
14	The time period of mass attached with a spring can be calculated by:	C. $T = 2\pi \sqrt{g/L}$ D. $T = 2\pi \sqrt{m/k}$
15	One byte is equal to:	A. 7 bits<0:p> B. 5 bits<0:p> C. 8 bits<0:p>

		D. 9 bits <o:p></o:p>
16	The displacement produced in the spring directly proportional to force is called:	A. Hook's law B. Boyle's law C. Newton's law D. both 'b' and 'c'
17	The waves, which are used to detect the broken bones, are called:	A. Light waves B. x-rays C. Sound waves D. both b,c,
18	Time period is reciprocal of:	A. Frequency B. Cycle C. Wavelength D. Amplitude
19	The S.I unit of Spring constant is:	A. Nm B. N C. Nm-1 D. Ns
20	The time period of frequency and time period is equal to:	A. v B. 1 C. 0 D. λ