Simple Harmonic Motion and Waves

Sr	Questions	Answers Choice
1	The time period of mass attached with a spring can be calculated by:	A. T = 2π√L/g B. T = 1/T C. T =2π√g/L D. T = 2π√m/k
2	In a vacuum all electromagnetic waves have the same:	A. Speed<o:p></o:p> B. frequency C. amplitude D. wavelength
3	Shock absorbers in automobiles are one practical application of:	A. SHM B. Random motion C. Damped motion D. None of these
4	Which of the following is an example of simple harmonic motion:	A. Motion of a simple pendulum<o:p></o:p> B. The motion of ceiling fan<o:p></o:p> C. The spinning of the earth on its axis<o:p></o:p> D. A bouncing ball on a floor<o:p></o:p>
5	The ratio of external force applied on the spring to displacement is called:	A. Hook's law B. Constant C. Spring constant
6	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,
7	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
8	The waves in which particles of the medium vibrate perpendicular to the directions waves are:	A. Electromagnetic waves B. Sound waves C. bothe a and b D. Transverse waves
9	The force applied on the mass attached with a spring is represented by:	A. F_a B. F_c C. F_{ext} D. F_s
10	The time required to complete one round trip (vibration) abut mena position is called:	A. Time period B. Freqency C. Amplitude D. None of these
11	The time period of frequency and time period is equal to:	A. v B. 1 C. 0 D. λ
12	At extreme position potential energy of the pendulum is	A. Maximum B. Miimum C. a and b D. zero
13	Time period is reciprocal of:	A. Frequency B. Cycle C. Wavelength D. Amplitude
14	In there is no extension in the spring then this positon is called	A. Equilibrium position B. Unequilibrium C. Nautral equilibrium D. Stable equilibrium

15	A device which has two ways of communication is:	A. television B. radio C. hard disk D. mobile phone
16	Mathematical formula of spring constant is:	A. F/x B. X/F C. F/t D. F/m
17	The number of wavelength of waves passing through a point in one secnd is called:	A. Time period B. Cycle C. Frequency D. None of these
18	The disturbance travelling in a medium is called:	A. Wave motion B. Simple harmonic motion C. Motion D. both a ,b
19	The distance between two consecutive troughs or crests is called:	A. wavelength B. Frequency C. Time period D. None of these
20	The unit of spring constnat is:	A. m B. kg C. Nm² D. Nm⁻¹