

ECAT Physics Chapter 8 Waves

Sr	Questions	Answers Choice
1	If the mass of the simple pendulum becomes double, its time period	A. increase B. decreases C. remains constant D. none of them
2	SI unit of frequency is	A. second B. hertz C. revolution D. vibrations/sec
3	If $F=0.04$ N and $X=4$ cm then $K=$	A. 1 Nm^{-1} B. 2 Nm^{-1} C. 3 Nm^{-1} D. 4 Nm^{-1}
4	Example of progressive wave is	A. transverse waves B. longitudinal waves C. both of them D. none of them
5	Which of the following is not mechanical wave?	A. Sound wave B. Light wave C. wave produced in spring D. None of them
6	The time required to complete one vibration is called	A. frequency B. total time C. time period D. velocity
7	The waves which propagate through the oscillations of material particles are known as:	A. Mechanical waves B. Electromagnetic waves C. Any of them D. None of them
8	Smaller the damping, the resonance will be	A. more flat B. more sharp C. both of them D. none of them
9	Which waves are used in sonography?	A. Microwaves B. Infra red waves C. Sound waves D. Ultrasonic waves
10	When a mass 'm' is pulled slowly through a distance ' x_0 ', the elastic potential energy of the spring would be	A. $P.E=Kx^2$ B. $P.E= \frac{1}{2}kx^2$ C. $P.E=\frac{1}{2}Kx^2$ D. $P.E=Kx^2$
11	If the length of a simple pendulum becomes four times then its time period will become	A. Four times B. Two times C. Six times D. Eight times
12	In transverse waves, the individual particles of the medium move:	A. In circles B. Perpendicular to the direction of level C. Parallel to the direction of level D. None of these
13	Progressive waves of frequency 300 Hz are superimposed to produce a system of stationary waves in which adjacent nodes are 1.5 m apart. What is the speed of the progressive waves?	A. 100 ms^{-1} B. 200 ms^{-1} C. 450 ms^{-1} D. 900 ms^{-1}
14	At 'resonance' the transfer of energy from driving source to the oscillator is	A. maximum B. minimum C. zero D. none of them

15	SI unit of wave length is:	A. Kilometer B. Metre C. Centimetre D. Hertz
16	In case of mechanical waves, we study the motion of	A. a single particle B. collection of particle C. any one of them D. none of them
17	A stationary sound wave has frequency 165 Hz (speed of sound in air = 330 m/s) then distance between two consecutive nodes is	A. 2 m B. 1 m C. 0.5 m D. 4 m
18	A body is executing free vibrations when it oscilates	A. with the interference of an external force B. without the interference of an external force C. with the interference of an internal force D. none of them
19	The portion of the water above its mean level forms a:	A. Crest B. Trough C. Both A and B D. None of these
20	The velocity of sound is greatest in	A. Water B. Air C. Vacuum D. Metal