Physics ECAT Pre Engineering Chapter 8 Waves

Sr	Questions	Answers Choice
1	At a certain instant a stationary transverse wave is found to have maximum kinetic energy. The appearance of string of that instant is	A. Sinusoidal shape with amplitude A/3 B. Sinusoidal shape with amplitude A/2 C. Sinusoidal shape with amplitude A D. Straight line
2	For a body executing S. H. M, its	A. momentum remains constant B. potential energy remains constant C. kinetic energy remains constant D. total energy remains constant
3	Sound waves in air always	A. Longitudinal B. Transverse C. Stationary D. Electromagnetic
4	Acceleration of the mass at any instant is given by	A. $a = k/m\ x$ B. $a = -m/k\ x$ C. $a = -k/m\ x$ D. $a = m/k\ x$
5	The waves in which the particles of the medium are displaced in a direction perpendicular to the direction of propagation of waves are known as	A. longitudinal waves B. transverse waves C. non-mechanical waves D. none of them
6	In the resonance condition, the amplitude of the oscillator becomes	A. very large B. very small C. zero D. any one of them
7	A weakly damped system has fairly	A. sharp resonance curve B. flat resonance curve C. both of them D. none of them
8	If the mass of the simple pendulum becomes double, its time period	A. increase B. decreases C. remains constant D. none of them
9	The time required to complete on vibration is called	A. frequency B. total time C. time period D. velocity
10	The waves which propagate out in space due to oscillation of electric and magnetic fields are known as	A. e.m. waves B. mechanical waves C. sound waves D. water waves
11	The distance covered by the wave in one second is:	A. Wave number B. Wave length C. Frequency D. Wave speed
12	Which of the following is/are example/s if mechanical waves i.e. waves generated in _____:	A. Rope B. Coil of spring C. Water D. All of them
13	The process in which energy is dissipated from the oscillating system is known as	A. resonance B. interference C. diffraction D. damping
14	As the bob of the pendulum moves to and fro which of the force is experienced by the bob	A. its weight B. tension in the string C. viscous drag force by air D. all of them
15	The total energy of spring mass system is	A. zero B. changing with time C. constant

		D. none of them
16	transverse wave motion is possible in:	A. Air B. A mixture of NH_3 and O_2 C. Strings D. All of these
17	The maximum displacement of a body on either side of its equilibrium position is called	A. frequency B. amplitude C. displacement D. time period
18	In the formula for finding the speed of waves in the spring, unit of m in SIn units is:	A. kg B. kg-meter C. kg/meter D. Meter/kg
19	Through which character we can distinguish the light waves from sound waves	A. Interference B. Refraction C. Polarization D. Reflection
20	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