ECAT Physics Chapter 8 Waves

Sr	Questions	Answers Choice
1	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
2	The vibratory motion of a body whose magnitude of acceleration is directly proportional to the magnitude of its displacement and is always directed towards the equilibrium position is called	A. rotatory motion B. motion under gravity C. angular motion D. simple harmonic motion
3	Smaller the damping, the resonance will be	A. more flat B. more sharp C. both of them D. none of them
4	Which of the following is the longitudinal waves?	A. Sound waves B. Waves on plucked string C. Water waves D. Light waves
5	Crests and troughs are formed in:	A. Longitudinal waves B. Transverse waves C. Both of these D. None of these
6	Velocity of sound in vacuum (in m/s) is	A. 330 B. 1000 C. 156 D. 0
7	The wave form of S.H.M will be	A. square wave B. sine wave C. rectified wave D. saw-tooth wave
8	When two progressive waves of nearly same frequencies superimpose and give rise to beats, then	A. Frequency of beat changes with time B. Frequency of beat changes with location of observer C. All particles of medium vibrate simple harmonically with frequency equal to the difference between frequencies of component waves D. Amplitude of vibration of particles at any point changes simple harmonically with frequency equal to difference between two component waves
9	The distance covered by the wave during one period is called its:	A. Wave number B. Frequency C. Wavelength D. Time period
10	Data transmitted along glass-fiber cables is in the form of pulses of monochromatic red light each of duration 2.5 ns. Which of the following is the best estimate of the number of wavelength in each pulse?	A. 10³ B. 10⁶ C. 10⁹ D. 10¹²
11	When a mass 'm' is pulled slowly, the spring stretches by an amount x_0,then the average force would be	A. F= Kx₀ B. F=1/2Kx₀ C. F=2Kx₀ D. F=4Kx₀
12	Fluids can transmit:	A. Transverse wave B. Compressional wave C. Both of them D. None of them
13	The time required to complete on vibration is called	A. frequency B. total time C. time period D. velocity
		A. inversely proportional to

14	The characteristic of a body executing S.H.M is that its acceleration is	displacement B. directly proportional to displacement C. independent of displacement D. equal to zero
15	Through which character we can distinguish the light waves from sound waves	A. Interference B. Refraction C. Polarization D. Reflection
16	If the length of second pendulum becomes four times then its time period will become	A. Four time B. Two times C. Six times D. Eight times
17	The ratio of velocity of sound in air at 4 atm pressure and that at 1 atm pressure would be	A. 1 : 2 B. 4 : 1 C. 1 : 4 D. 2 : 1
18	Associated with the motion of a driven harmonic oscillator, there is a very striking phenomenon, know as	A. waves B. beat C. interference D. resonance
19	The waves produced in a microwave oven have frequency	A. 2450 Hz B. 2450 K Hz C. 2450 M Hz D. 2450 G Hz
20	Energy is dissipated and consequently the energy mass system do not oscillate indefinitely because of	A. very small energy B. very large energy C. frictional forces D. acceleration due to gravity