

ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	Fluids can transmit:	A. Transverse wave B. Compressional wave C. Both of them D. None of them
2	Transverse waves can be set up:	A. Solids B. Liquids C. Gases D. All of them
3	In compressional wave, the layer of medium having reduced pressure is called:	A. Compression B. Elasticity C. Node D. Rarefaction
4	A string is stretched between two points and is plucked at right angles to its length, the vibration produced is:	A. Longitudinal wave B. Transverse wave C. No vibration at all D. None of them
5	The square of 0.4 is:	A. Greater than 0.4 B. Smaller than 0.4 C. Equal to 0.4 D. None of them
6	In the same medium, velocity of the wave:	A. Goes on increasing B. Remains constant C. Goes on decreasing D. None of these
7	A traveling wave has a shape of:	A. Square wave B. Sine wave C. Parabola D. hyperbola
8	The distance covered by the wave in one second is:	A. Wave number B. Wave length C. Frequency D. Wave speed
9	The distance covered by the wave during one period is called its:	A. Wave number B. Frequency C. Wavelength D. Time period
10	Longitudinal waves are also called:	A. Congressional waves B. Transverse waves C. Radio waves D. None of them
11	Which of the following is not mechanical wave?	A. Sound wave B. Light wave C. wave produced in spring D. None of them
12	When a wave travels from one place to another, it transfers:	A. Matter B. Energy C. Momentum D. Both B and C
13	Which of the following is/are example/s of mechanical waves i.e. waves generated in _____:	A. Rope B. Coil of spring C. Water D. All of them
14	The waves which propagate out in the space due to oscillations of electric and magnetic fields are called:	A. Mechanical waves B. Electromagnetic waves C. Matter waves D. All of them
15	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

		D. None of them
16	The restoring force is always directed towards:	A. Rest position B. Equilibrium position C. Mean position D. All of them
17	Amplitude is the displacement of the vibrating body from:	A. One extreme position to the other extreme position B. Mean position any one extreme position C. Both A and B are correct D. None of these
18	An oscillating body oscillates due to:	A. Applied force B. Restoring force C. Frictional force D. None of these
19	An angle of 180° in circular motion is equivalent to _____ in SHM.	A. Half the vibration B. One vibration C. 3/4th of a vibration D. None of these
20	In SHM, the acceleration is _____ when velocity is _____:	A. Zero, smallest B. Smallest, zero C. Zero, zero D. Zero, greatest
21	An object in SHM will have maximum speed when its displacement from equilibrium position is:	A. Infinity B. Maximum C. Zero D. Minimum
22	If there identical strings each of constant K are hooked together the spring constant of resultant spring will be:	A. 3 K B. 2 K C. K/4 D. K/3
23	Hertz is unit of:	A. Time period B. Displacement C. Amplitude D. Frequency
24	A spring of constant $k = 0.4 \text{ N m}^{-1}$ is to be extended through 10 cm at a place where $g = 10 \text{ m sec}^{-2}$. The mass to be suspended should be:	A. 4 gms B. 0.4 gms C. 40 gms D. None of these
25	A body with frequency of would complete one vibration in:	A. f seconds B. $1/f$ seconds C. 1 second D. f^2 second
26	If a given spring of spring constant K is cut into two identical segments, the spring constant of each segment is:	A. K/2 B. 2 K C. 4 K D. None of these
27	The number of vibration in two seconds can be expressed as _____ of frequency of vibration is f:	A. f B. 2 f C. 3 f D. $1/2 f$
28	If a force of 0.05 N produces an elongation of 20 mm in a string, then its spring constant will be:	A. 250 N m^{-1} B. 25 N m^{-1} C. 2.5 N m^{-1} D. None of these
29	If mass of 10 gm is suspended from a spring of $K=0.8 \text{ Nm}^{-1}$ then the extension will be:	A. 10 cm B. 1 m C. 10 mn D. None of these
30	A particle is moving along a circular path with uniform speed. Its projection will execute _____ along the _____ of the circle:	A. Circular motion, circumference B. Vibratory, chord C. SHM, diameter D. SHM, circumference