

ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	The speed of the secondary wavelets as mentioned in Huygen's principle is _____ the speed of propagation of the wave itself.	A. Equal to B. Greater than C. Smaller than D. None of these
2	When a source of light is at very large distance, the shape of wavefront is:	A. Spherical B. Cylindrical C. Plane D. None of these
3	Speed of light in vacuum depends upon:	A. Frequency B. Wavelength C. Amplitude D. None of these
4	In case of point, source of light shape of wavefront is:	A. Spherical B. Cylindrical C. Plane D. None of these
5	Huygen principle is used to determine:	A. Speed of light B. Location of wavefront C. About polarized or unpolarized light D. None of them
6	Angle between the ray of light and the corresponding wavefront is:	A. 0° B. 60° C. 90° D. 120°
7	The locus of all the points in the same phase of vibration is called:	A. Wave packet B. Wave front C. Wave number D. None of them
8	Monochromatic light means waves of:	A. Same frequency B. Same colour C. Same wavelength D. All of them
9	Frequency of red color as compared to that of violet color is:	A. Equal B. Smaller C. Greater

		<p>C. Greater</p> <p>D. None of these</p>
10	Wave length of that color as compared to that of violet color is:	<p>A. Smaller</p> <p>B. Longer</p> <p>C. Equal</p> <p>D. None of these</p>
11	Which one of the following can act approximately as a source of monochromatic light;	<p>A. Neon lamp</p> <p>B. Fluorescent tube</p> <p>C. Sodium lamp</p> <p>D. None of these</p>
12	Electromagnetic waves transport:	<p>A. Energy only</p> <p>B. Momentum only</p> <p>C. Both A and B are correct</p> <p>D. None of is correct</p>
13	Wave length of light, on the average, is given by:	<p>A. 10^{-14} m</p> <p>B. 10^{-10} m</p> <p>C. 10^{-6} m</p> <p>D. 10^{-4} m</p>
14	Light waves are:	<p>A. Transverse wave</p> <p>B. Longitudinal wave</p> <p>C. Compressional wave</p> <p>D. None of them</p>
15	Light has:	<p>A. Wave nature</p> <p>B. Particle nature</p> <p>C. Dual nature</p> <p>D. None of these</p>
16	For transmission of both transverse and longitudinal waves, we can use:	<p>A. Solid</p> <p>B. Gas</p> <p>C. Plasma</p> <p>D. None of these</p>
17	transverse wave motion is possible in:	<p>A. Air</p> <p>B. A mixture of NH_3 and O_2</p> <p>C. Strings</p> <p>D. All of these</p>
18	The wave motion set up in any medium depends upon:	<p>A. Elasticity</p> <p>B. Inertia</p> <p>C. Density</p> <p>D. All of these</p>
19	If one end of a rubber cord is fixed with a support and the other end is wiggled by hand, the waves generated on the card are:	<p>A. Stationary waves</p> <p>B. Transverse waves</p> <p>C. Both of these</p> <p>D. None of these</p>
20	Which one of the following wave motions is transverse:	<p>A. Wave motion produced in water when a piece of stone is thrown into it</p> <p>B. Pulling of weight hanging vertically with a spiral spring</p> <p>C. Both of these</p> <p>D. None of these</p>
21	Of the following, the option _____ reminds of longitudinal waves.	<p>A. Sound waves</p> <p>B. Heat waves</p> <p>C. Electromagnetic waves</p> <p>D. Light waves</p>
22	Crests and troughs are formed in:	<p>A. Longitudinal waves</p> <p>B. Transverse waves</p> <p>C. Both of these</p> <p>D. None of these</p>
23	In transverse waves, the individual particles of the medium move:	<p>A. In circles</p> <p>B. Perpendicular to the direction of level</p> <p>C. Parallel to the direction of level</p> <p>D. None of these</p>
24	The portion of the water above its mean level forms a:	<p>A. Crest</p> <p>B. Trough</p> <p>C. Both A and B</p> <p>D. None of these</p>
25	SI unit of wave length is:	<p>A. Kilometer</p> <p>B. Metre</p> <p>C. Centimetre</p> <p>D. Hertz</p>
26	When the particles of the medium vibrate about their mean position, along the direction of the motion of waves, then the waves are called:	<p>A. Longitudinal waves</p> <p>B. Transverse waves</p> <p>C. Water waves</p>

the motion of waves, then the waves are called.

- C. Water waves
- D. Complex waves

27 In the formula for finding the speed of waves in the spring, unit of m in SI units is:

- A. kg
- B. kg-meter
- C. kg/meter
- D. Meter/kg

28 Which one of the following elasticities is possessed by fluids:

- A. Young's elastic modulus (length)
- B. Bulk elastic modulus (volume)
- C. Modulus of rigidity (shape)
- D. None of these

29 Which of the following medium/media can transmit both transverse and longitudinal waves:

- A. Solids
- B. Liquids
- C. Gases
- D. All of them

30 In solids, only following type/s of wave can travel:

- A. Transverse
- B. Longitudinal
- C. Both A and B
- D. None of them