

Physics Fsc Part 1 Chapter 7 Online Test

Sr	Questions	Answers Choice
1	A one meter long string establishes two loops waves length of the wave is.	A. <p>1 m</p> B. <p>0.5 m</p> C. <p>0.25 m</p> D. <p>2 m</p>
2	Open end of an organpipe act as.	A. <p>Node</p> B. <p>Anti Node</p> C. <p>Crest</p> D. <p>Trough</p>
3	The compressions and elongations are formed in.	A. <p>Particle waves</p> B. <p>Longitudinal waves</p> C. <p>Stationary waves</p> D. <p>Transverse waves</p>
4	A notde in a stationary wave is.	A. <p>A point of maximum displacement</p> B. <p>A point of intermediate displacement</p> C. <p>A point of zero displacement</p> D. <p>A point of infinite displacement</p>
5	The principle of superposition in waves is stated as.	A. <p>The displacement of wave is the sum of the displacement of its individual components</p> B. <p>The velocity of a wave is the product of its individual components</p> C. <p>The frequency of a wave is the difference of its individual components</p> D. <p>The amplitude of a wave is the ratio of its individual components</p>
6	Ratio of the fundamental frequency of an open end and closed end organ pipe of same length is.	A. <p>2 : 1</p> B. <p>1 : 2</p> C. <p>1 : 1</p> D. <p>4 : 1</p>
7	Transverse waves can't be produced in	A. <p>Solids</p> B. <p>Metal</p> C. <p>gas</p> D. <p>fluids</p>
8	At the closed end of an air column there exist	A. <p>Node</p> B. <p>Anti node</p> C. <p>Crest</p> D. <p>Trough</p>
9	Beats can be heard when difference of frequency is not more than.	A. <p>10 Hz</p> B. <p>8 Hz</p> C. <p>4 Hz</p> D. <p>6 Hz</p>
10	The result of constructive interference between two waves is represented as.	A. <p>A decrease in amplitude</p> B. <p>An increase in amplitude</p> C. <p>No change in amplitude</p> D. <p>A shift in phase</p>
11	Which one of the following medium can transmit both transverse and longitudinal wave.	A. <p>Liquid</p> B. <p>Solid</p> C. <p>gas</p> D. <p>Both a and b</p>
12	The number of nodes between two consecutive antinodes are.	A. <p>Two</p> B. <p>Three</p> C. <p>One</p> D. <p>Four</p>
13	Two identical waves moving in same direction produce.	A. <p>Beats</p> B. <p>Interference</p> C. <p>Stationary</p>

- 14 The wave is used to transfer.
- A. <p>Energy</p>
B. <p>Mass</p>
C. <p>Weight</p>
D. <p>Frequency</p>
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- 15 Radar System is an application of.
- A. <p>Interference</p>
B. <p>Beats</p>
C. <p>Stationary waves</p>
D. <p>Doppler's Effect</p>
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- 16 Portion of the transverse waves above the mean position is
- A. <p>Crest</p>
B. <p>Through</p>
C. <p>Amplitude</p>
D. <p>Wave length</p>
-
- 17 The portion of wave below the mean position is called.
- A. <p>Crest</p>
B. <p>Trough</p>
C. <p>Frequency</p>
D. <p>Wave Length</p>
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- 18 If 30 waves per second pass through a medium at speed of 30 ms^{-1} , the wavelength is.
- A. <p>30 m</p>
B. <p>15 m</p>
C. <p>900 m</p>
D. <p>1 m</p>
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- 19 The distance between two consecutive troughs is.
- A. <p>Frequency</p>
B. <p>Wave front</p>
C. <p>Wave Length</p>
D. <p>Speed</p>
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- 20 A set of frequencies which are multiples of the fundamental frequency are called.
- A. <p>Doppler effect</p>
B. <p>Nodal frequencies</p>
C. <p>Harmonics</p>
D. <p>Beat frequencies</p>
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- 21 The Doppler Effect used in astronomy is for.
- A. <p>Measuring the diameters of stars</p>
B. <p>Determining velocity of galaxies</p>
C. <p>Analyzing properties of black holes</p>
D. <p>Studying behaviour of electromagnetic waves</p>
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- 22 A stationary wave is established in a string which vibrates in four segments at a frequency of 120 Hz. Its fundamental frequency is.
- A. <p>30 Hz</p>
B. <p>15 Hz</p>
C. <p>60 Hz</p>
D. <p>480 Hz</p>
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- 23 The path difference is an integral multiple of wavelength in
- A. <p>Constructive interference</p>
B. <p>Constructive and destructive interference</p>
C. <p>destructive interference</p>
D. <p>Superposition</p>
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- 24 Diffraction effect is.
- A. <p>More for a round edge</p>
B. <p>Less for a round edge</p>
C. <p>More for a sharp edge</p>
D. <p>Less for a blunt edge</p>
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- 25 The bending of waves around an obstacle is called.
- A. <p>Refraction</p>
B. <p>Reflection</p>
C. <p>Diffraction</p>
D. <p>Interference</p>
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- 26 The particles of medium in longitudinal wave vibrate direction of propagation
- A. <p>Parallel</p>
B. <p>Perpendicular</p>
C. <p>Upward</p>
D. <p>None of these</p>
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- 27 Waves produced over strings are.
- A. <p>Stationary waves</p>
B. <p>Mechanical Waves</p>
C. <p>Standing waves</p>
D. <p>Both a and c</p>
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- 28 Example of mechanical wave is.
- A. <p>Water wave</p>
B. <p>Radio wave</p>
C. <p>Infrared wave</p>
D. <p>Ultraviolet</p>
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- 29 What type of waves do headphones use to produce sound
- A. <p>Electromagnetic waves</p>
B. <p>Mechanical waves</p>
C. <p>Pressure waves</p>
D. <p>Longitudinal waves</p>
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- 30
- A. <p>3 times</p>

30	If the amplitude of the wave is tripled. then the amount of energy is increased by	B. <p>6 times</p> C. <p>9 times</p> D. <p>12 times</p>
31	Energy is not carried by	A. <p>Transverse wave</p> B. <p>Longitudinal wave</p> C. <p>Stationary wave</p> D. <p>Progressive wave</p>
32	Two light waves which are not coherent cannot be	A. <p>Interference</p> B. <p>Diffracted</p> C. <p>Polarized in the same plane</p> D. <p>Superposed</p>
33	The beats are result of.	A. <p>Interference</p> B. <p>Superposition</p> C. <p>Destructive interference</p> D. <p>Constructive and destructive interference</p>
34	In transverse waves, the particles vibrate.	A. <p>Parallel</p> B. <p>Perpendicular</p> C. <p>Opposite</p> D. <p>Anti Parallel</p>
35	Harmonics are	A. <p>Integer multiple of a fundamental frequency</p> B. <p>Integer submultiples of a fundamental frequency</p> C. <p>Random frequencies</p> D. <p>Non integer multiples of a fundamental frequency</p>
36	Crests and Troughs are formed in	A. <p>Stationary waves</p> B. <p>Matter waves</p> C. <p>Mechanical waves</p> D. <p>Transverse waves</p>
37	The waves produced due to oscillation of electric and magnetic fields are.	A. <p>E.M. Waves</p> B. <p>Mechanical waves</p> C. <p>Sound waves</p> D. <p>Light waves</p>
38	If a stretched string is 4 m and it has 4 loops of stationary waves, then wavelength is.	A. <p>1 m</p> B. <p>2 m</p> C. <p>3 m</p> D. <p>4 m</p>
39	If the tension of a stretched string is made four times, then the velocity of wave.	A. <p>Remain same</p> B. <p>Is halved</p> C. <p>Becomes twice</p> D. <p>Becomes 4 times</p>
40	The point of maximum displacement on stationary wave is	A. <p>Antinode</p> B. <p>Node</p> C. <p>Trough</p> D. <p>Crest</p>
41	In number of nodes in open end organ pipes are 'N' THEN THE NUMBER OF ANTIODES ARE.	A. <p>N</p> B. <p>N+1</p> C. <p>N - 1</p> D. <p>N - 2</p>
42	If 20 waves pass through medium in one second with a speed of 20 m/sec than wavelength is	A. <p>1 m</p> B. <p>10 m</p> C. <p>20 m</p> D. <p>2 m</p>
43	We get light inside a room in a day time due to.	A. <p>Interference</p> B. <p>Diffraction</p> C. <p>Polarization</p> D. <p>Refraction</p>
44	The path difference is an odd integral multiple of half wavelength is for	A. <p>Constructive interference</p> B. <p>Destructive interference</p> C. <p>Both a and b</p> D. <p>Beats</p>
45	High frequency radio waves used in radars travel in water.	A. <p>Few centimeter</p> B. <p>Few meter</p> C. <p>Few kilometer</p> D. <p>No Distance</p>
46	In order to produce beat, the two sound waves should have.	A. <p>The same amplitude</p> B. <p>Slightly different amplitude</p> C. <p>Slightly different frequencies</p> D. <p>The same frequency</p>

47 The ripple tank is used to study various features of

- A. <p>Wave</p>
- B. <p>Particle</p>
- C. <p>Light</p>
- D. <p>Sound</p>

48 If amplitude of wave is doubled the energy becomes.

- A. <p>Four times</p>
- B. <p>Half</p>
- C. <p>Twice</p>
- D. <p>Six times</p>

49 Stationary waves are define das.

- A. <p>Waves that move with a constant velocity</p>
- B. <p>Waves that move with a changing velocity</p>
- C. <p>Waves that oscillate in a fixed position </p>
- D. <p>Waves that propagate through a medium</p>