Physics ICS Part 1 Chapter 8 Online Test

Sr	Questions	Answers Choice
1	Waves transport energy without transporting	A. Matter B. Force C. Momentum D. All of these
2	The mechanism of transports energy of all the waves is	A. Different B. Same C. Complicated D. Easy
3	In transverse waves the particles of medium vibrate	A. Along the direction of wave B. Opposite to direction of wave C. Perpendicular to direction of wave D. Slowly
4	An oscillating mass-spring system produces	A. Sound waves B. Electromagnetic waves C. Light waves D. Periodic waves
5	Question Image	
6	Which of the following is mechanical wave	A. Heat B. Light C. Sound D. None of these
7	The Newton's formula for the speed of sound in air is	
8	Who did give the correct formula for the speed of sound in air?	A. Boyle B. Laplace C. Newton D. Einstein
9	The experimental value for the velocity of sound in air is	A. 233 m-sec⁻¹ B. 333 m-sec⁻¹ C. 433 m-sec⁻¹ D. 533 m-sec⁻¹
10	The speed of sound increases with the increase of in	A. Pressure B. Volume C. Temperature D. Density
11	The distance between two consecutive crests of troughs is called	A. Time period B. Wave length C. Frequency D. Displacement
12	When the amplitude of a wave become double, its energy becomes	A. One half B. Two times C. Three times D. Four times
13	The distance between the consecutive nodes is	
14	When two waves having same frequency traveling in same direction combine, phenomenon is called	A. Wave motion B. Combination of waves C. Interference D. Diffraction
15	When two waves of same frequency travel in opposite direction, the phenomenon will be	A. Diffraction B. Stationary waves C. Polarization D. Interference
16	When ever the path difference between the waves is integral multiple of half the wavelength, interference will be	A. Constructive B. Destructive C. (-)ve D. (+) ve
17	In stationary waves, the particle velocity at nodes is	A. Minimum B. Maximum C. Zero

		D. Constant
18	Longitudinal waves do not exhibit	A. Reflection B. Refraction C. Polarization D. Diffraction
19	When the amplitude of a wave is increase to doubled is energy.	A. Remain the same B. Increases 4 times C. Increases by two times D. Decreases by half
20	Sound waves are	A. Electromagnetic waves B. Transverse waves C. Compressional waves D. Matter waves
21	Light waves are	A. Longtail waves B. Transvers waves C. Stationary waves D. Mechanical wave
22	the example of mechanical waves is	A. Water waves B. Infrared waves C. Radio waves D. Ultraviolet waves
23	The portion of the wave above mean level is called.	A. Node B. Antinode C. Crest D. Trough
24	In vibrating string, the points where the amplitude is maximum are called.	A. Nodes B. Antinodes C. Troughs D. Crests
25	the wavelength of transverse wave travelling with a speed 'v' having frequency 'f' in equal to	A. f/v B. Vf C. V/f D. f/V2
26	The distance covered by wave in 1 sec is	A. wavelength B. Wave number C. Wave speed D. Frequency
27	Half wavelength corresponds to	A. 0 ^o B. 90 ^o C. 180 ^o D. 360 ^o
28	10 waves pass through a point in 2 seconds with speed 10 ms-1 the frequency of wave will be	A. 1 Hz B. 2 Hz C. 5 Hz D. 10 Hz
29	The profile of periodic waves generated by a source executing S.H.M is represented by a.	A. Circle B. Sine curve C. Tangent curve D. Cosine curve
30	If 332 waves pass through a medium in 1 second with speed of 332 ms-1 then wavelength will be	A. 7 m B. 332 m C. 664 m D. 1 m
31	Crests and trough are formed in.	A. Longitudinal waves B. transverse waves C. Stationary waves D. Compression waves
32	If 20 waves passes through he medium in 2 sec of 10 ms-1 then he wavelength is.	A. 200 m B. 2 m C. 1 m D. 0.5 m
33	The distance between two consecutive crest is called.	A. Displacement B. Amplitude C. Wave front D. Wavelength
34	The distance between two consecutive trough is called.	A. Displacement B. Amplitude C. Wave length D. Wave front
35	If the wave motion is 0.01 sec and wave speed is 100 ms-1 then frequency of wave is	A. 0.5 Hz B. 1 Hz

	If the wave motion is 0.01 sec and wave speed is 100 ms-1 then frequency of wave is.	C. 10 Hz D. 100 Hz
36	If 30 waves per second pass through a medium at a speed 30 ms-1, then the wavelength is.	A. 30 m B. 15 m C. 1 m D. 28 m
37	According to Newton, sound travels in air under conditions of.	A. Adiabatic B. Isothermal C. Isobaric D. Isochoric
38	According to Newton's formula, the speed of sound in air at STP is	A. 332 ,ms-1 B. 340 ms-1 C. 350 ms-1 D. 280 ms-1
39	Speed of sound in vacuum is	A. 280 ms-1 B. 332 ms-1 C. 333 ms-1 D. Zero ms-1
40	the velocity of sound at 0 ^{O}C is 332 ms-1, the velocity of sound at 10 ^{O}C will be	A. 337.1 ms-1 B. 338.1 ,ms-1 C. 342.1 ms-1 D. 328.1 ms-1
41	The speed \velocity of sound is greatest in.	A. Air B. Steel C. Ammonia D. Water
42	The speed of sound is greater in solids due to their high.	A. Density B. Pressure C. Temperature D. Elasticity
43	Increase in the velocity of sound in air for 1 ^{O}C rise in temperature is.	A. 61 ms-1 B. 0.61 ms-1 C. 161 ms-1 D. 261 ms-1
44	The speed of sound in air does not depend upon	A. Temperature B. Pressure C. Density D. Medium
45	Sound travel faster in	A. CO2 B. H2 C. O2 D. He
46	The speed of sound in air would become double than ots speed at 10 ^{O}C at a temperature of.	A. 313 ^oC B. 586 ^oC C. 859^oC D. 899 ^oC
47	Increase in speed of sound for 1 ^{O}C rise in temperature is.	A. 0.61 ms-1 B. 0.61 cms-1 C. 61 ms-1 D. 6.1 ms-1
48	If the pressure of a gas is doubled, then speed of sound is.	A. Doubled B. Become half C. Not affected D. Increases by four times
49	With increase of temperature, speed of sound.	A. Remains constant B. Becomes zero C. Decreases D. Increases
50	Speed of sound in copper is	A. 38000 ms-1 B. 3600 ms-1 C. 3500 ms-1 D. 3400 ms-1
51	The error in speed of sound calculated by Newton at STP is about.	A. 0 % B. 14 % C. 15 % D. 16 %
52	Sound wave can not be	A. Reflected B. Refracted C. Diffracted D. Polarized

53	Teh speed of sound in air is 340 m/s. If the pressure of air is doubled then the speed becomes.	A. Double B. Half C. Four times D. Remains same
54	Speed of sound in aluminum at 20 ^{o}C is.	A. 3600 m/s B. 5100 m/s C. 5130 m/s D. 3500 m/s
55	In which medium the speed of sound is greater.	A. Oxygen B. Air C. Water D. copper
56	the louder the sound, the greater will be its.	A. Speed B. Frequency C. Amplitude D. Wave length
57	Frequency range of hearing of cats is.	A. 20-20000 Hz B. 10- 10000 Hz C. 60-20000 Hz D. 60-70000 Hz
58	the velocity of sound is maximum at 20 ^{o}C in	A. Lead B. Copper C. Glass D. Iron
59	When sound waves enter in different medium, the quantity that remains unchanged is.	A. Intensity B. Speed C. Frequency D. Wave length
60	Velocity of sound is independent of	A. Temperature B. Density C. Pressure D. Medium
61	The speed of sound in ari at 0 ^{o}C is 332 ms-1, Then the speed at 40 ^{o}C will be	A. 372 ms-1 B. 356 ms-1 C. 346 ms-1 D. 332 ms-1
62	The process followed by Newton for the determination of speed of sound in air is	A. Adiabatic B. Isothermal C. Isobaric D. Isochoric
63	Two waves of same frequency and moving in the same direction produces.	A. Interference B. Diffraction C. Beats D. Stationary waves
64	When two identical travelling waves are superimposed, velocity of resultant wave.	A. Decreases B. Increases C. Remain same D. Becomes zero
65	When two identical waves superimposed, which can change.	A. Wave length B. Frequency C. Velocity D. Amplitude
66	Diffraction is a special type of	A. Reflection B. Polarization C. Interference D. Refraction
67	On loading the prong of a tuning fork with wax, the frequency of sound.	A. Increases B. Decreases C. Remains same D. First increases then decrease
68	Two tuning forks of frequencies 240 Hz and 243 Hz are sounded together, the number of beats per second is.	A. Zero B. 2 C. 3 D. 4
69	Beats can be heard when difference of frequency is not more than.	A. 8 Hz B. 10 Hz C. 4 Hz D. 6 Hz
70	Two tunign forks of frequencies 260 Hz and 256 Hz are sounded together , the number of beats per second is.	A. 2 B. 258 C. 516 D. 4

		D. 4
71	In order to produce beats, the two sound waves should have.	A. The same amplitude B. Slightly different amplitude C. The same frequency D. slightly different frequencies.
72	The periodic variations of sound between maximum and minimum loudness are called.	A. Doppler's effect B. reflection C. Laplace correction D. Beats
73	In stationary waves, the velocity of particle at the node is.	A. Maximum B. Infinite C. Zero D. Varible
74	In stationary waves the points which always remain at rest are.	A. Nodes B. Antinodes C. Crest D. Trough
75	A set of frequencies which are multiples of the fundamental frequency are called.	A. Doppler effect B. Nodal frequencies C. Beat frequencies D. Hamonics
76	If a stretched string 4 m long and it has 4 loops of stationary waves, then the wave length is.	A. 1m B. 2 m C. 3 m D. 4 m
77	Stationary waves are generated on a string of high l, if tension is increased , frequency of vibration will	A. Decrease B. Unchanged C. Half D. Increases
78	A stationary waves is established din a string which vibrates in four segments at a frequency of 120 Hz, Its fundamental frequency is.	A. 15 Hz B. 30 HZ C. 60 Hz D. 480 Hz
79	A stretched string 2 m long and it has 2 hopes of stationary waves hen the wavelength is	A. 4 m B. 2 m C. 3 m D. 1 m
80	The wavelength of fundamental note in one end closed pipe in term of length 'l' of pipe is.	A. 4 l B. 2l C. l D. 1/4 l
81	Wavelength of a wave for closed pipe having length 'l' in the fundamental mode is.	A. 2 l B. 1/2 C. 4 l D. l
82	The pitch of sound deepens upon	A. Intensity of sound B. Loudness of sound C. Wavelength of sound D. Frequency of sound
83	Stars moving away from Earth show a	A. Green shift B. Blue shift C. Red shift D. Yellow shift
84	The apparent change in the pitch of sound due to relative motion is called.	A. Carnot theorem B. Interference C. Doppler effect D. Beats
85	In sonar we use	A. Sound waves B. Ultrasound waves C. Microwaves D. Radio waves
86	Star moving towards the earth show	A. Red shift B. Blue shift C. Green shift D. Yellow shift
87	Radar system is an application of.	A. Chemical effect B. Electric effect C. Magnetic effect D. Doppler's effect
88	The speed of stars and galaxies can be calculated by	A. Compton effect B. Stefan's law

88	The speed of stars and galaxies can be calculated by	C. Doppler's effect D. Pascal's law
89	The waves used in radar speed trap are	A. <u>Longitudinal</u> B. Sound wave C. Micro waves D. Matter waves
90	The state of human blood flow can be found by using.	A. Newton's formula of speed of sound B. Interference of sound C. Phenomena of beats D. Doppler's effect of sound
91	A bat finding its correct location by sending	A. Matter waves B. Ultrasonic waves C. Infrasonic waves D. electromagnetic waves