Physics ICS Part 1 Chapter 8 Online Test

Sr	Questions	Answers Choice
1	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
2	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
3	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
4	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
5	The pitch of sound deepens upon	A. Intensity of sound B. Loudness of sound C. Wavelength of sound D. Frequency of sound
6	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
7	Frequency range of hearing of cats is.	A. 20-20000 Hz B. 10- 10000 Hz C. 60-20000 Hz D. 60-70000 Hz
8	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
9	When the amplitude of a wave become double, its energy becomes	A. One half B. Two times C. Three times D. Four times
10	The mechanism of transports energy of all the waves is	A. Different B. Same C. Complicated D. Easy
11	Sound wave can not be	A. Reflected B. Refracted C. Diffracted D. Polarized
12	Longitudinal waves do not exhibit	A. Reflection B. Refraction C. Polarization D. Diffraction
13	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
14	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
15	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

16	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
17	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
18	An oscillating mass-spring system produces	A. Sound waves B. Electromagnetic waves C. Light waves D. Periodic waves
19	Beats can be heard when difference of frequency is not more than.	A. 8 Hz B. 10 Hz C. 4 Hz D. 6 Hz
20	In vibrating string, the points where the amplitude is maximum are called.	A. Nodes B. Antinodes C. Troughs D. Crests
21	In stationary waves, the velocity of particle at the node is.	A. Maximum B. Infinite C. Zero D. Varible
22	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
23	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
24	Crests and trough are formed in.	A. Longitudinal waves B. transverse waves C. Stationary waves D. Compression waves
25	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
26	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
27	Waves transport energy without transporting	A. Matter B. Force C. Momentum D. All of these
28	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
29	The periodic variations of sound between maximum and minimum loudness are called.	A. Doppler's effect B. reflection C. Laplace correction D. Beats
30	The apparent change in the pitch of sound due to relative motion is called.	A. Carnot theorem B. Interference C. Doppler effect D. Beats
31	the example of mechanical waves is	A. Water waves B. Infrared waves C. Radio waves D. Ultraviolet waves
32	Which of the following is mechanical wave	A. Heat B. Light C. Sound D. None of these
33	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
34	The speed of sound in air does not depend upon	A. Temperature B. Pressure C. Density D. Medium
35	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
36	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.
37	When two waves of same frequency travel in opposite direction, the phenomenon will be	A. Diffraction B. Stationary waves C. Polarization D. Interference
38	Question Image	
39	Two waves of same frequency and moving in the same direction produces.	A. Interference B. Diffraction C. Beats D. Stationary waves
40	In stationary waves, the particle velocity at nodes is	A. Minimum B. Maximum C. Zero D. Constant
41	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
42	In stationary waves the points which always remain at rest are.	A. Nodes B. Antinodes C. Crest D. Trough
43	The distance covered by wave in 1 sec is	A. wavelength B. Wave number C. Wave speed D. Frequency
44	Speed of sound in copper is	A. 38000 ms-1 B. 3600 ms-1 C. 3500 ms-1 D. 3400 ms-1
45	The speed of sound increases with the increase of in	A. Pressure B. Volume C. Temperature D. Density
46	With increase of temperature, speed of sound.	A. Remains constant B. Becomes zero C. Decreases D. Increases
47	Star moving towards the earth show	A. Red shift B. Blue shift C. Green shift D. Yellow shift
48	Speed of sound in vacuum is	A. 280 ms-1 B. 332 ms-1 C. 333 ms-1 D. Zero ms-1
49	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
50	the louder the sound, the greater will be its.	A. Speed B. Frequency C. Amplitude D. Wave length
51	Light waves are	A. Longtail waves B. Transvers waves C. Stationary waves

		D. Mechanical wave
52	The speed \velocity of sound is greatest in.	A. Air B. Steel C. Ammonia D. Water
53	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
54	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
55	The waves used in radar speed trap are	A. <u>Longitudinal</u> B. Sound wave C. Micro waves D. Matter waves
56	Diffraction is a special type of	A. Reflection B. Polarization C. Interference D. Refraction
57	The speed of stars and galaxies can be calculated by	A. Compton effect B. Stefan's law C. Doppler's effect D. Pascal's law
58	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
59	Sound travel faster in	A. CO2 B. H2 C. O2 D. He
60	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 C. 10 Hz D. 100 Hz
61	the velocity of sound is maximum at 20 ^{o}C in	A. Lead B. Copper C. Glass D. Iron
62	Half wavelength corresponds to	A. 0 ^o B. 90 ^o C. 180 ^o D. 360 ^o
63	Sound waves are	A. Electromagnetic waves B. Transverse waves C. Compressional waves D. Matter waves
64	The distance between two consecutive trough is called.	A. Displacement B. Amplitude C. Wave length D. Wave front
65	The distance between two consecutive crest is called.	A. Displacement B. Amplitude C. Wave front D. Wavelength
66	Who did give the correct formula for the speed of sound in air?	A. Boyle B. Laplace C. Newton D. Einstein
67	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
68	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
		A. Time period B. Wave length

69	The distance between two consecutive crests of troughs is called	B. Wave length C. Frequency D. Displacement
70	The portion of the wave above mean level is called.	A. Node B. Antinode C. Crest D. Trough
71	A set of frequencies which are multiples of the fundamental frequency are called.	A. Doppler effect B. Nodal frequencies C. Beat frequencies D. Hamonics
72	In which medium the speed of sound is greater.	A. Oxygen B. Air C. Water D. copper
73	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
74	The Newton's formula for the speed of sound in air is	
75	The distance between the consecutive nodes is	
76	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
77	Stars moving away from Earth show a	A. Green shift B. Blue shift C. Red shift D. Yellow shift
78	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
79	When two identical waves superimposed, which can change.	A. Wave length B. Frequency C. Velocity D. Amplitude
80	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
81	The error in speed of sound calculated by Newton at STP is about.	A. 0 % B. 14 % C. 15 % D. 16 %
82	The process followed by Newton for the determination of speed of sound in air is	A. Adiabatic B. Isothermal C. Isobaric D. Isochoric
83	A bat finding its correct location by sending	A. Matter waves B. Ultrasonic waves C. Infrasonic waves D. electromagnetic waves
84	Velocity of sound is independent of	A. Temperature B. Density C. Pressure D. Medium
85	In sonar we use	A. Sound waves B. Ultrasound waves C. Microwaves D. Radio waves
86	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
87	The speed of sound is greater in solids due to their high.	A. Density B. Pressure C. Temperature D. Elasticity
		A. Intensity

88	When sound waves enter in different medium, the quantity that remains unchanged is.	B. Speed C. Frequency D. Wave length
89	Radar system is an application of.	A. Chemical effect B. Electric effect C. Magnetic effect D. Doppler's effect
90	When two identical travelling waves are superimposed, velocity of resultant wave.	A. Decreases B. Increases C. Remain same D. Becomes zero
91	According to Newton, sound travels in air under conditions of.	A. Adiabatic B. Isothermal C. Isobaric D. Isochoric