

MDCAT Physics Chapter 6 Waves Online Test

Sr	Questions	Answers Choice
1	It is a common characteristic of all types of wave motion that	A. Particles move up and down B. Particles move back and forth C. Energy is transferred without the transport of particles
		D. A material medium transmits the disturbance A. Decreases
2	When temperature increases, frequency of organ pipe:	B. Remains the same C. Increases D. Becomes zero A. 4m
3	A 4 m long string fixed at its ends resonate in 4 segments. The wavelength of the waveis:	B. 0.5m C. 2m D. 0.25 m
4	A longitudinal sinusoidal wave has wavelength of 1cm and a period of 2sec. Its wavevelocity is:	A. 50 cm/ sec B. 0.5 cm/ sec C. 5 m/ s D. 0.005 m/ sec
5	If the tension in a string stretched between two fixed points is made four times, the frequency of the fundamental harmonic will become:	A. Two times B. Three times C. Four times D. Six times
6	The wavelength of light observed on the earth, form a moving star is found todecrease by 0.05%. Relative to the earth the star is	A. moving away with a velocity of 1.5 x 10 ⁵ m/s B. moving away with a velocity of 1.5 x 10 ⁴ m/s C. coming closer with a velocity of 1.5 x 10 ⁵ m/s D. <div>coming closer with a velocity of 1.5 x 10⁵m/s</div>
7	A wave which consists of a single, non-repetitive disturbance is called a	A. Continuous wave B. Longitudinal wave C. Pulse D. Transverse wave
8	A closed organ pipe and an open organ pipe have their first overtone identical infrequency. Their lengths are in ratio	A. 3:4 B. 1:2 C. 2:3 D. 3:5
9	A stationary wave is established in a string which vibrates in four segments at afrequency of 120 Hz. Its fundamental frequency is:	A. 15Hz B. 60Hz C. 30Hz D. 430Hz
10	In a closed organ pipe, the fundamental frequency is f. What will be the ratio of thefrequencies of the next three overtones?	A. 2:3:4 B. 3:7:11 C. 3:4:5 D. 3:5:7
11	A whistle is revolved with high speed in a horizontal circle of radius R. to an observer at the centre of the circle the frequency of the whistle will appear to be:	A. Decreasing B. Increasing C. Both D. Constant
12	A string vibrates in 1 loop has frequency 25 Hz if it moves in 2 loops its frequencywould be:	A. 25 Hz B. 50 Hz C. 12.5 Hz D. 5Hz
13	A sonometer wire 100 cm in length has a fundamental frequency of 330 Hz. Thevelocity of propagation of waves along the wire is	A. 115m/sec B. 115m/sec C. 660m/sec D. 990m/sec
14	Bats navigate and find food by:	A. Ultrasonic B. Echolocation C. Refraction

15	The frequency of an open pipe is f. if one end is closed then its fundamental frequencywill be:	A. f/2 B. 3f/4 C. f D. 2f
16	When passes from medium to another, deviate from its path is called	A. reflection B. <div>refraction</div> C. diffraction D. transmission
17	A progressive sound wave is a means of transferring energy. A progressive sound waveof constant frequency is generated in air. The intensity of energy transfer is directlyproportional to another of the wave parameters. Which of the following is correct?	A. <div>Intensity (</div>
18	A closed organ pipe and an open organ pipe have their first overtones of identicalfrequency. Their respective lengths are in the ratio:	A. 1:2 B. 4:3 C. 2:3 D. 3:5
19	A church organ consist of open ended pipes ranging from 4m to 4 mm, if the speed of sound is considered as 400 m/s then the min and max frequency is:	A. 400 Hz and 4 kHz B. 100 Hz and 100 kHz C. 50 Hz and 50kHz D. 400 Hz and 400 kHz
20	An organ pipe open at both ends and another organ pipe, closed at one end willresonate with each other, if their lengths are in ration of	A. 1:1 B. 1:4 C. 2:1 D. 1:2