

## PPSC Physics Topic 5 Waves and Wave Properties of Light

Sr	Questions	Answers Choice
1	The beat frequency is the	A. Sum of the two frequencies B. Product of the two frequency C. Difference of the two frequencies D. Ratio of the two frequencies
2	Wave length of a LASER can be used as a standard of.	A. Angle B. Time C. Length D. Temperature
3	If a rope in a hand makes 10 oscillations after every 2 s. the frequency of the wave is.	A. 2 C s <sup>-1</sup> B. 5 C s <sup>-1</sup> C. 10 C s <sup>-1</sup> D. 20 C s <sup>-1</sup>
4	The sound waves used sonography are	A. Less than 20 KHz B. of 20 Khz C. Greater than 20 KHz D. Of 20 MHz
5	Which effect explain the frequency shift that occurs when there is motion sound a listener or both relative to the medium.	A. Early effect B. Doppler's effect C. Hall effect D. Zeeman effect
6	Which of the following is an example of continuous spectra.	A. Black body radiation spectrum B. Molecular spectra C. Atomic spectra D. Grating spectrum
7	The ratio of the velocity of sound in hydrogen to the velocity of sound in oxygen is	A. 4:1 B. 16:1 C. 2:1 D. 8:1
8	Which of the following characteristics of a wave is independent of the others.	A. speed B. Frequency C. Amplitude D. Wavelength
9	What is the change in path when sound wave is reflected from a rigid support.	A. $\lambda/2$ B. $\lambda$ C. 2 $\lambda$ D. Zero
10	The speed of bodies exceeding the speed of sound is called.	A. Supersonic B. Ultrasonic C. Infrasonic D. Super fast
11	Blue colour of sky is due to.	A. Diffraction B. Reflection C. Polarization D. Scattering
12	The frequency of the fundamental mode of transverse vibration of a stretched wire 1,000 mm long is 256 Hz When the wire is shortened to 400 mm at the same tension	A. 640 Hz B. 680 Hz C. 720 Hz D. 780 Hz
13	The speed of a sound wave is independent of	A. Nature of medium B. Pressure C. Temperature D. Mass and energy
14	LASER is a device for	A. Producing a beam of white light B. Producing a beam of monochromatic and coherent light C. Producing a beam of high intensity incoherent light. D. Producing highly penetrating's X-rays

15	What is shapes of a pure note	A. Sinwave B. Sawtooth C. Square wave D. Triangular wave
16	When wind blows in the same direction in which the sound travels, the sound velocity	A. Decreases B. Increases C. Remains unchanged D. Becomes zero
17	Which of the following properties of light does not vary with the nature of the medium.	A. Amplitude B. Frequency C. Wavelength D. Time period
18	Two waves of the same frequency and amplitude travelling in opposites directions along the same path in the same medium produce.	A. Stationary waves B. Transverse wave C. Longitudinal waves D. Compressional waves
19	On reflection of light from a source there occurs a change in	A. Wavelength B. Velocity C. Period D. Frequency
20	What is the emission of light by a substance that has observed light or others electromagnetic radiations of a difference wavelength.	A. Fluorescence B. Illuminance C. Luminance D. Incandescence