

PPSC Physics Topic 5 Waves and Wave Properties of Light

Sr	Questions	Answers Choice
1	The spectrum of radiation due to transitions between energy levels in an atom, other absorption or emission is called.	A. Atomic spectrum B. Molecular spectrum C. Grating spectrum D. Normal spectrum
2	Difference in the density of two medium when waves are passing from one into another medium always results in the change in.	A. Wave speed B. Wave direction C. Both speed and direction D. Wave frequency
3	In order to hear an echo what is the minimum distance between the sound and reflecting surface.	A. 0.65 m B. 16.5 m C. 1.65 m D. 165 m
4	A stretched wire with clamped ends has a fundamental frequency of 1,000 Hz. What will be the new fundamental frequency if tension in the wire is increased by 2%	A. 980 Hz B. 1,000 Hz C. 1,010 Hz D. 1,020 Hz
5	The loudness of a sound depends on its	A. Wavelength B. Frequency C. Wave amplitude D. Regularity
6	The speed of a sound wave is independent of	A. Nature of medium B. Pressure C. Temperature D. Mass and energy
7	If a wave vibrates 10 times in one second with a speed of 10 m s ⁻¹ the wavelength will be.	A. 1 m B. 10 m C. 20 m D. 100 m
8	Air bubble in water shines because of	A. Reflection B. Refraction C. Diffraction D. Total internal reflection
9	The main advantage of a grating over Young's apparatus is the	A. Sharpness of the bright lines B. Absence of dark fringes C. Absence of bright fringes D. Greater deviation of light
10	Longitudinal waves cannot be	A. Reflected B. Diffracted C. Dispersed D. Polarized
11	Huygen's concept of secondary waves.	A. Allow us to find the focal length of a thick lens B. Is a geometrical method to find a wave front. C. Is used to determine the velocity of light D. Is used to explain polarization
12	What is the shape of a pure note	A. Sin wave B. Sawtooth C. Square wave D. Triangular wave
13	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 X-rays
14	Which of the following proves that light waves are transverse in nature.	A. Diffraction B. Interference C. Polarization D. Dispersion

		D. Retraction
15	Which of the following represents an elastic wave.	A. Light waves B. Radiowaves C. X-rays D. Sound waves
16	Which term best describes the nature of light from modern view point.	A. Waves B. Rays C. Particles D. Photons
17	Velocity of sound in air at a given temperature.	A. Increases with increase in pressure B. Decrease with increases in pressure C. Is independent of pressure D. Becomes quadruples
18	X-rays can cause	A. Malaria B. Dysentery C. Cancer D. Blood pressure
19	A wave source of frequency 1000 Hz emits waves of wavelength 0.1 m How long does it take for the waves to travel 2500 m.	A. 20 s B. 25 s C. 40 s D. 100 s
20	Which is the best sound source to produce a pure note.	A. Tuning fork B. Flute C. Drum D. Harmonium