

PPSC Physics Topic 5 Waves and Wave Properties of Light

Sr	Questions	Answers Choice
1	In a diffraction pattern, the width of any fringe	A. Is directly proportional to slit width B. Is inversely proportional to slit width C. Has no dependence on slit width D. Is zero
2	The amplitude of a vibrating body at resonance place in vacuum is.	A. zero B. Maximum C. Minimum D. Infinite
3	The maximum energy of photons emitted from an X rays tube is certain to be increased by	A. Increasing the voltage across the tube B. Decreasing the voltage across the tube C. Heating the metal target D. Putting a barrier in the way of photons
4	Which of the following is a transverse wave.	A. Sound wave B. Shock wave C. Hair wave D. Radiowave
5	Waves transfer	A. Frequency B. Velocity C. Energy D. Wavelength
6	Soap film in sunlight appears coloured due to	A. Dispersion of light B. Diffraction of light C. Scattering of light D. Interference of light
7	Two tuning forks of frequencies 260 Hz and 257 Hz are sounded together the number of beats produced per seconds is.	A. 1 B. 3 C. 4 D. 257
8	Huygen's wave theory fails to explain	A. Diffraction B. polarization C. Interference D. Refraction
9	Which of the following refers to the distance from crest to crest of a wave.	A. Frequency B. Wavelength C. Amplitude D. Period
10	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
11	Huygen's principle is used to explain the	A. Speed of light B. Dispersion of light C. Propagation of light D. Reflection of light
12	The phenomenon of beats takes place due to	A. Longitudinal waves B. Transverse waves C. Stationary waves D. Both a and b
13	Polarization of light shows that light is.	A. Corpuscular in nature B. Of extremely short waves C. Longitudinal waves D. Transverse waves
14	A water wave is an example of	A. Electromagnetic wave B. Longitudinal wave C. Transverse wave D. Reverberation
15		A. Stationary waves

15	Two waves of the same frequency and amplitude travelling in opposite directions along the same path in the same medium produce.	<ul style="list-style-type: none"> B. Transverse wave C. Longitudinal waves D. Compressional waves
16	Plane polarized light can be produced by	<ul style="list-style-type: none"> A. Simple reflection B. Double refraction C. Scattering of light D. All of these
17	The energy flowing per second through a unit area held perpendicular to the direction of wave is.	<ul style="list-style-type: none"> A. The loudness of the sound waves B. The pitch of the sound waves C. The intensity level of sound waves D. The intensity of sound waves
18	Distance between two consecutive nodes or antinodes is equal to.	<ul style="list-style-type: none"> A. $\lambda/4$ B. λ C. $\lambda/2$ D. 2λ
19	A wave reflected from the boundary of a denser medium will have phase change	<ul style="list-style-type: none"> A. 45° B. 60° C. 90° D. 180°
20	Which characteristic successively increases in the musical scale.	<ul style="list-style-type: none"> A. Pitch B. Quality C. Loudness D. Amplitude