

PPSC Physics Topic 5 Waves and Wave Properties of Light

Sr	Questions	Answers Choice
1	The phase velocity is the velocity of a point that moves with a wave at constant phase it is also called.	A. Phase speed B. Wave speed C. Wave velocity D. All of these
2	Which of the following devices can be used to produce both transvers and longitudinal waves.	A. A string B. A ripple tank C. a helical spring D. A turning fork
3	The fundamental frequency of a sound source is 256 Hz. What is the frequency of the first harmonic.	A. 64 B. 128 C. 256 D. 512
4	X-rays eject electrons from matter by	A. Pair production B. Pair annihilation C. Compton effect D. Photoelectric effect
5	When temperature increases, frequency of an organ pipe	A. Decreases B. Increases C. Remain the same D. Become zero
6	Light wave are	A. Longitudinal B. Transverse C. Sometimes longitudinal and sometimes transverse D. Neither longitudinal nor transverse
7	Light product by a single Nicole is	A. Unpolarized B. Plane polarized C. Circulatory polarized D. Elliptically polarized
8	X-rays are a part of electromagnetic spectrum and are characterized by frequencies higher that those of.	A. Infrared radiation B. Ultraviolet radiation C. Far ultraviolet radiation D. Far infrared radiation
9	When two waves travelling through the same medium arrive at the same point 180° out of phase, they give rise to.	A. Polarization B. Destructive interference C. Refraction D. Constructive interference
10	Air bubble in water shines because of	A. Reflection B. Refraction C. Diffraction D. Total internal reflection
11	Hearing damage is possible at sound pressure of	A. 0 dB B. 50 dB C. 130 dB D. 195 dB
12	Which of the following proves that light waves are transverse in nature.	A. Diffraction B. Interference C. Polarization D. Refraction
13	Which one of the following cannot be polarized.	A. Radiowave B. Ultraviolet rays C. X- rays D. Sound waves
14	Sound wave in air are	A. Longitudinal waves B. Transvers waves C. Electromagnetic waves D. Matter waves
15	A wave source of frequency 1,000 Hz emits waves of wavelength 0.1 m How long does it take for the waves to travel 2500 m.	A. 4 s B. 25 s C. 40 s D. 100 s

16	On reflection of light from a source there occurs a change in	A. Wavelength B. Velocity C. Period D. Frequency
17	The spacing between fringes in a Young's double slit pattern will be increased, if we decrease the	A. Wavelength of the source light B. Distance from slit to screen C. Width of the slits D. Separation of the slits
18	Which of the following factors will not affect the speed of sound in a medium.	A. Temperature B. Pressure C. Humidity D. Mass
19	Ultrasonic sound waves	A. Can be heard by a normal human ear B. Can be heard with the help of hearing apparatus C. Can be heard with the help of microphone D. cannot be heard
20	When a transverse wave travelling in a less dense medium is reflected at an interface with a more dense medium.	A. A trough becomes a crest B. There is no phase shift C. There is a phase shift of 360° D. A crest remains a crest