

MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	One angstrom equal:	A. 10^{-8} m B. 10^{-9} m C. 10^{-10} m D. 10^{-11} m
2	Confining the light vibrations in one plane is called:	A. Reflection of light B. Interference of light C. Polarization of light D. Diffraction of light
3	The most common method to obtain plane polarized light by using dichoric substance is:	A. Selective absorption B. Reflection from different surfaces C. Refraction from different surfaces D. Scattering
4	Which one of the following is an optically active substance?	A. Quartz crystal B. Calcite crystal C. Sugar solution D. All of these
5	A polaroid is:	A. An adjustable shutter B. A device used to analyze polarized light C. A device used in polarimeter D. A light filter
6	The wavefront formed at very large distance from the source is:	A. Cylindrical B. Spherical C. Elliptical D. Plane
7	The blue color of sky is due to:	A. Dispersion B. Diffraction C. Polarization D. Scattering
8	Plane polarized light can be produced by:	A. Simple reflection B. Refraction C. Selective absorption D. All of these
9	Sunset makes sky appears reddish because of:	A. Diffraction of sun rays B. Refraction of light C. Scattering of light from dust particles D. Polarization of light
10	If 5000 lines/cm are ruled on a diffraction grating, the element is:	A. 5×10^{-5} m B. 2×10^{-6} m C. 5×10^{-6} m D. 2×10^{-5} m
11	For a monochromatic light passing from air to glass, which one of the following statement is true?	A. Frequency and wavelength decreases B. Frequency increases and wavelength decreases C. Frequency stays same, wavelength increases D. Frequency stays the same, wavelength decreases
12	When a ray of light enters a denser medium from a rarer medium, its:	A. Wavelength increases B. Velocity increases C. Frequency decreases D. Wavelength decreases
13	A ray of light reflected from a dense medium under goes a phase change of:	A. 30° B. 60° C. 90° D. 180°

size: small; ">"
D. 180"

14	A thin layer of oil on the surface of water looks colored due to:	A. Diffraction of light B. Reflection of light C. Dispersion of light D. Interference effect of light
15	When crest of one wave falls on the crest of the other wave. This phenomenon is known as:	A. Destructive interference B. Diffraction C. Polarization D. Constructive interference
16	The medium in which speed of light is the same in all directions is called:	A. Homogeneous B. Heterogeneous C. Non-homogeneous D. Free space
17	A point source in a homogeneous medium gives rise to:	A. A plane wavefront B. A spherical wavefront C. A cylindrical wavefront D. An elliptical wavefront
18	In order to get interference using two light rays:	A. The sources should be monochromatic and coherent B. The sources should have the same frequency C. Superposition should be linear D. All of these
19	The superposition of the two waves of same frequency and amplitude travelling in the same direction gives rise to an effect called:	A. Diffraction B. Interference C. Polarization D. Dispersion
20	The locus of all points in a medium having same phase of vibration is called:	A. Crest B. Trough C. Wavelength D. Wavefront