

MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	Fraunhofer's lines commonly visible in the sun's spectrum are examples of	A. Line emission spectrum B. Line absorption spectrum C. Band emission spectrum D. Band absorption spectrum
2	On a rainy day if there is an oil drop on tar road colored rings are seen around this drop This is because of	A. Interference pattern produced due to thin oil film B. Diffraction pattern C. Polarization D. Total internal reflection of light
3	The light produced by a laser is all the following except	A. Incoherent B. Monochromatic C. In the form of a narrow beam D. Electromagnetic
4	A spectrum which contains all wavelengths without any break is called	A. Emission spectrum B. Line spectrum C. Continuous emission spectrum D. All of them
5	In Huygen's wave theory the locus of all points in the same state of vibration is called	A. A half-period zone B. Vibrator C. Wave front D. A ray
6	The velocity of light in vacuum can be changed by changing	A. Frequency B. Amplitude C. Wavelength D. None of these
7	Choose the correct statement	A. Rays are normal to wave front B. Rays may be normal to wave front C. Rays are not normal to wave front D. There is no relationship between rays and wave fronts
8	The splitting of white light into several colors on passing through a glass prism is due to	A. Refraction B. Reflection C. Interference D. Diffraction
9	A polarizer is used to	A. Reduced intensity of light B. Produce polarized light C. Increase intensity of light D. Produce unpolarised light
10	In young's double slit experiment the separation between the slit is halved and distance between the slit and screen is doubled.The fringe width is	A. Unchanged B. Halved C. Doubled D. Quadrupled
11	Plane microwaves are incident on a long slit having a width of 5 cm.The wavelength of the microwaves if the first minima is formed at 30° is	A. 25 cm B. 5 cm C. 2.5 cm D. 5 mm
12	Which of the following properties show light is transverse wave in nature?	A. Interference B. Reflection C. Diffraction D. Polarization
13	To demonstrate the phenomenon of interference we require two sources that emit radiation	A. Of same frequency B. Different wavelength C. Of the same frequency and having definite phase relationship D. Of nearly the same frequency
14	The tip of a needle does not give a sharp image it is due to	A. Polarization B. Interference C. Diffraction D. None of these
		A. Light can be diffracted

15	Which effect provides direct experimental evidence that light is a transverse rather than a longitudinal wave motion?	B. Two coherent light waves can be made to interfere. C. The intensity of light from a point source falls off inversely as the square of the distance from the source D. Light can be polarized
16	Two monochromatic radiations X and Y are incident normally on a diffraction grating. The second order intensity maximum for X coincides with the third order intensity maximum for Y what is the ratio wavelength of X/wavelength of Y?	A. 1/2 B. 2/3 C. 3/2 D. 2/1
17	Which of the following gives three regions of the electromagnetic spectrum in order of increasing wavelength?	A. Gamma rays, microwaves, visible radiation B. Ultraviolet infra-red microwaves C. Radio waves ultraviolet X-rays D. Visible radiation gamma rays radio waves
18	Which effect provides direct experiment evidence that light is a transverse rather than a longitudinal, wave motion?	A. Light can be diffracted B. Two coherent light waves can be made to be interfere C. The intensity of light from a point source falls off inversely as the square of the distance from the source D. Light can be polarized
19	Ultra-violet rays differ from X-rays in that ultra - violet rays	A. Cannot be diffracted B. Cannot be polarized C. Do not affect a photographic plate D. Have a lower frequency
20	Which of the following frequency ranges includes most of the electromagnetic waves emitted by the ultra - violet tubes used in a sun bed?	A. 5×10^5 to 5×10^8 Hz B. 5×10^8 to 5×10^{11} Hz C. 5×10^{11} to 5×10^{14} Hz D. 5×10^{14} to 5×10^{17} Hz