

MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	According to Huygen's principle:	A. Light travel in straight line B. Light is a transvers wave C. Light has dual nature D. All point on the primary wavefront are the sources of secondary wavelets
2	The cause of mirage observed in deserts in bright sunlight is due to:	A. Refraction of light B. Reflection of light C. Scattering of light D. Total internal reflection of light
3	The velocity of light in vacuum can be changed by changing:	A. Frequency B. Amplitude C. Wavelength D. None of these
4	The image of the tip of a needle is never sharp because of	A. Polarization of light B. Interference of light C. Diffraction of light D. Reflection of light
5	Which one the following gives three regions of electromagnetic sepctrum in order of increasing wavelength?	A. Gamma rays, micro waves, visible light B. Radio waves, ultraviolet waves, X-rays C. Ultraviolet rays, Infrared rays, micro waves D. Visible light, gamma rays, radio waves
6	Huygen's theory cannot explain:	A. Diffraction B. Interference C. Polarization D. Photoelectric effect
7	The contrast in the fringes in an interference pattern depends upon	A. Fringe width B. Relative intensities of the two sources C. Distance between the slits D. Wavelength
8	If yellow light emitted by sodium lamp in Young's double slit experiment is replaced by blue light of the same intensity:	A. Fringe width will decrease B. Fringe width will increase C. Fringe width will remain unchanged D. Fringe will become less intense
9	Which one of the following phenomenon cannot be explained on the bases of Huygen's theory?	A. Refraction B. Reflection C. Diffraction D. Formation of spectrum
10	Light appears to travel in straight line because	A. It is not absorbed by the atmosphere B. It is refracted by the atmosphere C. Its wavelength is very small D. Its velocity is very large
11	Star twinkle due to	A. The fact that they do not emit light continously B. The refractive index of earth's atmosphere fluntuates C. The star's atmosphere absorbs its light intermittently D. None of these
12	A prism splits a beam of white light into seven component colors. This is so because	A. Phase of different colors is different B. Amplitude of different colors is different C. Energy of different colors is different D. Velocity of different colors is different

13	The re conversion of light signals into electrical signals takes place due to	A. Transmitter B. Receiver C. Generator D. None of these
14	The conversion of electrical signals into light signals taken place due to	A. Generator B. Transmitter C. Receiver D. None of these
15	In digital modulation, the LED or laser flashed on and off at a	A. Fast rate B. Very fast rate C. Extremely fast rate D. None of these
16	Using a graded index fibres the time difference is reduced to about	A. 0.5 ns per km B. 1.0 ns per km C. 2.0 ns per km D. 2.3 ns per km
17	Inspite of different dispersion, all the wavelengths arrive at the other end of the fibre at the same time. With a step-index fibre overall time difference may be about	A. 40 ns B. 30 ns C. 32 ns D. 33 ns
18	The power loss can also take place due to	A. Information received can be inaccurate due to dispersion B. Light signal may not be perfectly monochromatic C. Signal accuracy may be affected by defective source D. All of these
19	Power loss taken place when a light signal travels along fibres by	A. Multiple reflection B. Light absorbed due to impurities in glass C. At joint some light is scattered by group of atoms D. All of these
20	Which device converts the light signals which these amplified and decoded	A. Photo cell B. Photo diode C. Photo transistor D. None of these