

MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	Which one of the following is nearly monochromatic	A. Light from candle B. Light from simple lamp C. Light from sodium lamp D. Light from sun
2	Polaroid glass is used in sun glasses because	A. It is fashionable B. It has good color C. It is cheaper D. It reduces the light intensity to half on account of polarization
3	The phenomenon of diffraction can be exhibited by	A. Polarized waves only B. Un polarized waves only C. Longitudinal waves only D. All polarized or un polarized waves and longitudinal or transverse waves
4	To observe diffraction phenomenon the size of a obstacle	A. Should be much larger than the wavelength B. Should be of the same order as the wavelength C. Have no relation of wavelength D. Should be exactly $\lambda/2$
5	If Young s double slit experiment is immersed in water then the fringes with	A. Decreases B. Remains unchanged C. Becomes infinite D. Increases
6	The focal length of the lens of human eye	A. Is fixed B. Varies from zero to infinity C. Can be increased only D. Can be decreased only
7	When interference of light takes place	A. Energy is created in the region of maximum intensity B. Energy is destroyed in region of maximum intensity C. Conservation of energy hold goods and energy is redistributed D. Conservation of energy does not hold good
8	The colour of light is determined by is	A. Wavelength B. Frequency C. Velocity D. Amplitude
9	Critical angle of light passing from glass to air is minimum for	A. Red B. Green C. Yellow D. Violet
10	A completely transparent material will be invisible in vacuum when the refractive index n is	A. Unity B. More than unity C. Less than unity D. Equal to 1.33
11	Mirage is a phenomenon due to	A. Reflection of light B. Refraction of light C. Total internal reflection of light D. Diffraction of light
12	For incident angles equal or greater than the critical angle the glass air boundary will act as a	A. Convex mirror B. Concave mirror C. Mirror D. None if them
13	The danger signals are red while the eve is more sensitive to yellow because	A. Scattering in yellow colour is less than that of red B. Red light is longer in wavelength than yellow light

		C. Scattering in red is less than that of in yellow D. Red colour has greater frequency than yellow light
14	A driver in a lake wants to signal his distress to a person sitting on the edge of the lake flashing his water proof torch He should direct the beam	A. Vertically up wards B. Horizontally C. At angle to the vertical which is slightly less than the critical angle D. At an angle to the vertical which is slightly more than critical angle
15	Diffraction of X-ray by crystals show that	A. The intensity of X-rays B. X-rays have very short wavelength C. X-rays are electromagnetic waves D. A-rays are just like visible light
16	In Michelson interferometer if the moveable mirror is moved through a distance of 8λ then the number of fringes shifted are	A. 4 B. 8 C. 16 D. 32
17	How many fringes will pass a reference point if the moveable mirror of a Michelson s interferometer is moved 0.06 mm The wavelength of light used is 5.89×10^{-3} mm	A. 200 B. 300 C. 20.4 D. 2.3
18	Polaroids are used in	A. Sun glasses B. The production and analysis of plane polarized light C. Stereoscopic motion picture D. All of these
19	Which of the following is an optically active material	A. Solution of cane sugar B. Liquid nitrogen C. Mercury D. Polaroid
20	Wavelength of a laser beam can be used as a standard of	A. Time B. Angle C. Length D. Temperature