MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	To get high resolving power for a telescope one should use	A. Objective of large aperture B. Objective of large focal length C. Eye piece of large focal length D. Eye piece of small focal length
2	The frequency of light ray is 6 x 10^{14} Hz. The frequency when it propagates in a medium of refractive index 1.5 will be	A. 6 x 10¹⁴ Hz B. 4 x 10¹⁴ Hz C. 9 x 10¹⁴ Hz D. 1.67 x 10¹⁴ Hz
3	Rainbow is formed due to combination of	A. Dispersion and total internal reflection B. Reflection and refraction C. Dispersion and focusing D. Refection and scattering
4	Spectrum of sun consists of	A. Bright lines B. Dark lines C. Bright bands D. Dark bands
5	Focal length of convex lens is maximum for	A. Blue light B. Yellow light C. Green light D. Red light
6	Wavelength of light of frequency 100 Hz is	A. 2 x 10⁶m B. 3 x 10⁶m C. 4 x 10⁶m D. 5 x 10⁶m
7	One cannot see through fog becuase	A. Fog absorbs light B. The refractive index of fog is infinity C. Light suffers total reflection at the droplet in a fog D. Light is scattered by the droplets in fog
8	In young s interference experiment one slit is covered with a cellophane paper which absorbs half the intensity then	A. No fringes are observed B. All fringes will be darks C. bright fringes will be less bright and dark will be less dark D. Bright fringes will be brighter and dark fringes will be darks
9	In Newton s rings the central spot appears dark due to	A. Phase change B. Destructive interference C. Small eye piece of optical device D. Both a and b
10	Optically active substance are those substance which	A. Produce polarization of polarized light B. Rotate the plane of polarization of polarized light C. Produce double refraction D. Both a and b
11	Which of the following is not an application of polarization	A. To reduce glare of light B. To check concentration sugar in solution C. Curtain less windows D. All of these
12	A diffraction grating of length 2cm has 4000 lines The grating element is	A. 0.5 x 10⁻² cm B. 5 x 10⁴ C. 5 x 10⁻⁴ D. 0.5 x 10⁻⁴ cm
		A. <span style="color: rgb(0, 0, 0); font-family: Georgia; font-size: 18px;

13	In Michelsons interference the movable mirror is moved and a shift of two fringes is observed then the distance moved by the mirror is	line-height: 23.390625px;">λ /2 B. λ C. 2λ D. None
14	For single slit diffraction the first minimum occurs when	A. dsinθ = λ B. dsinθ = λ/2 C. dsinθ = 2λ D. dsinθ = mλ
15	In Young s experiment the distance between two adjacent fringes for blue light is than that for green light	A. Lesser B. Greater C. Equal D. Lesser if distance between source and screen is large
16	In electromagnetic waves electric and magnetic field ar	A. Parallel B. Antiparallel C. Perpendicular D. Sometimes parallel sometimes perpendicular
17	The ratio of fringes with for bright and dark fringes is	A. 1 : 2 B. 2 : 1 C. 1 : 4 D. 1 : 1
18	An oil film floating on water surface show colours due to	A. Interference B. Diffraction C. Scattering D. Reflection
19	A normal to the waves front showing direction of propagating of wave is called	A. Photon B. Particle C. Ray D. Line
20	In Young s double slit experiment if we use white light then	A. Colored fringes will be observed B. Bright fringes will be observed C. Alternate dark and bright fringes will be observed D. No interference fringes will be seen