MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	A lens behaves as a converging lens in air and a diverging lens in water the refractive index of the material is	A. Equal to unity B. Equal to 1.33 C. Between unity and 1.33 D. Greater than 1.33
2	An object is placed at a distance of f/2 from a convex lens.The Image will be	A. At one of the foci,virtual and double its size B. At,3/f real and inverted C. At 2f,virtual and erect D. At f,real and inverted
3	When the length of a microscope tube increases its magnifying power	A. Decreases B. Increases C. Does not change D. May increase or decrease depending on the observer and the place of observation
4	A converging lens in used to from an image on a screen when the upper half of the lens is covered by an opaque screen	A. Half the image will disappear B. No change either in size or in intersity C. Intensity of image will increase D. Intensity of the image will decrease
5	A fly is sitting on the objective of a telescope pointed towards the moon.What effect is expected on the photography of the moon taken through the telescope?	A. The entire field of view blocked B. There is an image of the fly on the photography C. There is no effect at all D. There is a reduction in the intensity of the image
6	For destructive interference the path difference is give by:	A. (m-1/2)λ B. (m+1/2)λ C. mλ D. 1/2 mλ
7	For constructive interference the path difference is	A. mλ B. (m-1)λ C. m²λ D. 1/2mλ
8	For interference to occur,the interfering beams of light must be	A. Of different frequencies B. Coherent C. White light D. Added
9	For interference to occur the two light waves should be:	A. Of two different frequencies B. Coming from opposite directions C. Of high intensity D. Monochromatic
10	According to Huygen,every point on a wavefront may be regarded as a.....of secondary wavelets.	A. Base B. Source C. Producer D. Origin
11	The direction of a ray of light is.....to the wave front.	A. Parallel B. Equal C. Opposite D. Perpendicular
12	Consider telecommunication through optical fibers.Which of the following statements is not true?	A. Optical fibers may have homogeneous core with a suitable cladding B. Optical fibers can be of graded refractive index C. Optical fibers are subject to electromagnetic interference from outside D. Optical fibers have extremely low transmission loss
13	In Young's double slit experiment,the separation between the slits is made 3 fold the fringe	A. 1/3 times B. 1/9 times

	width becomes	C. 3 times D. 9 times
14	Optic fibers are related with	A. Communication B. Light C. Computer D. None of these
15	Sun has elliptical shape when it rises and sets due to	A. Refraction B. Reflection C. Scattering D. Dispersion
16	Why laser rays are used to measure long distance?	A. Laser rays propagate in a straight B. Laser rays are not absorbed C. Laser rays are most coherent waves D. Laser rays are high velocity waves
17	The difference between 1st ring fringe and 1st dark fringe is measured as	A. λD/2d B. λD/d C. λD/4d D. 2λD/d
18	Which is having minimum wavelength?	A. X-rays B. Ultra-violet rays C. Y-rays D. Cosmic rays
19	The cause of mirage observed in desert is	A. Refraction B. Reflection C. Scattering D. Total internal reflection
20	Intensities of the two waves of light are I and 4I.The maximum intensity of the resultant wave after superposition is	A. 5I B. 9I C. 16I D. 25I