

MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	The refractive index of a medium is defined as a ratio	
2	Certain light of wavelength 600 nm is used to view an object under the microscope. If the aperture of its objective is 1.22 cm, then the limiting angle of resolution will be	A. $6 \times 10^{-5} \text{ rad}$ B. $7 \times 10^{-5} \text{ rad}$ C. $8 \times 10^{-5} \text{ rad}$ D. None of these
3	The eye piece of a compound microscope acts as a	A. Diverging lens B. Converging lens C. Diverging mirror D. Converging mirror
4	Conventionally, all the distances p, q, f, are measured from _____ of the lens	A. Focus B. Optical center C. Edges D. Centre of curvature
5	An optical fiber carries data in the form	A. Lights signals B. Sound signals C. A wave D. A particle
6	The ratio of diameters of two convex lenses is _____ the ratio of their focal lengths	A. Greater than B. Less than C. Equal to D. Square of
7	A single converging lens placed close to the eye to see magnified image is called	A. A telescope B. Compound microscope C. Simple microscope D. None of these
8	If the focal of a convex lens is 5 cm then to get real and inverted image of the same size as that of object, the object should be placed at	A. 5 cm B. 10 cm C. 15 cm D. 20 cm
9	How is the image formed by a convex lens affected if the upper half of the lens is covered with a paper	A. The upper half of the image is cut off B. The brightness of the image is reduce C. The brightness of the image is increased D. Lower half of the image is cut off
10	When a light signal travels along the length of the optical fibre, the power lost by it is due to	A. Reflection B. Refraction C. Scattering and absorption D. Diffraction
11	The path difference involved in interference in thin films depends upon	A. Thickness and nature of thin films B. Angular of incidence of light C. Nature of media on both sides of thin film D. All of these
12	When the object lies between F and 2F the image formed by a convex lens is	A. Real B. Virtual C. Diminished D. Erect
13	The speed of light in a medium of refractive index 1.5 is	A. $3 \times 10^8 \text{ ms}^{-1}$ B. $4.5 \times 10^8 \text{ ms}^{-1}$ C. $2.0 \times 10^8 \text{ ms}^{-1}$ D. None of these
14	A convex lens acts as diverging lens when the object is placed	A. Between F and 2F B. At 2F C. Within the focal length D. Beyond 2F

15	Spherical aberration can be reduced by using	A. Convex lens B. All the portions of the lens C. Central portion of the lens D. Upper portion of the lens
16	The total magnification of a combination of two lenses having individual magnification M_1 and M_2 is	A. $M_1 + M_2$ B. $M_1 M_2$ C. $M_1 - M_2$ D. M_1 / M_2
17	The unit of power of a lens is	A. Meter B. Watt C. Horsepower D. Dioptre
18	An object is placed between the focus and the optical center of the convex lens. The image formed is	A. Real, erect and magnified B. Virtual, inverted and magnified C. Virtual, erect and diminished D. Virtual, erect and magnified
19	The magnification of a compound microscope of object and eye piece of focal lengths f_o and f_e , respectively is	
20	Angular magnification of a simple microscope is given as	