

MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	Identify the incorrect statement	A. The distance between the objective and eye-piece is 16.02 cm B. The angular magnification of the planet is 800 C. The image of the planet is inverted D. The objective is larger than the eye-piece
2	The angle with the horizontal at which an underwater swimmer will see the setting sun is	A. 91° B. 32° C. 49° D. 69°
3	If a glass slab is placed in the path of a converging beam of light The point of convergence of light	A. Moves away from the glass slab B. Moves towards the glass slab C. Remains at the same point D. Moves straight
4	Which of the following radiation will be focused farthest from a convex lens	A. X - rays B. γ - rays C. Microwaves D. β - rays
5	Which of the following colors will have minimum critical angle when light passes from glass to air	A. Red B. Blue C. yellow D. Orange
6	Light traveling through vacuum enters water which characteristic of light does not change	A. Velocity B. Frequency C. Wavelength D. Amplitude
7	In compound microscope the focal length of eye piece is	A. Large B. Small C. Same as objective D. None of these
8	If focal length of objective is increased	A. Magnifying power of compound microscope decreased B. Magnifying power of astronomical telescope increases C. The diameter of the objective lens D. None of these
9	An optical instrument used to see very far off objects is called	A. Telescope B. Camera lens C. Microscope D. Spectrometer
10	A simple astronomical telescope consists of	A. Two convex lenses B. Three convex and one concave C. Two concave lens D. None of these
11	The distance between the objective and eye-piece of a telescope in normal adjustment is	A. $\frac{f_o}{f_e}$ B. $\frac{f_o}{f_e} + 1$ C. $2f_e$ D. None of these
12	The magnifying power of an instrument is expressed in	A. Radians B. Degrees C. No units D. None of these
13	The final image obtained by astronomical telescope is	A. Inverted w.r.t object B. Magnified C. Virtual D. All of them
		A. $3 \times 10^{10} \text{ m/s}$ B. $3 \times 10^9 \text{ m/s}$

14	The speed of light in vacuum or in air is	$3 \times 10^8 \text{ m/s}$ $3 \times 10^7 \text{ m/s}$
15	The speed at which light travels within the material depends upon	A. Refractive index of medium B. Wavelength C. Frequency D. Intensity
16	Optical fibres are of	A. Five type B. Two type C. Three type D. None of these
17	Multimode graded index fibre core has diameter of	A. 40-200 μm B. 50-1000 μm C. 50-150 μm D. 50-300 μm
18	How many phone calls can be carried by single mode step index fibre	A. 25000 B. 96000 C. 14000 D. 21000
19	Single mode step index fibre has a very thin core of about diameter	A. 5.5 μm B. 9.5 μm C. 5.0 μm D. All of these
20	Multimode step index fibre has a core of relatively larger diameter such is	A. 125 μm B. 175 μm C. 50 μm D. 100 μm