

MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	The experimental evidence in support of wave theory in Huygen's time was	A. not present B. not convincing C. convincing D. none of them
2	Who proposed that light energy form a luminous source travels in space by means of wave motion?	A. Newton B. Maxwell C. Einstein D. Huygen
3	The minimum number of lenses used in compound microscope is	A. 1 B. 2 C. 3 D. 4
4	The transmitter in optical fiber system contains a device called	A. LED B. Diode C. Transistor D. None of these
5	Analyzer is use to	A. Polarize the light B. Un-polarize the light C. Check whether the light is polarized or un polarized D. Rotate the plane of polarized light
6	For total internal reflection to take place, the angle of incidence must be _____ than critical angle and the light should travel from _____ to _____ medium	A. Greater, rarer, denser B. Smaller, rarer, denser C. Smaller, denser, rarer D. Greater, denser, rarer
7	The variation if focal length of a lens when we pass from the central portion out words (to words the lens edges) is known as	A. Astigmatism B. Chromatic C. Spherical aberration D. Coma
8	Which of the following light move faster in water	A. Red B. Violet C. Green D. Blue
9	An optical fiber of _____ cm in diameter id equivalent to 7.62 cm diameter bundle of _____ wires to carry the same amount of signals	A. 0.6, aluminum B. 6.0, copper C. 0.6, copper D. 6.0, aluminum
10	The fiber of which refractive index _____ gradually as move from central core to its periphery is called _____ index fiber	A. Decreases, multi-mode graded B. Increases, single mode step C. Either of A or B D. Increases, multi-mode step
11	Cladding means a layer of _____ refractive index over the central core of _____ refractive index	A. Lower, lower B. Higher, lower C. Lower, higher D. None of these
12	A fiber of 50 μ m diameter capable of carrying white light at _____ distances is called _____ index fiber	A. Large, multi-mode step B. Small, multi-mode step C. Small, multi-mode graded D. Large, single mode step
13	Propagation of light in an optical fiber requires that light should be	A. Refracted from air to fiber B. Continuously refraction C. Totally reflected within the fiber D. Both B and C
14	If we know the refractive index of glass, speed v of light in the glass can be found by	A. $v = c n$ B. $v = c/n$ C. $v = n/c$ D. None of these
15	Which type of optical fiber has the largest diameter	A. Single mode step index fiber B. Multi-mode step index fiber C. Multi-mode graded index fiber D. Single mode graded index fiber

		D. None of these
16	Let a ray of light enters from air into two media of different refractive indices. The speed of light will be _____ to refractive index	A. Directly proportional B. Inversely proportional C. Sometimes inversely D. Equal
17	The property of light which makes light possible to be transmitted into inaccessible place is	A. Interference B. Diffraction C. Polarization D. None of these
18	The laser light used in an optical fiber system has a wavelength equal to	A. $3 \mu\text{m}$ B. $5 \mu\text{m}$ C. $1.3 \mu\text{m}$ D. $6 \mu\text{m}$
19	For glass-air boundary, the value of the critical angle is	A. 42° B. 45° C. 30° D. 60°
20	The light waves and radio waves differ in	A. Speed B. Frequency C. Wavelength D. Both B and C