

MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	Spectrometer can be used to	A. Measure wave length of light B. Measure refractive index of the materials C. Study spectra of light D. All
2	Optical device used in spectrometer	A. Simple microscope B. Compound microscope C. Telescope D. Any of them
3	Basic principle of an optical fibre is	A. Reflection B. Scattering C. Polarization D. Total internal reflection
4	The index of refraction of diamond is 2.0 velocity of light in diamond in m/s is	A. 6×10^{18} B. 3×10^{18} C. 2×10^{18} D. 1.5×10^{18}
5	The cause of power loss in optic fibre is	A. Absorption B. Scattering C. Dispersion D. All
6	Source of light used in the fibre optic communication	A. Led B. Laser C. Photo diode D. Both a and b
7	An object is placed at a distance of 200 cm from a convex lens of focal length 10 cm the linear magnification is	A. 1/3 B. 2/3 C. 3/4 D. None
8	In compound microscope magnification of objective is 2 and magnification of eyepiece is 4 magnification of compound microscope is	A. 2 B. 6 C. 8 D. None
9	A telescope has an objective of focal length 10 cm the magnifying power of telescope is 5. Its length in normal adjustment is	A. 7.5cm B. 10.5 cm C. 12 cm D. 15 cm
10	A convex lens of focal length 5 cm is used as magnifying glass Its magnifying power when the image is formed at infinity	A. 6 B. 5 C. 1.5 D. 7
11	Which does not show polarization	A. Longitudinal wave in gas B. Transverse wave in gas C. Both a and b D. None of these
12	Which of the following is conserved when light waves interfere	A. Intensity B. Energy C. Amplitude D. Momentum
13	Inverse square law for luminance is valid for	A. Search light B. Isotropic point source C. Cylindrical source D. All types of source
14	A beam of light enters air from water. Which of the following characteristics of light will not change in water	A. Frequency B. Wavelength C. Velocity D. Amplitude
15	Refractive index of material depends upon	A. Nature of material B. Wave length C. Temperature D. All of these

D. All of these

16 Two lenses of power +12 and -2 diopters are placed in contact the power of combination is

- A. 10 diopters
- B. 8 diopters
- C. 6 diopters
- D. 12 diopters

17 If the cover of a red book is observed in monochromatic blue light, It will appear

- A. White
- B. Red
- C. Black
- D. Blue

18 A tourmaline crystal is being used as an analyzer In one complete rotation of the crystal the number of excitation will be

- A. 0
- B. 1
- C. 2
- D. 4

19 A convex lens is dipped in a liquid whose refractive index is equal to the material of the lens. Then its focal length will become

- A. Infinite
- B. Zero
- C. Extremely small
- D. Extremely large

20 The ratio of the diameter of two convex lenses is the ratio of their focal lengths

- A. Greater than
- B. Less than
- C. Equal to
- D. None