MDCAT Physics Chapter 7 Light Online Test

Sr	Questions	Answers Choice
1	The speed of light in vacuum is 3 x 10^8 ms^{-1}.Its speed in a medium of refractive index 1.5 will be	A. 6.5 x 10⁸ B. 2 x 10⁸ ms⁻¹ C. 4.5 x 10⁸ cm D. 5.5 x 10⁸
2	The critical angle for a ray of light suffering total internal reflection will be smallest for the ray traveling from	A. Water to glass B. Water to air C. Glass to air D. Glass to water
3	Just before setting the sun may appear to be elliptical This happens due to	A. Diffraction B. Reflection C. Dispersion D. Refraction
4	At what distance should a book be placed from a 50 Cd bulb so that the luminance on the book becomes 2 lm m^{-2}	A. 50 m B. 10 m C. 5 m D. 1 m
5	Inverse square law for luminance is valid for	A. Search light B. Isotropic point source C. Cylindrical source D. All types of sources
6	If the distance of a surface from light source is doubled,then the luminance will become	A. 1/4 times B. 1/2 times C. 2 times D. 4 times
7	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
8	For obtaining equal and same height mirror should be	A. Convex B. Concave C. Plane D. None
9	In a astronomical telescope the final image for normal vision is formed at	A. The focal of the eye piece B. The least distance of the distinct vision C. The focus of the objective lens D. Infinity
10	If the red light is replaced by blue light illuminating the object in a microscope the resolving power of the microscope	A. Decreases B. Increases C. Gets halved D. Remains unchanged
11	Near and far points of a healthy human eye respectively are	A. 0 and 25 cm B. 0 and infinity C. 25 cm and 100 cm D. 25 cm and infinity E.
12	The resolving power of telescope depends on	A. Focal length of eye lens B. Focal length of objective lens C. Length of the telescope D. Diameter of he objective lens
13	In a compound microscope the intermediate image is	A. Virtual erect and magnified B. Real,erect and magnified C. Virtual,inverted and magnified D. Virtual,erect and reduced
14	Resolving power of a telescope depends on:	A. The magnification of eyepiece B. The focal length of objective lens C. Diameter of objective lens D. Refractive index of objective lens
		A. Image position

15	Geometrical optics cannot give following characteristics for a microscope	B. Image size C. Resolution of image D. Any of the above
16	While viewing a distant object with a telescope suddenly a housefly sits on objective lens.The correct statement is that	A. Housefly will be seen enlarged in image B. Housefly will be seen reduced in image C. Intensity of image will be decreased D. Intensity of image will be increased
17	The astronomical telescope consists of objective and eye piece.The focal length of he objective is	A. Equal to that of the eye piece B. Greater than that of eye piece C. Shorter than that of eye piece D. Five times shorter than that of the eye piece
18	For the normal setting of a telescope	A. Only the object is at infinity B. Only the final image is at infinity C. Both the object and the final image is at infinity D. Neither the object nor the final image has to be at infinity
19	Which of the following is conserved when light waves interfere?	A. Intensity B. Energy C. Amplitude D. Momentum
20	A convex lens has focal length F.An object is placed at P then	A. Image is formed at + ∞ and is real B. Image is formed at + ∞ and is virtual C. Image is formed at + ∞ and is real D. Image is formed at + and is virtual