

PPSC Physics Topic 4 Geometrical Optics

Sr	Questions	Answers Choice
1	use of outer layer in optical fibres called cladding is mainly to.	A. Scatter the light B. Absorb unwanted light C. Transmit the light D. Produce total internal reflection
2	Due to which phenomenon, diamond shines so brightly.	A. Scattering of light B. Refraction of light C. Dispersion of light D. Total internal reflection
3	What is the cause of mirage in desert areas.	A. Refractive index of atmosphere increases with height B. Refractive index of atmosphere decreases with height C. Refractive index of atmosphere remains constant D. Scattering
4	What is the focal length of a normal eye lens.	A. 1 mm B. 2 cm C. 25 cm D. 1 m
5	Which part of eye is located in the centre of the eye that allows light to enter the retina.	A. Iris B. Pupil C. Cornea D. Fovea
6	A double convex air bubble in water will behave as.	A. Plane slab B. Concave mirror C. Convex lens D. Concave lens
7	If a ray of light in glass is incident on an air surface at an angle greater than the critical angle, the ray will	A. Refract only B. Reflect only C. Partially refract and partially reflect D. Diffract only
8	A fixed point inside the lens through which a ray of light does not change its path is called.	A. Pole B. Focus C. Centre of curvature D. Optical centre
9	The image of an object 5 mm high is only 1 cm high. The magnification of the lens is	A. 0.2 B. 0.5 C. 1 D. 2
10	In water drops rainbows are formed by	A. Reflection B. Refraction C. Dispersion D. All of these
11	Maximum detail of an object can be seen by a microscope when the object is illuminated by light of.	A. Longer wavelength B. Shorter wavelength C. X-rays D. Gamma rays
12	For total internal reflection the light rays enter	A. From rarer to denser medium B. From, denser to rarer medium C. Medium of same refractive index D. At an angle 90°
13	The value of critical angle of glass is	A. 45° B. 42° C. 48° D. 52°
14	The final image produced by a compound microscope is.	A. Real and inverted B. Real and erect C. Virtual and erect D. Virtual and inverted
		A. Scientific study of light and vision

15	Optics is the	B. Scientific study to sound C. Scientific study of time D. Scientific study of fluid
16	The power of lens in dioptries is	A. Its focal length in meters B. The reciprocal of its focal length in metres C. The reciprocal of length in metres D. The reciprocal of length in centimetres
17	To obtain is parallel beam from the headlight of a car it must be fitted with.	A. A convex mirror B. A concave mirror C. A convex lens D. A concave lens
18	The length of an astronomical telescope for normal vision is.	A. $f_o \times f_e$ B. f_e/f_o C. $f_o - f_e$ D. $f_o + f_e$
19	The final image produced by a microscope is.	A. Real and erect B. Virtual and erect C. Real and inverted D. Virtual and inverted
20	Which of the following is the cause of failure of a lens to form a sharp and distinct image of a white object.	A. Spherical aberration B. Chromatic aberration C. Distortion D. Astigmatism