

PPSC Physics Chapter 4 Geometrical Optics

Sr	Questions	Answers Choice
1	When the angel of incidence becomes larger than the critical angle no refraction occurs This is known is.	A. Diffraction B. Refraction C. Total internal reflection D. Diffuse reflection
2	The angle of incidence that causes the refracted ray in the rarer medium to bend though 90° is called.	A. Critical angle B. solid angle C. Plane angle D. Acute angle
3	When a ray of light traveling in a rare medium enters into a denser medium	A. It remains undeviated B. It is reflected back C. It bends towards the normal D. It bends away from the normal
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5	The critical angle for a beam of light passing from water into air is 48.8° o This mean that all light rays with an angle of incidence greater than this angle will be.	A. Absorbed B. Totally reflected C. Partially reflected and partially transmitted D. Totally transmitted
6	If a ray of light in glass in 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
7	Image formed by a camera is	A. Real, inverted, and diminished B. Virtual, upright and diminished C. Virtual, upright and magnified D. Real, inverted and magnified
8	Which type of image is produced by the converging lens of human eye if it views a distant object.	A. Real, erect, same size B. Real, inverted, diminished C. Virtual, erect, diminished D. Virtual, inverted, magnified
9	What is true is real images formed by a converging lens.	A. they are inverted B. They are on the same side of the lens as the object C. They can never be shown on a screen D. They cannot be seen
10	Which statement about the image formed by a convex lens is correct.	A. It is always real and erect B. It is always real and inverted C. It is always virtual and erect D. It may be either virtual or real
11	A person of height 1.5 m stands 2.0 m in front of a plane mirror How far from the person is her image .	A. 2.0 m B. 3.0 m C. 3.5 m D. 4.0 m
12	Which type of image is formed by a concave lens on a screen.	A. Inverted and real B. Inverted and virtual C. Upright and real D. Upright and virtual
13	The index of refraction depends on	A. the focal length B. The speed of light C. The image distance D. The object distance
14	An object is -14 cm in front of a convex mirror The image 5.8 cm behind the mirror. What is the focal length of the mirror.	A. -4.1 cm B. -8.2 cm C. -9.9 cm D. -20 cm

15	An object of placed at the centre of curvature of a concave mirror The image produced by the mirror is located.	A. Out beyond the centre of curvature B. At the centre of curvature C. Between the centre of curvature and the focal point D. At the focal point
16	A converging mirror with a radius of 20 cm creates a real image 30 cm from the mirror What is the object distance.	A. -5.0 cm B. -7.5 cm C. -15 cm D. -20 cm
17	Which of the following quantities is not changed during refraction of light.	A. Its direction B. Its speed C. Its frequency D. Its wavelength
18	Power of the lens is one dioptre, if its focal length is.	A. 1/6 metre B. 1/2 metre C. 1 metre D. 8 metre
19	Dioptre is the term used for describing the	A. Intensity of light B. Density of air C. Power of light D. Refractive index
20	Since light rays are always diverged by concave lenses such lenses	A. Cannot form images B. Form only black and white images C. Form only inverted image D. Form only erect images