

PPSC Physics Topic 4 Geometrical Optics

Sr	Questions	Answers Choice
1	The line passing symmetrically through the optical center of the lens is.	A. Focal plane B. Principal focus C. Principal axis D. Focal length
2	When a ray of light is incident at an acute angle to the boundary of the media the refracted ray.	A. Bends away from the normal B. Bends towards the normal C. Remains undeviated D. Is totally reflected
3	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°
4	The dioptric power of a concave lens of 10 cm focal length is.	A. 0.1 diopter B. 1.0 diopter C. 10 diopter D. -10 diopter
5	Which scientist made the first successful terrestrial measurement of the speed of light	A. Isaac Newton B. Ole Romer C. Armand Fizeau D. Albert Michelson
6	Refractive index of a medium is defined as.	A. speed of light in vacuum/speed of light in medium B. Speed of light in medium/Speed of light in vacuum C. Speed of light in air/speed of light in medium D. Speed of light in medium/Speed of light in air
7	The angle of incidence that causes the refracted ray in the rarer medium to bend through 90° is called.	A. Critical angle B. solid angle C. Plane angle D. Acute angle
8	The refractive index of benzene is 1.5. What is the critical angle of benzene.	A. 0.667° B. 42° C. 48° D. 90°
9	Plossi or symmetrical eye piece consists of	A. Two plano convex lenses with same focal length B. Two sets of doublets C. An achromatic doublet D. A spherical doublet
10	Lenses of what diameter are usually not practical.	A. Less than 1 m B. Larger than 1 m C. Larger than 5 m D. Larger than 10 m
11	In a magnifying glass, the objective is placed at a distance	A. Less than the focal length B. Between the focal length and twice the focal length C. Greater than twice the focal length D. At the focus of the lens
12	Larger the diameter of the objective of a telescope.	A. Greater is its resolving power B. Lesser is its resolving power C. Lesser is its magnifying power D. greater is its magnifying power
13	In optics, which subfield studies the measurement of electromagnetic radiation including visible light.	A. Radiometry B. Photometry C. Telemetry D. Chronometry
14	The deflection image due to oblique centric rays failing on the lens is called.	A. Coma B. Spherical aberration C. Astigmatism D. Chromatic aberration

D. Curvature of image field

15	In compound microscope image formed by the eyepiece is	A. Real B. Inverted C. erect D. diminished
16	the depth of a pond is 4 m What is the apparent depth of the pond if the water level is 3.5 m high. The refractive index of water is 1.33	A. 1.9 m B. 2.3 m C. 3.13 m D. 4.5 m
17	An image formed on the film of camera is	A. Real , inverted and diminished B. Virtual, inverted and diminished C. Real upright and diminished D. Virtual, upright and idminshed
18	The relation between angle of incidence and angle of refraction is known as.	A. Snell's law B. Refractive index C. Index of refraction D. All of the above
19	Shadow formation and the pin hole camera illustrate the	A. Phenomenon of reflection B. Phenomenon of refraction C. Phenomenon of total internal reflection D. Rectilinear propagation of light
20	A person suffering from short sighted ness uses	A. Concave lens B. Convex mirror C. Convex lens D. Concave mirror