

Geometrical Optics

Sr	Questions	Answers Choice
1	Which types 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
2	Astronauts in space need to communicate with each other by radio links because:	A. <p>Sound waves travel very slowly in space</p> B. <p>Sound waves travel very fast in space</p> C. <p>Sound waves cannot travel in space</p> D. <p>Sound waves have low frequency in space</p>
3	Critical angle for diamond is:	A. 60° B. 24° C. 26° D. 49°
4	The distance of image from mirror is represented by:	A. q B. p C. F D. m
5	Snell' law is:	A. $n = \sin i / \sin r$ B. $n = \sin i / \sin r$ C. $n = \sin r / \sin i$ D. i / r
6	The loudness of a sound is most closely related to its:	A. <p>Frequency</p> B. <p>Period</p> C. <p>Wavelength</p> D. <p>Amplitude</p>
7	The focal length is related to radius of curvature by the formula:	A. $f = 2R$ B. $f = 4R$ C. $f = R/2$ D. $R = f/2$
8	Focal length for concave mirror is :	A. -ve B. +ve C. same D. none of these
9	Magnification of mirror is given by:	A. $m=p/q$ B. $m=q/p$ C. $m=pxq$ D. $m=1/p+q$
10	After refraction from a convex lens, rays of light parallel to the principal axis converge at a point, this point of convex lens is called:	A. Principal focus B. Pole C. Focal length D. Optical center
11	Which of the following quantities is not change during refraction of light?	A. Its direction B. Its speed C. its frequency D. Its wavelength
12	The refractive index of internal coating of optical fibre is:	A. 1.56 B. 1.51 C. 1.53 D. 1.58

13	The totally reflecting prism one angle is of:	A. 45 ^o B. 90 ^o C. 180 ^o D. 120 ^o
14	The distance between principal focus and pole of mirror is called:	A. Principal focus B. Focal length C. P D. Image
15	An object is 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	The distance of spherical mirror is called:	A. Curvature B. Aperture C. Sphere D. a,b
17	Totally reflecting prism is used in:	A. periscope B. binoculars C. periscope and binocular D. telescope
18	Image formed on a camera is:	A. real, inverted, and diminished B. virtual, upright and diminished C. virtual, upright and magnified D. real, inverted and magnified
19	Which form of energy is sound:	A. Electrical B. mechanical C. Thermal D. Chemical
20	An object is placed 6 cm away in front of a concave mirror that has 10 cm focal length. Determine the location of the image:	A. -5 cm B. -10 cm C. -15 cm D. -20 cm