

Geometrical Optics

Sr	Questions	Answers Choice
1	Totally reflecting prism turns the incident ray at an angle of:	<p>A. 90°</p> <p>B. 60°</p> <p>C. 75°</p> <p>D. 45°</p>
2	The mirror whose outer surface is reflecting is called:	<p>A. Concave mirror</p> <p>B. Convex mirror</p> <p>C. Lens</p> <p>D. Mirror</p>
3	Speed of light in air is ms^{-1}	<p>A. 3×10^8</p> <p>B. 3×10^{11}</p> <p>C. 3×10^5</p> <p>D. 340</p>
4	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:	<p>A. -5 cm</p> <p>B. -10 cm</p> <p>C. -15 cm</p> <p>D. -20 cm</p>
5	Snell's law is stated as:	<p>A. $\sin i / \sin r = n_1/n_2$</p> <p>B. $\sin i / \sin r = n_2/n_1$</p> <p>C. $\sin r / \sin i = n_2/n_1$</p> <p>D. $\sin r / \sin i = 2n_2/n_1$</p>
6	When light passes through a prism it deviates from its original path due to:	<p>A. Reflection</p> <p>B. Diffraction</p> <p>C. Interference</p> <p>D. Refraction</p>
7	From which of the following we can get information almost about everything:	<p>A. Book</p> <p>B. Teacher</p> <p>C. Computer</p> <p>D. Internet</p>
8	The minimum value of angle of deviation is called:	<p>A. Minimum angle</p> <p>B. incident angle</p> <p>C. angle of minimum deviation</p> <p>D. None of these</p>
9	When the object is placed beyond 2F of a convex lens, the image formed will be:	<p>A. Real, inverted and smaller than the object</p> <p>B. Real, inverted and of the same size as the object</p> <p>C. Real, inverted and larger in size than the object</p> <p>D. Virtual, erect and larger in size than the object</p>
10	To see from submarine the ship at the surface of water , we use:	<p>A. Telescope</p> <p>B. Microscope</p> <p>C. Peri scope</p> <p>D. Prism</p>
11	The ray of light striking to the side of prism is called:	<p>A. refraction ray</p> <p>B. incident ray</p> <p>C. reflected ray</p> <p>D. emergent ray</p>
12	A converging mirror with a radius of 20 cm creates a real image 30 cm from the mirror. What is the object distance?	<p>A. 5.0 cm</p> <p>B. 7.5 cm</p> <p>C. 15 cm</p> <p>D. 20 cm</p>
13	The point through which rays of light pass after reflection from concave mirror is called principal:	<p>A. Focus</p> <p>B. Circle</p> <p>C. Axis</p> <p>D. Radius</p>

14	Mathematical relationship between critical angle "C" and refractive index "n" is:	<p>A. $N = C$ B. $N = 1 / \sin c$ C. $N = 1 / \cos c$ D. $N = 1 / \sin^2 c$</p>
15	If focal length of a lens is 1m, then its power will be:	<p>A. 1 D B. 0.5 D C. 1.5 D D. 1 D</p>
16	The centre of spherical mirror is called:	<p>A. Focus B. Axis C. Centre D. Pole</p>
17	CD which is made of soft material is called:	<p>A. <p class="MsoNormal">Hard disk</p> B. <p class="MsoNormal">Floppy disk</p> C. <p class="MsoNormal">Iron disk</p> D. <p class="MsoNormal">Copper disk</p></p>
18	Which form of energy is sound:	<p>A. Electrical B. mechanical C. Thermal D. Chemical</p>
19	The focal length is related to radius of curvature by the formula:	<p>A. $f = 2R$ B. $f = 4R$ C. $f = R/2$ D. $R = f/2$</p>
20	The angle of which prism deviates the incident ray is called:	<p>A. angle of incident B. angle of reflection C. angle of deviation D. angle of minimum deviation</p>