

## PPSC Physics Topic 4 Geometrical Optics

Sr	Questions	Answers Choice
1	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
2	Telecommunication by Optical fibers is done by	A. Single mode step index fibre B. Multimode step index fibre C. Multimode graded index fibre D. All of the above
3	Sunlight can undergo total internal reflection if it enters from	A. Glass to air B. Air to glass C. Air to water D. Water to glass
4	Dispersive power of a prism depends upon the wavelength of the light used and is	A. More for large wavelengths B. Less for large wavelengths C. More for small wavelengths D. Less for small wavelengths
5	Linear magnification is equal to the ratio of.	A. Size of the object to the size of the image B. Size of the image to the size of the object C. size of the object focal length D. Size of the image focal length
6	When a ray of light travelling in a denser medium enters into a rarer medium.	A. It remains undeviated B. It is reflected back C. It bends towards the normal D. It bends away from the normal
7	Chromatic aberration can be removed by using.	A. Convex lens B. Two convex lenses C. Concave lens D. Combination of a convex lens and a concave lens
8	Reciprocal of the focal length is called.	A. Radius of curvature of the lens B. Power of the lens C. Aperture of the lens D. Resolving power
9	Why does a glass plate inside a colorless liquid become invisible	A. The colours of both are same B. The densities of both are same C. Their refractive indices are same D. Their refractive indices are different
10	The aberration in the image formed by a lens due to different wavelengths present in a source is called.	A. Spherical aberration B. Chromatic aberration C. Astigmatism D. Achromatic aberration
11	Which of the following phenomenon is caused by the different speeds of light in differed optical media.	A. Reflection B. Refraction C. Diffraction D. Total internal reflection
12	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. Gama rays
13	The characteristic of an image formed by a plane mirror is.	A. It is of the same size as the object B. It is laterally inverted C. It is upright D. All of the above
14	The near point of a person is 50 cm and his far point is 200 cm The power of the lenses which his spectacles should have to see clearly distant objects will be.	A. -0.5 D B. -10 d C. -1.5 D D. -2.0 D

15	An image formed on the film of camera is	<p>A. Real , inverted and diminished</p> <p>B. Virtual, inverted and diminished</p> <p>C. Real upright and diminished</p> <p>D. Virtual, upright and idminshed</p>
16	Short sightedness in the eye occurs due to the.	<p>A. Contraction of eyeball</p> <p>B. Increases in focal length of eye lens</p> <p>C. Reduction in focal length of eye lens</p> <p>D. Reduaction in distance between retina and eye lens</p>
17	The point midway between the lens surface on its participial axis	<p>A. Optical centre</p> <p>B. Principal focus</p> <p>C. Focal plane</p> <p>D. Focal length</p>
18	Which instrument measures the magnification of a telescope.	<p>A. lactometer</p> <p>B. dynamometer</p> <p>C. Wattmeter</p> <p>D. Ammeter</p>
19	To final image produced by a compound microscope is.	<p>A. Real and inverted</p> <p>B. Real and erect</p> <p>C. Virtual and erect</p> <p>D. Virtual and inverted</p>
20	The refractive index of benzenes is 1.5 What is the critical angle of benzene.	<p>A. <math>0.667^\circ</math></p> <p>B. <math>42^\circ</math></p> <p>C. <math>48^\circ</math></p> <p>D. <math>90^\circ</math></p>