PPSC Physics Chapter 4 Geometrical Optics

Sr	Questions	Answers Choice
1	The magnifying power of a convex lens of focal length 5 cm is	A. 3 B. 5 C. 6 D. 20
2	The image of an object 5 mm high is only 1 cm high. The magnification of the lens is	A. 0.2 B. 0.5 C. 1 D. 2
3	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
4	The power of convex lens of focal length 50 cm will be	A. 1,0 dioptre B. 2.0 dioptre C. 4.0 dioptre D. 5.0 dioptre
5	The diameter of a lens is called.	A. Focal length B. Principal axis C. Optical centre D. Aperture
6	A fixed point inside the lens through which a ray of light does not change its path is called.	A. Pole B. Focus C. Centre of curvature D. Opticla centre
7	a spectrometer is used to study	A. Spectrum B. Waveform C. Interference D. Diffraction
8	A lens whose thickness is small as compared to focal length is a	A. Concave lens B. Double concave lens C. Convex lens D. Plano concave lens
9	Lenses are commonly made of.	A. Glass only B. Plastic only C. Glass and clear plastic D. Aluminium
10	The refractive index of benzenes is 1.5 What is the critical angle of benzene.	A. 0.667 ^o B. 42 ^o C. 48^o D. 90^o
11	The phenomenon of total internal reflection occurs in	A. Optical fibre B. Rainbow C. Mirage D. All of these
12	The focal length of a thin converging lens is 10 cm What is the maximum distance from the lens that the object can be placed so the lens acts as a magnifying glass.	A. 5 cm B. 10 cm C. 15 cm D. 20 cm
13	The main advantage of step index fiber is.	A. The size of the cable B. The equality of the cbale C. Difference in the wavelengths of signals D. All of the above
14	A negative magnification always means the the image is.	A. Erect B. Real C. Virtual D. Inverted
		A. Greater than the angle of

15	Total internal reflection occurs when the angle of incidence is.	refraction B. Equal to the critical angle C. Greater than the critical angle D. Greater than 45^o
16	The index of refraction for a substance is	A. Constant B. Constant for a given wavelwngth C. Variable with the speed of light D. Never constant
17	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
18	A double convex lens acts as diverging lens when the object is.	A. Inside the focus B. At the focus C. Between F and 4 F D. a 4F
19	use of outer layer in optical fires called cladding is mainly to.	A. Scatter thelight B. Absorb unwanted light C. Transmit the light D. Produce total internal reflection
20	For a prism of particular and given wavelength the resolving power varies as	A. First power of lens of its base B. Square of inverse length of its base C. Increases of length of its base D. Cube of the length of its base