PPSC Physics Chapter 4 Geometrical Optics

Sr	Questions	Answers Choice
1	The relation between refractive index an critical angle is.	A. sin C =1/n B. sin n = 1/C C. sin c = 1 D. n = sin C
2	Refraction contributes to the formation of.	A. Rainbows only B. Mirages only C. Echo D. Rainbows and mirages
3	Rainbows and mirage are formed by	A. Reflection only B. Refraction only C. dispersion only D. A combination of refraction, total internal refraction and dispersion
4	A ray of light from air into glass The angle of incidence is 30o if the refractive index of glass in 1.52 The angle of refraction will be.	A. 16.7 ^o B. 19.3 ^o C. 29.6 ^o D. 39.3 ^o
5	Refractive index of a medium is define das.	A. speed of light in vaccum/speed of light in medium B. Speed of light in medium/Speed of light in vacuum C. Speed o flight in air/speed of light in medium D. Speed of light in medium/Speed of light in air
6	Fiber optics system can be used for.	A. Word processing B. Image processing and receiving C. Image transmitting D. All of the above
7	The dioptre power of concave lens of 10 cm focal length is.	A. 0.1 dioptre B. 1.0 diopter C. 10 dioptre D. -10 dioptre
8	Two convex lens focal length 'f' use din combination become telescope. When the distance between them is.	A. 1 B. 4f C. 2f D. f/2
9	The power of lens in dioptres is	A. Its focal length in meters B. The reciprocal of its focal length in metres C. The reciprocal of length in metres D. The reciprocal of length in centimetres
10	A bi convex lens of a material of refractive index 1.5 has the radius of curvature of each side equal to 50 cm the power of the lens will be.	A. 0.5 dipotre B. 1.0 dioptre C. 1.5 diopter D. 2.0dioptre
11	If D1 and D2 are the powers of two lenses placed in contact then the power of the combination will be.	A. D1+D2 B. D1-D2 C. D1/D2 D. D1 x D2
12	Parallel rays of light are focused by a thin convex lens.A thin concave lens of the name focal length is then joinjed to the convex lens The focal point will.	A. Shift to infinity B. shift towards the lens by a small distance C. shift away from he lens by a small distance D. Remain at its original position
13	The power of a convex lens is 5 D at what distance the object should be placed from the lens so that its real and 2 times larger image is formed.	A. 25 cm B. 30 cm C. 35 cm D. 40 cm
		A. 1 cm

14	A convex lens of focal length 6 cm to be used to from a virtual image three times the size of the object Where must the lens be placed.	B. 2 cm C. 3 cm D. 4 cm
15	A convex mirror is used to reflect light from an object placed 66 cm in front of the mirror. The focal length of the mirror is 46 cm Find the location of the image.	A. 23 cm B. -23 cm C. -27 cm D. 27 cm
16	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 that the lens acts as a magnifying glass.	A. 5 cm B. 10 cm C. 15 cm D. 20 cm
17	Reciprocal of the focal length is called.	A. Radios of curvature of the lens B. Power of the lens C. Aperture of the lens D. Resolving power
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	When a ray light is incident at anacute angle to the boundary of the media the refracted ray.	A. Bends away from the normal B. Bends towards the normal C. Remains undedicated D. Is totally reflected
20	When a ray of light is incident perpendicularly to the boundary of two media.	A. It pass through without bending B. It is speed is faster int he optically denser medium C. It derivates from its original path D. It is totally reflected back