PPSC Physics Topic 4 Geometrical Optics

Sr	Questions	Answers Choice
1	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
2	Lenses of what diameter are usually not practical.	A. Less than 1 m B. Larger than 1m C. Larger than 5 m D. Larger than 10 m
3	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
4	To final image produced by a compound microscope is.	A. Real and inverted B. Real and erect C. Virtual and erect D. Virtual and inverted
5	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
6	Which of the following is used for the failure of a lens to form a sharp and distinct image.	A. Distortion B. Astrigmation C. Chromatic aberration D. spherical aberration
7	A diverging lens may not have	A. Negative focal length B. Positive focal length C. One plane surface D. One convex surface
8	Keliner or achromat eye piece consist or	A. Two plano convex lenses with same focal length B. Two sets of doublets C. An achromatic doublet D. A spherical doublet
9	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
10	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
11	When of the following colours scatters minimum.	A. Blue B. Violet C. Yellow D. Red
12	In case of a convex lens when object is placed away from 2F, image is formed.	A. at F B. at 2F C. away from 2 F D. Between F and 2 F
13	In a magnifying glass, the objective is placed at a distance	A. Less than the focal B. Between the focal length and twice the focal length C. Greater than twice the focal length D. At the focus of the lens
14	Which type of image is produced by the converging lens of human eye if it views a distant object.	A. Real, erect, same size B. Real, inverted, diminished

		C. Virtual, erect, diminshed D. Virtual, inverted, magnified
15	To obtain is parallel beam from the headlight of a car it must be fitted with.	A. A convex mirror B. A concave mirror C. A convex lens D. A concave lens
16	The final image produced by a microscope is.	A. Real and erect B. Virtual and erect C. Real and inverted D. Virtual and inverted
17	Which of the following is used for reducing spherical aberrations in optical instruments.	A. Plano convex lens B. Concave lens C. Spherical mirrors D. Piane mirrors
18	Which type 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
19	The blooming of the image due to dispersion in lenses is called.	A. spherical aberration B. Chromatic aberration C. Astigmation D. Curvature of image field
20	The phenomenon of total internal reflection occurs in	A. Optical fibre B. Rainbow C. Mirage D. All of these