PPSC Physics Topic 4 Geometrical Optics

Sr	Questions	Answers Choice
1	Two lenses of focal length 'f' are combined the resultant focal length is	A. f B. 2f C. f/2 D. zero
2	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. Astigmation D. Achromatic aberration
3	The length of Galilean telescope is given by	A. fo + fe B. fo- fe C. 1/fo - 1/fe D. 1/fo = 1/fe
4	Total internal reflection occurs when the angle of incidence is.	A. Greater than the angle of refraction B. Equal to the critical angle C. Greater than the critical angle D. Greater than 45^o
5	In case of a convex lens, image formed at 2 F is	A. Virtual, erect and larger than the object B. Real, inverted and large than the object C. Real, inverted and same size as the object D. Real, inverted and smaller than the object
6	A double convex air bubble in water will behave as.	A. Plane slab B. Concave mirror C. Convex lens D. Concave lens
7	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
8	Monochromatic light passing through a thick prism is.	A. Polarize B. Disperesed C. Diffracted D. Deviated
9	The maximum number of rays required by a lens to form an image are	A. 2 B. 3 C. 4 D. Infinite
10	Why danger signals are made red.	A. Our eyes are more sensitive to real colour B. Red colour has minimum scattering C. Red colour has maximum scattering D. Red colour has maximum frequency
11	Which phenomenon is responsible formation of shadows.	A. Interference of light B. Diffraction of light C. Polarization of light D. Propagation of light
12	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.	A. 1 cm B. 2 cm C. 3 cm D. 4 cm
13	Which of the following quantities is not changed during refraction of light.	A. Its direction B. Its speed C. Its frequency D. Its wavelength
		A. speed of light in vaccum/speed of light in medium

14	Refractive index of a medium is define das.	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
15	A part of electromagnetic spectrum that can be detected by the human aye	A. Angle of incidence B. Angle of refraction C. Light D. Angle of reflection
16	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
17	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
18	The normal adjustment the magnifying power of an astronomical telescope is.	A. fe/fo B. fo/fe C. fo+ fe D. fo -fe
19	To get large magnifying power of an astronomical telescope. we should have focal length of eye lens.	A. Small B. Large C. Of any value D. Infinity
20	Which of the following colours of light passes through glass with minimum speed.	A. Green B. Yellow C. Red D. Violet