PPSC Physics Topic 4 Geometrical Optics

Sr	Questions	Answers Choice
1	An object is placed at the focus of a diverging lens The image is located at	A. The focus B. 2 F C. Infinity D. Half away between the lens and the focus
2	A pencil dipped partially into water appears bent because of.	A. Reflection of water surface B. Diffraction of water surface C. Refraction of water surface D. Water is a fluid
3	The primary purpose of using a large aperture objective in a telescope is to produce	A. Brighter image B. Larger image C. Wider field of view D. Smaller image
4	Any transparent medium bounded by one or two spherical surfaces is called	A. Prism B. Lens C. Plane mirror D. Grating
5	The normal adjustment the magnifying power of an astronomical telescope is.	A. fe/fo B. fo/fe C. fo+ fe D. fo -fe
6	A leser beam may be used to measure very large distance because it is.	A. Unidirectional B. Cohernet C. Monochromatic D. Not absorbed
7	Michelson used the equation to determine the speed of light.	A. c = 4 fd B. c = 8fd C. c =12 fd D. c = 18 fd
8	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
9	A double convex air bubble in water will behave as.	A. Plane slab B. Concave mirror C. Convex lens D. Concave lens
10	The deflection image due to oblique centric rays failing on the lens is called.	A. Coma B. Spherical aberration C. Astigmatism D. Curvature of image field
11	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
12	In water drops rainbows are formed by	A. Reflection B. Refraction C. Dispersion D. All of these
13	On which of the following the object size as perceived by eye depends upon.	A. Actual size of the object B. Aperture of the pupil C. Object distance from the eye D. Size of the image formed on the retina
14	the depth of a pond is 4 m What is the apparent depth of the pond if the water level is 3.5 m high. The refractive index of water is 1.33	A. 1.9 m B. 2.3 m C. 3.13 m D. 4.5 m
15	The variation of focal length of a lens when we pass from the central portion to periphery is called.	A. Coma B. Astigmatism C. Spherical aberration

		D. Chromatic aberration
16	What is true is real images formed by a converging lens.	A. they are inverted B. They are on the same side of the lens as the object C. They can never be shown on a screen D. They cannot be seen
17	An image formed on the film of camera is	A. Real , inverted and diminshed B. Virtual, inverted and diminshed C. Real upright and diminished D. Virtual, upright and idminshed
18	The point midway between the lens surface on its participial axis	A. Optical centre B. Principal focus C. Focal plane D. Focal length
19	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
20	A young man wearing glasses does not require bifocals because he	A. Is farsighted B. Has the ability to accommodate C. Is short signed D. Does not suffer from coma