

## PPSC Physics Topic 4 Geometrical Optics

Sr	Questions	Answers Choice
1	Since light rays are always diverged by concave lenses such lenses	A. Cannot form images B. Form only black and white images C. Form only inverted image D. Form only erect images
2	The dioptric power of concave lens of 10 cm focal length is.	A. 0.1 dioptr <sup>e</sup> B. 1.0 dioptr <sup>e</sup> C. 10 dioptr <sup>e</sup> D. -10 dioptr <sup>e</sup>
3	Which mirror be used for obtaining a parallel beam of light from a small lamp.	A. Plane mirror B. Convex mirror C. Concave mirror D. All of these
4	When a ray of light traveling in a rare medium enters into a denser medium	A. It remains undeviated B. It is reflected back C. It bends towards the normal D. It bends away from the normal
5	A concave mirror is used to form an image of the sun on a white screen IF the lower half of the mirror were covered with an opaque card the effect on the image on the screen would be.	A. Negligible B. To make the image less bright than before C. To make the upper half of the image disappear D. To make the lower half of the image disappear.
6	Which of the following quantities is not changed during refraction of light.	A. Its direction B. Its speed C. Its frequency D. Its wavelength
7	a spectrometer is used to study	A. Spectrum B. Waveform C. Interference D. Diffraction
8	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
9	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
10	If a single convex lens is placed closed to the eye then it can be used as	A. Telescope B. Simple microscope C. Compound microscope D. Opera glass
11	Light entering glass will not suffer change in	A. Frequency B. wavelength C. Speed D. Direction
12	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
13	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
14	Maximum detail of an object can be seen by a microscope when the object is illuminated by light of.	A. Longer wavelength B. Shorter wavelength C. X-rays

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15 Which term is used for human eye defect near sightedness.

A. Myopia  
B. Hypermetropia  
C. Presbyopia  
D. Cataract

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16 linear magnification is the ratio between the

A. Distances of object and image from mirror  
B. Distances of object and image from the focal point  
C. Distance of image and object from the mirror  
D. Distance of image from object and the distance of object from mirror

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17 A convex lens of focal length 6 cm to be used to form 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

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18 The image of distant object as seen through an astronomical telescope is.

A. Real and inverted  
B. Virtual and inverted  
C. Real and erect  
D. Virtual and erect

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19 What is zoom lens

A. It is a lens having fixed focal length  
B. It is a lens having variable focal length  
C. It is a lens used in radii to telescope  
D. All of the above

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20 When an obliquely falling ray of light enters from one medium to another it changes its path this phenomenon is called.

A. Reflection  
B. Refraction  
C. Diffusion  
D. Diffraction