Physics ECAT Pre Engineering Chapter 9 Physical Optics

Sr	Questions	Answers Choice
1	Laws of reflection and refraction can also be explained by:	A. Particle nature of light B. Quantum nature of light C. Wave nature of light D. Complex nature of light
2	How is the image formed by a convex lens affected if the upper half of the lens is covered with a paper:	A. The upper half of the image is cut off B. The brightness of the image is reduced C. The brightness of the image is increased D. No effect at all
3	Angle between the ray of light and the corresponding wavefront is:	A. 0<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° B. 60<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° C. 90<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">° D. 120<span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°
4	If the object is situated at focus of a convex lens, then its image is formed at:	A. F B. 2F C. Infinity D. None of these
5	The least distance of distinct vision is:	A. 10 cm B. 25 cm C. 50 cm D. 100 cm
6	The ratio of the diameter of two convex lenses is _____-the ratio of their focal lengths:	A. Greater than B. Less than C. Equal to D. None of these
7	In case of point, source of light shape of wavefront is:	A. Spherical B. Cylindrical C. Plane D. None of these
8	A magnifier gives an image which is:	A. Virtual, inverted B. Real, erect C. Virtual, erect D. Real, inverted

9	Speed of light in vacuum depends upon:	A. Frequency B. Wavelength C. Amplitude D. None of these
10	The superposition of the two waves of same frequency and amplitude travelling in the same direction gives to an effect called	A. Diffraction B. Interference C. Polarization D. Dispersion
11	The size of the image is maximum when its distance from the magnifying glass is:	A. 0.10 m B. 0.15 m C. 0.20 m D. 0.25 m
12	When the object lies between F and 2F, the image formed by is formed at:	A. Real B. Virtual C. Diminished D. Erect
13	When the object lies between F and 2F, the image formed by is formed at:	A. Virtual B. Diminished C. Erect D. Real
14	If yellow light emitted by sodium lamp in Young's double slit experiment is replaced by blue light of the same intensity	A. Fringe width will decrease B. Fringe width will increase C. Fringe width will remain unchanged D. Fringe will become less intense
15	In the formula R = N x m for diffraction grating, N denotes:	A. No. of lines/cm B. No. of lines/meter C. Total number of lines D. None of above
16	The focal length of convex lens having magnifying power of 5.55 is:	A. 5.5 cm B. 5 cm C. 4.5 cm D. 6 cm
17	The appearance of the colour in the soap (oil) film results from:	A. Dispersion B. Interference C. Reflection D. Refraction
18	The image of the tip of a needle is never sharp because of	A. Polarization of light B. Interference of light C. Diffraction of light D. Reflection of light
19	The distance from eye to near point is taken as:	A. 10 cm B. 15 cm C. 20 cm D. 25 cm
20	When the same object is viewed at a shorter distance, the image on the retina of the eye is _____ the so the object appears:	A. Greater, smaller B. Smaller, smaller C. Smaller, larger D. Greater, larger