

Physics ECAT Pre Engineering Chapter 9 Physical Optics

Sr	Questions	Answers Choice
1	The ratio of the size of the image to that of object is called:	A. Focal length B. Aperture C. Linear magnification D. Principal axis
2	In YDS experiment, fringe spacing means the distance between two consecutive ____ fringes.	A. Bright B. Dark C. Any of A and B D. None of these
3	The appearance of the colour in the soap (oil) film results from:	A. Dispersion B. Interference C. Reflection D. Refraction
4	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
5	Which one of the following can act approximately as a source of monochromatic light;	A. Neon lamp B. Fluorescent tube C. Sodium lamp D. None of these
6	A convex lens acts as diverging lens when the object is placed:	A. Between F and 2F B. At 2F C. With focal length D. Beyond 2F
7	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
8	Speed of light in vacuum depends upon:	A. Frequency B. Wavelength C. Amplitude D. None of these
9	Light has:	A. Wave nature B. Particle nature C. Dual nature D. None of these
10	A magnifier gives an image which is:	A. Virtual, inverted B. Real, erect C. Virtual, erect D. Real, inverted
11	Stars twinkle due to	A. The fact that they do not emit light continuously B. The refractive index of earth's atmosphere fluctuates C. The Star's atmosphere absorbs its light intermittently D. None of these
12	Electromagnetic waves transport:	A. Energy only B. Momentum only C. Both A and B are correct D. None of is correct
13	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
14	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

15	A virtual image is formed when object is placed:	A. Within focal length of a convex lens B. Near the focal point of a concave lens C. Both A and B D. Away from 2F of a convex lens
16	Which one the following gives three regions of electromagnetic spectrum in order of increasing wavelength?	A. Gamma rays, micro waves, visible light B. Radio waves, ultraviolet waves, X-rays C. Ultraviolet rays, infrared rays, micro waves D. Visible light, gamma rays, radio waves
17	When the object lies between F and 2F, the image formed by is formed at:	A. Real B. Virtual C. Diminished D. Erect
18	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
19	In an interference pattern of Young's double slit(YDS) experiment:	A. Bright fringes are wider than dark fringes B. Dark fringes are wider than bright fringes C. Both dark and bright fringes are of equal width D. Central fringes are wider than the outer fringes
20	If the object is placed at 12 cm distance from a convex lens of focal length 6 cm, then we get an image of ____ as that of object:	A. Double the size B. Same size C. Half the size D. None of these