

ECAT Pre General Science Physics Chapter 10 Optical Instruments

Sr	Questions	Answers Choice
1	Frequency of red colour as compared to that of violet colour is	A. Equal B. Smaller C. Greater D. None of these
2	Huygen's principle states that	A. Light travels in straight line B. Light has dual nature C. Either of these D. None of these
3	Speed of light in vacuum depends upon	A. Frequency B. Wavelength C. Amplitude D. None of these
4	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
5	In case of destructive interference of two waves, the amplitude of the resultant wave will be _____ either of the waves.	A. Greater than B. Smaller than C. Equal to D. None of these
6	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
7	The wave nature of light was proposed by	A. Newton B. Thomas Young C. Huygen D. None of these
8	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
9	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
10	The terms phase difference and path difference are	A. Same B. Different C. Equal D. none of these
11	Which one of the followings can act approximately as a source of monochromatic light	A. Neon lamp B. Fluorescent tube C. Sodium lamp D. None of these
12	Huygen principle is used to determine	A. Speed of light B. Location of wavefront C. About polarized and unpolarized light D. None of them
13	A line which represents the direction of travel of a wave is known as	A. Spherical wavefront B. Locus C. Ray D. Either B or C
14	To observe interference of light, the condition, which must be met with is that the sources must be	A. Monochromatic B. Phase coherent C. Both of above D. None of above
		A. Bright fringes are wider than dark fringes B. Dark fringes are wider than bright fringes

15	In an interference pattern of Young's Double Slit (YDS) experiment	fringes C. Both dark and bright fringes are of equal width D. Central fringes are wider than the outer fringes
16	The locus of all the points in the same phase of vibration is called	A. Wave pocket B. Wavefront C. Wave number D. None of these
17	The speed of the secondary wavelets as mentioned in Huygen's principle is _____ the speed of propagation of the wave itself	A. Equal to B. Greater than C. Smaller than D. None of these
18	Wavelength of light, on the average, is given by	A. 10^{-14} m B. 10^{-10} m C. 10^{-6} m D. 10^{-4} m
19	In YDS experiment, fringe spacing means the distance between two consecutive _____ fringes	A. Bright B. Dark C. Any of A or B D. None of these
20	Light has	A. Wave nature B. Dual nature C. Particle nature D. None of them