

ECAT Physics Chapter 10 Optical Instruments

Sr	Questions	Answers Choice
1	Speed of light in vacuum depends upon	A. Frequency B. Wavelength C. Amplitude D. None of these
2	The property of light which does not change with the nature of the medium is	A. Frequency B. Amplitude C. Wavelength D. None of these
3	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
4	Huygen principle is used to determine	A. Speed of light B. Location of wavefront C. About polarized and unpolarized light D. None of them
5	When the source of light is at very large distance, the shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of these
6	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
7	Light has	A. Wave nature B. Dual nature C. Particle nature D. None of them
8	Angle between ray of light and the corresponding wavefront is	A. 0° B. 60° C. 90° D. 120°
9	Two sources are said to be coherent if they have	A. Same amplitude B. Same wavelength C. Definite phase relation with each other D. None of them
10	Monochromatic light means wave of	A. Same frequency B. Same colour C. Same Wavelength D. All of them
11	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
12	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
13	Electromagnetic waves transport	A. Energy only B. Momentum only C. Both A and B D. None is correct
14	Light waves are	A. Transverse waves B. Longitudinal waves C. Compressional

		D. None of them wave
15	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
16	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
17	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
18	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
19	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
20	In case of constructive interference of two waves, the amplitude of the resultant wave is _____ either of the waves	A. Greater than B. Equal to C. Smaller than D. None of these