

ECAT Pre General Science 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	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
3	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
4	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
5	Electromagnetic waves transport	A. Energy only B. Momentum only C. Both A and B D. None is correct
6	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
7	The wave nature of light was proposed by	A. Newton B. Thomas Young C. Huygen D. None of these
8	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
9	Monochromatic light means wave of	A. Same frequency B. Same colour C. Same Wavelength D. All of them
10	Huygen's principle states that	A. Light travels in straight line B. Light has dual nature C. Either of these D. None of these
11	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
12	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
13	Wavelength of red colour as compared to that of violet colour is	A. Smaller B. Longer C. Equal D. None of these
14	Huygen principle is used to determine	A. Speed of light B. Location of wavefront C. About polarized and unpolarized light D. None of them

15	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
16	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
17	Frequency of red colour as compared to that of violet colour is	A. Equal B. Smaller C. Greater D. None of these
18	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
19	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
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