

ECAT Physics Chapter 10 Optical Instruments

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	Speed of light in vacuum depends upon	A. Frequency B. Wavelength C. Amplitude D. None of these
3	The terms phase difference and path difference are	A. Same B. Different C. Equal D. none of these
4	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
5	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
6	Frequency of red colour as compared to that of violet colour is	A. Equal B. Smaller C. Greater D. None of these
7	Light waves are	A. Transverse waves B. Longitudinal waves C. Compressional D. None of them wave
8	Huygen principle is used to determine	A. Speed of light B. Location of wavefront C. About polarized and unpolarized light D. None of them
9	Angle between ray of light and the corresponding wavefront is	A. 0° B. 60° C. 90° D. 120°
10	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
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	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
13	The wave nature of light was proposed by	A. Newton B. Thomas Young C. Huygen D. None of these
14	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
15	Electromagnetic waves transport	A. Energy only B. Momentum only C. Both A and B D. None of these

		D. None is correct
16	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
17	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
18	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
19	Wavelength of red colour as compared to that of violet colour is	A. Smaller B. Longer C. Equal D. None of these
20	Huygen's principle states that	A. Light travels in straight line B. Light has dual nature C. Either of these D. None of these