

## ECAT Physics Chapter 10 Optical Instruments

Sr	Questions	Answers Choice
1	The wave nature of light was proposed by	A. Newton B. Thomas Young C. Huygen D. None of these
2	Angle between ray of light and the corresponding wavefront is	A. $0^{\circ}$ B. $60^{\circ}$ C. $90^{\circ}$ D. $120^{\circ}$
3	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
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	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
6	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
7	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
8	Monochromatic light means wave of	A. Same frequency B. Same colour C. Same Wavelength D. All of them
9	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
10	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
11	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
12	Huygen's principle states that	A. Light travels in straight line B. Light has dual nature C. Either of these D. None of these
13	Light waves are	A. Transverse waves B. Longitudinal waves C. Compressional D. None of them wave
14	Speed of light in vacuum depends upon	A. Frequency B. Wavelength C. Amplitude D. None of these

15	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
16	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
17	Electromagnetic waves transport	A. Energy only B. Momentum only C. Both A and B D. None is correct
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	Light has	A. Wave nature B. Dual nature C. Particle nature D. None of them