

## Physics ECAT Pre Engineering Chapter 10 Optical Instruments

Sr	Questions	Answers Choice
1	Monochromatic light means wave of	A. Same frequency B. Same colour C. Same Wavelength D. All of them
2	Frequency of red colour as compared to that of violet colour is	A. Equal B. Smaller C. Greater D. None of these
3	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
4	Wavelength of red colour as compared to that of violet colour is	A. Smaller B. Longer C. Equal D. None of these
5	Huygen principle is used to determine	A. Speed of light B. Location of wavefront C. About polarized and unpolarized light D. None of them
6	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
7	Light waves are	A. Transverse waves B. Longitudinal waves C. Compressional D. None of them wave
8	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
9	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
10	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
11	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
12	Electromagnetic waves transport	A. Energy only B. Momentum only C. Both A and B D. None is correct
13	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
14	Huygen's principle states that	A. Light travels in straight line B. Light has dual nature C. Either of these D. None of these

15	The wave nature of light was proposed by	A. Newton B. Thomas Young C. Huygen 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	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
18	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
19	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
20	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