

Physics ECAT Pre Engineering Chapter 10 Optical Instruments

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

		D. None of them
16	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
17	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
18	Speed of light in vacuum depends upon	A. Frequency B. Wavelength C. Amplitude D. None of these
19	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
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