Physics ECAT Pre Engineering 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	Light has	A. Wave nature B. Dual nature C. Particle nature D. None of them
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	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
5	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
6	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
7	Wavelength of red colour as compared to that of violet colour is	A. Smaller B. Longer C. Equal D. None of these
8	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
9	Huygen principle is used to determine	A. Speed of light B. Location of wavefront C. About polarized and unpolarized light D. None of them
10	The terms phase difference and path difference are	A. Same B. Different C. Equal D. none of these
11	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
12	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
13	Angle between ray of light and the corresponding wavefront is	A. 0⁰ B. 60⁰ C. 90⁰ D. 120⁰
14	Wavelength of light, on the average, is given by	A. 10⁻¹⁴m B. 10⁻¹⁰m C. 10⁻⁶m D. 10⁻⁴m
15	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
16	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
17	Speed of light in vacuum depends upon	A. Frequency B. Wavelength C. Amplitude 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	Light waves are	A. Transverse waves B. Longitudinal waves C. Compressional D. None of them wave
20	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