Physics ECAT Pre Engineering Chapter 10 Optical Instruments

Sr	Questions	Answers Choice
1	Wavelength of red colour as compared to that of violet colour is	A. Smaller B. Longer C. Equal D. None of these
2	The terms phase difference and path difference are	A. Same B. Different C. Equal D. none of these
3	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
4	Speed of light in vacuum depends upon	A. Frequency B. Wavelength C. Amplitude D. None of these
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	Frequency of red colour as compared to that of violet colour is	A. Equal B. Smaller C. Greater D. None of these
7	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
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	Light has	A. Wave nature B. Dual nature C. Particle nature D. None of them
10	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
11	Huygen principle is used to determine	A. Speed of light B. Location of wavefront C. About polarized and unpolarized light D. None of them
12	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
13	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
14	Monochromatic light means wave of	A. Same frequency B. Same colour C. Same Wavelength D. All of them

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	Angle between ray of light and the corresponding wavefront is	A. 0⁰ B. 60⁰ C. 90⁰ D. 120⁰
17	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
18	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
19	The wave nature of light was proposed by	A. Newton B. Thomas Young C. Huygen D. None of these
20	Wavelength of light, on the average, is given by	A. 10⁻¹⁴m B. 10⁻¹⁰m C. 10⁻⁶m D. 10⁻⁴m