ECAT Pre General Science Physics Chapter 10 Optical Instruments

Sr	Questions	Answers Choice
1	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
2	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
3	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
4	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
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	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
7	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
8	Monochromatic light means wave of	A. Same frequency B. Same colour C. Same Wavelength D. All of them
9	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
10	Angle between ray of light and the corresponding wavefront is	A. 0⁰ B. 60⁰ C. 90⁰ D. 120⁰
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	Wavelength of red colour as compared to that of violet colour is	A. Smaller B. Longer C. Equal D. None of these
13	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
14	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

15	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
16	The terms phase difference and path difference are	A. Same B. Different C. Equal D. none of these
17	Wavelength of light, on the average, is given by	A. 10⁻¹⁴m B. 10⁻¹⁰m C. 10⁻⁶m D. 10⁻⁴m
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	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
20	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