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	Monochromatic light means wave of	A. Same frequency B. Same colour C. Same Wavelength D. All of them
3	Frequency of red colour as compared to that of violet colour is	A. Equal B. Smaller C. Greater D. None of these
4	The terms phase difference and path difference are	A. Same B. Different C. Equal D. none of these
5	Light waves are	A. Transverse waves B. Longitudinal waves C. Compressional D. None of them wave
6	Huygen's principle states that	A. Light travels in straight line B. Light has dual nature C. Either of these D. None of these
7	Angle between ray of light and the corresponding wavefront is	A. 0⁰ B. 60⁰ C. 90⁰ D. 120⁰
8	Huygen principle is used to determine	A. Speed of light B. Location of wavefront C. About polarized and unpolarized light D. None of them
9	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
10	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
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	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
13	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
14	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection

		D. Refraction
15	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
16	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
17	The wave nature of light was proposed by	A. Newton B. Thomas Young C. Huygen D. None of these
18	Speed of light in vacuum depends upon	A. Frequency B. Wavelength C. Amplitude D. None of these
19	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
20	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