ECAT Pre General Science Physics 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	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
3	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
4	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
5	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
6	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
7	Wavelength of red colour as compared to that of violet colour is	A. Smaller B. Longer C. Equal D. None of these
8	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
9	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
10	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
11	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
12	Light has	A. Wave nature B. Dual nature C. Particle nature D. None of them
13	Angle between ray of light and the corresponding wavefront is	A. 0⁰ B. 60⁰ C. 90⁰ D. 120⁰
14	Huygen's principle states that	A. Light travels in straight line B. Light has dual nature C. Either of these D. None of these
15	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

16	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
17	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
18	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
19	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
20	Electromagnetic waves transport	A. Energy only B. Momentum only C. Both A and B D. None is correct