ECAT Pre General Science Physics Chapter 10 Optical Instruments

Sr	Questions	Answers Choice
1	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
2	Electromagnetic waves transport	A. Energy only B. Momentum only C. Both A and B D. None is correct
3	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
4	The wave nature of light was proposed by	A. Newton B. Thomas Young C. Huygen D. None of these
5	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
6	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
7	Frequency of red colour as compared to that of violet colour is	A. Equal B. Smaller C. Greater D. None of these
8	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
9	Speed of light in vacuum depends upon	A. Frequency B. Wavelength C. Amplitude D. None of these
10	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
11	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
12	Huygen's principle states that	A. Light travels in straight line B. Light has dual nature C. Either of these D. None of these
13	Light has	A. Wave nature B. Dual nature C. Particle nature D. None of them
14	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
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 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
17	Angle between ray of light and the corresponding wavefront is	A. 0⁰ B. 60⁰ C. 90⁰ D. 120⁰
18	Wavelength of red colour as compared to that of violet colour is	A. Smaller B. Longer C. Equal D. None of these
19	The terms phase difference and path difference are	A. Same B. Different C. Equal D. none of these
20	Light waves are	A. Transverse waves B. Longitudinal waves C. Compressional D. None of them wave