

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	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
3	Frequency of red colour as compared to that of violet colour is	A. Equal B. Smaller C. Greater D. None of these
4	Wavelength of red colour as compared to that of violet colour is	A. Smaller B. Longer C. Equal D. None of these
5	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
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 C. Equal to D. None of these
7	In case of point source of light, shape of wavefront is	A. Spherical B. Cylindrical C. Plane D. None of above
8	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
9	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
10	Light waves are	A. Transverse waves B. Longitudinal waves C. Compressional D. None of them wave
11	Huygen's principle states that	A. Light travels in straight line B. Light has dual nature C. Either of these D. None of these
12	Monochromatic light means wave of	A. Same frequency B. Same colour C. Same Wavelength D. All of them
13	Light waves are	A. Mechanical waves B. Electromagnetic waves C. Any of above D. None of above
14	The appearance of colours in the soap (or oil) film results from	A. Dispersion B. Interference C. Reflection D. Refraction
15	The wave nature of light was proposed by	A. Newton B. Thomas Young C. Huygen D. None of these

16 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

17 Speed of light in vacuum depends upon

A. Frequency
B. Wavelength
C. Amplitude
D. None of these

18 Electromagnetic waves transport

A. Energy only
B. Momentum only
C. Both A and B
D. None is correct

19 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

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
