

Physics ICS Part 1 Chapter 9 Online Test

Sr	Questions	Answers Choice
1	Huygen's proposed, light energy travels in space from source in	A. 1578 B. 1678 C. 1778 D. 1868
2	Which of the following is evidence of wave nature of light	A. Interference B. Diffraction C. Polarization D. All of these
3	Young in 1801 performed experiment for the first time about	A. Interference B. Diffraction C. Polarization D. Particle nature of light
4	Light waves emitted from a source spread in	A. Specific direction B. All direction C. Upward direction D. None of these
5	In case of point source the shape of wave front is	A. Circular B. Spherical C. Elliptical D. Square
6	A ray of light is a line	A. Parallel to wave front B. Normal to wave front C. Anti-parallel to wave D. Any one of these
7	The distance between two consecutive wave front is equal to	A. One wave length B. Two wave length C. Half wave length D. Three wave length
8	Oil film floating on water exhibits colours due to	A. Interference B. Diffraction C. Polarization D. All of these
9	Bright fringes are also called as	A. Minima B. Maxima C. Wave front D. Ray of light
10	Dark fringes are also called as	A. Minima B. Maxima C. Wave front D. Ray of light
11	The centre of Newton's rings will be	A. Dark B. Bright C. Coloured D. Not visible
12	Standard metal according to Michelson's interferometer is equivalent to	A. 1553163.5 wave meter B. 3 x 10 ⁸ meter C. 15503000 meter D. None of these
13	In young's double slit experiment for the interference the central region will be	A. Dark B. Bright C. Coloured D. None of these
14	The property of bending of light around obstacles is	A. Interference B. Diffraction C. Polarization D. Superposition
15	The Bragg's equation is given by	
16	Interplaner distance can be determined by	A. Newton's rings B. Bragg's law

16	Interplanar distance can be determined by	C. Diffraction pattern D. Interferometer
17	According to Huygen's principle the points on primary wave front can be considered as	A. Secondary wavelets B. Ray of light C. Source of light D. None of these
18	Soap film is sunlight appears coloured due to.	A. Dispersion of light B. Diffraction of light C. Scattering of light D. Interference to light
19	The light energy travels in space as waves was firstly proposed by	A. Maxwell B. Young C. Einsten D. Hydrogen
20	Angle between ray of light and wave front is	A. 0° B. 60° C. 90° D. 120°
21	In case of point source the shape of wave front is.	A. Plane B. spherical C. Circular D. Elliptical
22	the locus of all pint in the same wave of vibration is called.	A. Wave front B. Diffraction C. Interference D. Polarization
23	A ray of light shows the direction of propagation of light It is line which is.	A. Normal to the wave front B. Parallax to the wave front C. Opposite to the wave front D. Equal to the wave front
24	Hygen's principle is used for.	A. Explain polarization B. Locate the wave front C. Find the speed of light D. Find the index of refraction
25	According to Hygen's principle, each point on a wave front acts as a source of.	A. Secondary wavelet B. New wave front C. Sound D. Primary wavelet
26	The fringe spacing increases if we use.	A. Yellow light B. Green lgiht C. Blue light D. Red light
27	An oil film on water surface shows colour due to.	A. Diffraction B. Interference C. Polarization D. Dispersion
28	The blue colour of sky is due to	A. diffraction B. Reflection C. Polarization D. Scattering
29	Sodium chloride in a flame gives	A. Green light B. White light C. Red light D. Yellow light
30	Light entering rom air glass does not change in its.	A. Frequency B. Wavelength C. Velocity D. Direction
31	Fringe spacing is inversely proportional to.	A. Wave length B. Slit separation C. Distance between the slit and screen D. Frequency of light
32	Fringe spacing in Young's double slit experiment increases due to increase in.	A. Slit separation B. Wave length C. Order of Fringe D. Frequency of source
33	The fringe spacing in a double slit experiment can be increased by decreasing.	A. Wavelength of light B. Width of slits C. Slit separation D. Distance between the slits and the screen

34	In blue light is used as compare to red light then fringe spacing.	A. Increase B. Decreases C. Remain same D. Becomes zero
35	In red light is used as compare to blue light then fringe spacing.	A. Decreases B. Remain same C. Increases D. Becomes zero
36	Example of thin film is.	A. Soap burble B. convex lens C. Concave lens D. Glass plate
37	The centre of Newton's fringe is dark due to.	A. Destructive interference B. Diffraction C. Constructive interference D. Polarization
38	Newton's rings are formed due to phenomenon of.	A. Interference B. Dispersion C. Diffraction D. Polarization
39	When newton ring are seen through the transmitted light, then central spot is.	A. Dark B. Blue C. Bright D. Red
40	When one mirror of a Michelson interferometer is moved a distance of 0.5 mm, 2000 fringes and observed, The wavelength of light used is.	A. 5000 m B. 50000 A ^o C. 500 cm D. 2000 A ^o
41	Michelson's interferometer can be used ot find the	A. Velocity of light B. Wavelength of light C. Velocity of sound D. Wavelength of sound
42	Bending of light around the edges of an obstacle is called.	A. Refraction B. Polarization C. Interference D. Diffraction
43	A typical diffraction grating has certain number of lines per centimeter whose range is.	A. 40 to 50 B. 400 to 5000 C. 400 to 500 D. 4000 to 5000
44	If 'N' is number of lines rule don the grating having length 'L' then grating element 'd' is given by.	A. N/L B. 2N/L C. L/N D. N/2L
45	The wavelength of X-rays is of the order of.	A. 10 ⁻⁸ m B. 10 ⁻¹⁰ m C. 10 ⁻⁵ m D. 10 ⁻⁴ m
46	X-ray diffraction has been very useful in determining the structure of	A. Hemoglobin B. Stars C. Galaxies D. Stones
47	Sound waves can not be	A. Reflected B. Refracted C. Polarized D. Diffracted
48	The process of confining the beam of light to vibrate in one plane is called.	A. Interference B. Diffraction C. Polarization D. Total internal refraction
49	Which phenomenon of light proves that light waves are transverse in nature.	A. Refraction B. Reflection C. Diffraction D. Polarization
50	The phenomenon of polarization of light reveals that sun light is	A. Longitudinal waves B. Transverse wave C. Electromagnetic waves D. Monochromatic wave
51	The distinguish between transverse and longitudinal wave_____ is used.	A. Refraction B. Interference C. Diffraction

D. polarization

52 Which one of the following can not be polarized.

- A. Ultra violet rays
- B. Radio waves
- C. T.V. Waves
- D. Sound waves

53 Intensity of light depend on

- A. Wave length
- B. Amplitude
- C. Velocity
- D. Frequency

54 Which is nooptically active

- A. Sugar
- B. Tartaric acid
- C. Water
- D. Sodium chloride