

## ECAT Physics Chapter 9 Physical Optics Online Test

| Questions  | Answers Choice  |
|--|---|
| The wave nature of light was proposed by:  | A. Newton B. Thomas Young C. Huygen D. None of these  |
| 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   |
| 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  |
| When a source of light isat very large distance, the shape of wavefront is:  | A. Spherical B. Cylindrical C. Plane D. None of these   |
| Speed of light in vacuum depends upon:   | A. Frequency B. Wavelength C. Amplitude D. None of these  |
| In case of point, source of light shape of wavefront is:   | A. Spherical B. Cylindrical C. Plane D. None of these   |
| Huygen principle is used to determine:   | A. Speed of light     B. Location of wavefront     C. About polarized or unpolarized light     D. None of them  |
| Angle between the ray of light and the corresponding wavefront is:   | A. 0 <span style="font-size: 10.5pt; line-height: 107%; font-family: Arial, sans-serif; background-image: initial; background-position: initial; background-epeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;">°</span> B. 60 |

|    |  | C. Wave number<br>D. None of them   |
|----|--|---|
| 10 | Monochromatic light means waves of:  | A. Same frequency B. Same colour C. Same wavelength D. All of them  |
| 11 | Frequency of red color as compared to that of violet color is:                       | A. Equal B. Smaller C. Greater D. None of these   |
| 12 | Wave length of that color as compared to that of violet color is:                    | A. Smaller B. Longer C. Equal D. None of these  |
| 13 | Which one of the following can act approximately as a source of monochromatic light; | A. Neon lamp B. Fluorescent tube C. Sodium lamp D. None of these  |
| 14 | Electromagnetic waves transport:   | A. Energy only B. Momentum only C. Both A and B are correct D. None of is correct   |
| 15 | Wave length of light, on the average, is given by:                                   | A. 10 <sup>-14</sup> <sub>m</sub> B. 10 <sup>-10</sup> <sub>m</sub> C. 10 <sup>-6</sup> <sub>m</sub> D. 10 <sup>-4</sup> <sub>m</sub> |