

Physics ICS Part 1 Chapter 8 Online Test

| Sr | Questions | Answers Choice |
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| 1 | The process of confining the beam of light to vibrate in one plane is called. | <p>A. <p>Interference</p></p> <p>B. <p>Diffraction&ampnbsp</p></p> <p>C. <p>Polarization</p></p> <p>D. <p>Total internal reflection&ampnbsp</p></p> |
| 2 | The key purpose of an analyzer in a polarization experiment is. | <p>A. <p>To polarize the light</p></p> <p>B. <p>To measure the intensity of light</p></p> <p>C. <p>To change the direction of light</p></p> <p>D. <p>To filter out unwanted light</p></p> |
| 3 | To distinguish between transverse and longitudinal waves.....is used. | <p>A. <p>Polarization&ampnbsp</p></p> <p>B. <p>Refraction&ampnbsp</p></p> <p>C. <p>Interference</p></p> <p>D. <p>Diffraction&ampnbsp</p></p> |
| 4 | Which is the primary method used to detect gravitational waves. | <p>A. <p>Optical telescopes</p></p> <p>B. <p>Radio telescopes</p></p> <p>C. <p>LASER interferometry</p></p> <p>D. <p>Gravitational lensing</p></p> |
| 5 | Light can be polarized by | <p>A. <p>Selective absorption</p></p> <p>B. <p>Reflection&ampnbsp</p></p> <p>C. <p>Scattering</p></p> <p>D. <p>All of these</p></p> |
| 6 | Longitudinal waves do not exhibit. | <p>A. <p>Polarization&ampnbsp</p></p> <p>B. <p>Reflection&ampnbsp</p></p> <p>C. <p>Diffraction&ampnbsp</p></p> <p>D. <p>Refraction</p></p> |
| 7 | Optically active crystals are | <p>A. <p>Quartz</p></p> <p>B. <p>Sodium Chlorate</p></p> <p>C. <p>Sodium Chloride</p></p> <p>D. <p>Both a and b</p></p> |
| 8 | Bending of light around the edges of an obstacle is called. | <p>A. <p>Refraction&ampnbsp</p></p> <p>B. <p>Polarization&ampnbsp</p></p> <p>C. <p>Diffraction&ampnbsp</p></p> <p>D. <p>Interference</p></p> |
| 9 | The unwanted light that interferes with vision is termed as. | <p>A. <p>Haze</p></p> <p>B. <p>glare</p></p> <p>C. <p>contrast</p></p> <p>D. <p>Flare</p></p> |
| 10 | What are gravitational waves. | <p>A. <p>Electromagnetic waves</p></p> <p>B. <p>Mechanical waves</p></p> <p>C. <p>Ocean waves</p></p> <p>D. <p>Ripple in the fabric of spacetime</p></p> |
| 11 | A polaroid is. | <p>A. <p>A device used in polarimeter</p></p> <p>B. <p>A light filter</p></p> <p>C. <p>A device used to analyze polarized light</p></p> <p>D. <p>All of these</p></p> |
| 12 | Malus's law states that | <p>A. <p>The intensity of light is directly proportional to the square of the cosine of the angle between the light wave and the analyzer</p></p> <p>B. <p>The intensity of light is directly proportional to the square of the sine of the angle between the light wave and the analyzer</p></p> <p>C. <p>The intensity of light is directly proportional to the angle between the light wave and the analyzer</p></p> <p>D. <p>The intensity of light is inversely proportional to the angle between the light wave and the analyzer</p></p> |

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| 13 | Which of the following is a primary source of gravitational waves. | A. <p>Binary black hole merger</p> B. <p>Solar flares</p> C. <p>Earthquake</p> D. <p>Solar wind</p> |
| 14 | The condition of maximum intensity of light in a polarization experiment is when. | A. <p>The light wave and analyzer are perpendicular</p> B. <p>The light wave and analyzer are parallel</p> C. <p>The light wave and analyzer are at an angle of 45°</p> D. <p>The light wave and analyzer are at an angle of 60°</p> |
| 15 | We can polarize the light by passing it through. | A. <p>Water</p> B. <p>Polaroid</p> C. <p>Glass</p> D. <p>Prism</p> |
| 16 | The effect of increasing the angle between the light wave and the analyzer on the intensity of light is. | A. <p>The intensity increases</p> B. <p>The intensity decreases</p> C. <p>The intensity remains the same</p> D. <p>The intensity becomes zero</p> |
| 17 | Who predicted the existence of gravitational waves. | A. <p>Galileo Galilei</p> B. <p>Albert Einstein</p> C. <p>Isaac Newton</p> D. <p>Leonardo da Vinci</p> |
| 18 | The phenomenon of polarization of light is | A. <p>The process of scattering of light</p> B. <p>The property of light to vibrate in a specific plane</p> C. <p>The ability of light to travel in a straight line</p> D. <p>The phenomenon of light changing colour</p> |
| 19 | Which of the following rays cannot be polarized. | A. <p>Sound Waves</p> B. <p>Light Waves</p> C. <p>X- Rays</p> D. <p>Infrared rays</p> |
| 20 | The intensity of light when it passes through a polarizer. | A. <p>Decreases</p> B. <p>Increases</p> C. <p>Remain same</p> D. <p>Become Zero</p> |
