

## PPSC Physics Topic 5 Waves and Wave Properties of Light

| Sr | Questions  | Answers Choice  |
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| 1  | Sound of frequencies lower than 20 Hz are called.  | A. Supersonics<br>B. <b>Infra sonics</b><br>C. Ultrasonic<br>D. Audible sound waves   |
| 2  | Light produced by a single Nicol is  | A. Unpolarized<br>B. Plane polarized<br>C. <b>Circulatory polarized</b><br>D. Elliptically polarized  |
| 3  | When a transverse wave is reflected on going from a more dense to a less dense medium.                                 | A. <b>There is no phase shift</b><br>B. There is a 180° phase shift<br>C. There is a phase shift of 360°<br>D. A crest is transformed to a trough   |
| 4  | The quality of sound   | A. Decreases with pitch<br>B. Varies directly as its pitch<br>C. Varies inversely as its pitch<br>D. <b>Depends upon the overtones present there</b>  |
| 5  | Newton's rings are experimentally derived from the phenomenon of.  | A. Polarization of light<br>B. Resolution of light<br>C. <b>Interference of light</b><br>D. Diffraction of light  |
| 6  | The spectrum of radiation due to transitions between energy levels in an atom, other absorption or emission is called. | A. <b>Atomic spectrum</b><br>B. Molecular spectrum<br>C. Grating spectrum<br>D. Normal spectrum   |
| 7  | A sonometer or audiometer is a device based on the principle of.   | A. <b>Resonance</b><br>B. Beats<br>C. Overtones<br>D. Harmonics   |
| 8  | The variation in the speed of sound with temperature is greater in.  | A. <b>Gases</b><br>B. Metals<br>C. Liquids<br>D. Insulators   |
| 9  | A body travels with a speed greater than the speed of sound. What would be the wave front shape.                       | A. Elliptical<br>B. Spherical<br>C. <b>Conical</b><br>D. Parabolical  |
| 10 | We can hear beats when the difference in the frequencies of two sounding bodies is not more than.                      | A. 2<br>B. 4<br>C. <b>6</b><br>D. 10  |
| 11 | Which of the following characteristics of a wave is independent of the others.   | A. speed<br>B. Frequency<br>C. <b>Amplitude</b><br>D. Wavelength  |
| 12 | Hearing damage is possible at sound pressure of  | A. 0 dB<br>B. 50 dB<br>C. <b>130 dB</b><br>D. 195 dB  |
| 13 | One of the devices to produce plane polarized light is.  | A. A prism<br>B. A bi prism<br>C. A plane mirror<br>D. <b>A Nicol prism</b>   |
| 14 | Which is the correct statement regarding the nature of light.  | A. It has wave nature<br>B. It has particle nature<br>C. <b>It has both wave and particle nature at the same time</b><br>D. It has wave nature sometime and particle nature at some other time. |

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| 15 | A monochromatic light beam when passed through a prism is.                                       | A. Diffracted<br>B. Deviated<br>C. Polarized<br>D. Dispersed  |
| 16 | In vacuum all electromagnetic waves have the same.   | A. Frequency<br>B. Amplitude<br>C. Speed<br>D. Wavelength   |
| 17 | Newton's rings are formed due to   | A. Diffraction of light<br>B. Interference of light<br>C. Polarization of light<br>D. Reflection of light |
| 18 | Newton proposed his corpuscular theory on the basis on   | A. Newton's rings<br>B. Polarization<br>C. Dispersion of white light<br>D. Rectilinear property of light  |
| 19 | The ratio of intensities of two sound waves is 4 : 9 what will be the ratio of their amplitudes. | A. 9:4<br>B. 2:3<br>C. 3:2<br>D. 4:9  |
| 20 | The locus of all points in a medium having the same phase of vibration is called.                | A. Crest<br>B. trough<br>C. Wavelength<br>D. Wave front   |