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National Institute of Open Schooling
Senior Secondary
Lesson 22 – Wave Phenomena and Light
WORKSHEET – 22

Q1. How do the interference fringes in Young's double-slit experiment changes with the change in the position of the source lamp from the centerline between the slits?

Q2. Describe the effect on interference fringes in Young's double-slit experiment when the monochromatic light source is replaced by a multichromatic light source.

Q3. How the interference patterns would be affected when one slit is coated with the paint?

Q4. What are the necessary conditions which need to be fulfilled to obtain an interference pattern from the propagation of two light waves?

Q5. Describe the physical process behind the white and blue color of the clouds and sky, respectively.

Q6. Draw a suitable diagram showing that refracted ray, and reflected ray are at 90 degrees at Brewster angle.

Q7. What would be the sky color in the absence of an atmosphere?

Q8. Briefly explain the types of wave fronts.

Q9. Calculate the reflection index when the polarization angle of any medium is 45 degrees.

Q10. What is the value of slit width when the light of wavelength 6000 Angstroms passes through a single slit, and the angular deflection to the 8th dark band on the side of central maxima?