

Worksheet: Wave Optics

IB · Class 12 · Physics · 5 questions · 12 marks

Name: _____

Date: _____

Score: _____ / 12

Q1. In YDSE, $\lambda = 600 \text{ nm}$, $d = 0.2 \text{ mm}$, $D = 1.5 \text{ m}$. Find the fringe width. *[2 marks]*

Q2. Find Brewster's angle for glass ($\mu = 1.5$). *[2 marks]*

Q3. A single slit of width 0.1 mm with $\lambda = 500 \text{ nm}$ and screen at 1 m . Find the central maximum width. *[3 marks]*

Q4. Two polarisers are at 60° . If I_0 falls on the first, find the transmitted intensity. *[3 marks]*

Q5. What happens to YDSE fringe width if the apparatus is immersed in water ($\mu = 4/3$)? *[2 marks]*
