

SPH4U UNIT 4 - THE WAVE NATURE OF LIGHT

PART A: MULTIPLE CHOICE (15 marks)

PART B: TRUE/FALSE (10 marks)

PART C: APPLICATION (30 marks)

- analyse a 2-point interference pattern (6)
- 2-point interference problem (7)
- air wedge problem (5)
- electromagnetic wave speed problem (5)
- single slit interference problem (7)

PART D: EXPLAIN (20 marks)

- Young's double-slit experiment (5)
- thin film interference (5)
- interference patterns (similarities/differences) (3)
- microwaves (2)
- polarization (5)