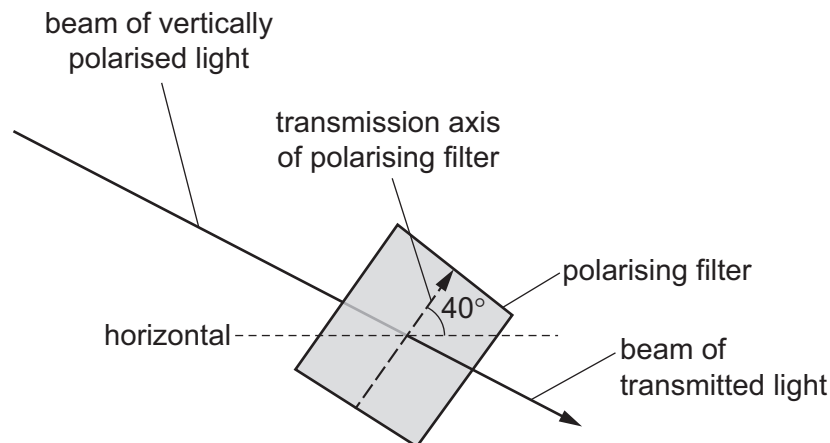
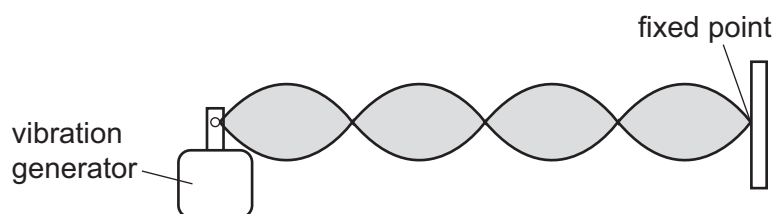


- 24** A vertically polarised beam of light is incident normally on a polarising filter. The transmission axis of the filter is at an angle of 40° to the horizontal.



What is the ratio $\frac{\text{amplitude of transmitted beam}}{\text{amplitude of incident beam}}$?

- A** 0.41 **B** 0.59 **C** 0.64 **D** 0.77
- 25** Two progressive waves meet at a point.
- Which condition must be met for superposition of the waves to occur?
- A** The waves must be coherent.
B The waves must be of the same type.
C The waves must be travelling in opposite directions.
D The waves must meet in phase.
- 26** A string is stretched between a vibration generator and a fixed point.



The frequency of vibration of the vibration generator is slowly increased.

What is the next frequency that produces a stationary wave on the string?

- A** $1.25f$ **B** $1.50f$ **C** $1.75f$ **D** $2.00f$