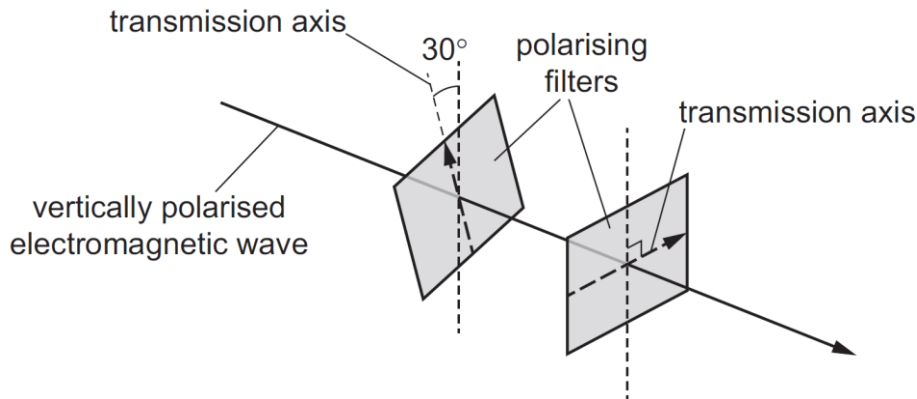


- 15** A vertically polarised electromagnetic wave of intensity  $I_0$  is incident normally on a polarizing filter. The transmission axis of the filter is at an angle of  $30^\circ$  to the vertical.

The transmitted wave from the first filter is then incident normally on a second polarising filter. The transmission axis of this filter is at an angle of  $90^\circ$  to the vertical.



What is the intensity of the wave after passing through the second filter?

- A** 0                      **B**  $0.063 I_0$                       **C**  $0.19 I_0$                       **D**  $0.56 I_0$

- 16** Waves P and Q have the same amplitude. The waves meet in phase at point X and interfere to