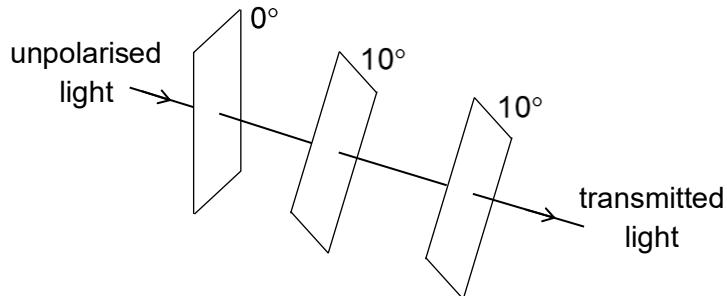


- 18** A narrow, parallel beam of unpolarised light of Intensity  $I_o$  is directed towards three ideal polarising filters.

The beam meets the first filter with its axis of polarisation vertical. The axis of polarisation of the second filter is at an angle of  $10^\circ$  to the first filter. The third filter has its axis of polarisation parallel to the second filter as shown.



The third filter is now turned and at  $34^\circ$  to the second filter. What is the intensity of the transmitted light?

- A**  $0.25I_o$       **B**  $0.33I_o$       **C**  $0.5I_o$       **D**  $I_o$