

17 Vertically polarised light is incident on a polarising filter.

The plane of polarisation of the filter is at angle  $\phi$  to the vertical.

When  $\phi = 0^\circ$ , the filter transmits vertically polarised light with amplitude  $A_0$ .

When  $\phi = 15^\circ$ , what is the amplitude of the light transmitted by the filter?

- A  $0.07 A_0$
- B  $0.26 A_0$
- C  $0.93 A_0$
- D  $0.97 A_0$

