

1

(a)

Three sheets of polaroids P, Q and R are placed close to one another. Polaroids P and R have their polarising axes fixed and perpendicular to each other.

The incoming beam of intensity I_0 is polarised parallel to the polarising axis of P before reaching P.

Polaroid Q is rotated about the axis of the light beam, as shown in Fig. 1.1. The plane of Polaroid Q remains parallel to that of P and R.

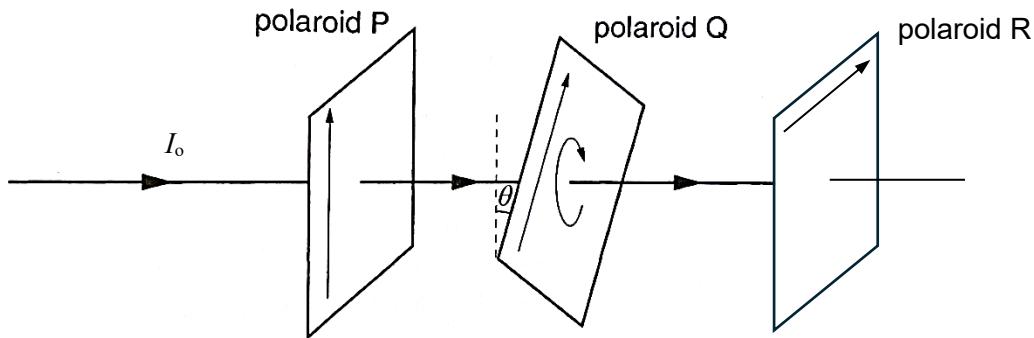


Fig. 1.1

Complete Fig. 1.2 to show the variation of the angle of rotation with intensity of the light transmitted after passing Polaroid R.

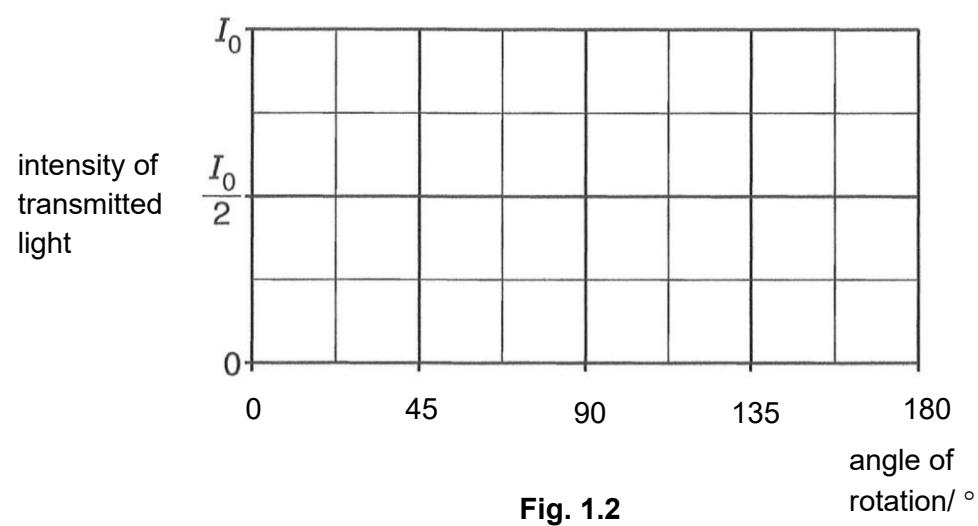


Fig. 1.2