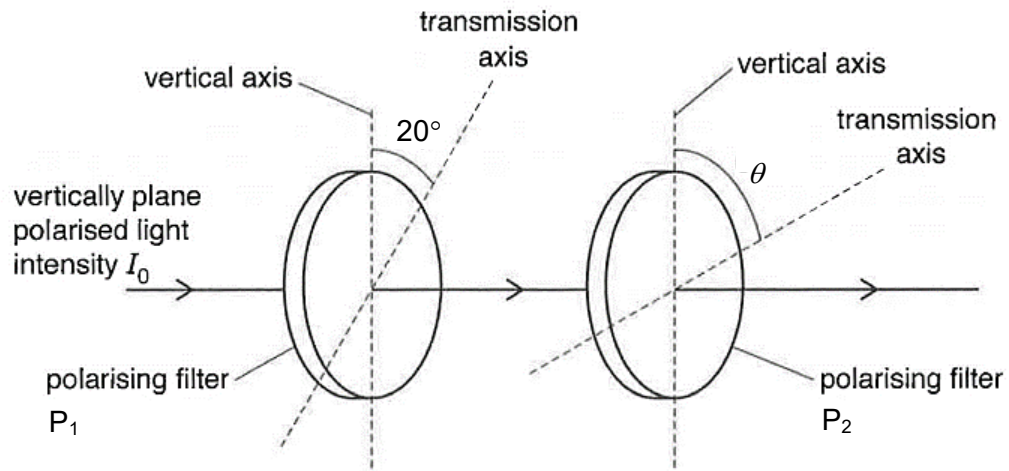


- 13 A beam of vertically polarised light of intensity  $I_0$  is transmitted through two polarising filters  $P_1$  and  $P_2$  as shown. The axes of polarisation of  $P_1$  and  $P_2$  are at  $20^\circ$  and  $\theta$  relative to the direction of polarisation of the incident light. The intensity of the light after passing through  $P_2$  is  $0.25 I_0$ .



What is the value of  $\theta$ ?

- A  $38^\circ$                       B  $58^\circ$                       C  $78^\circ$                       D  $95^\circ$

