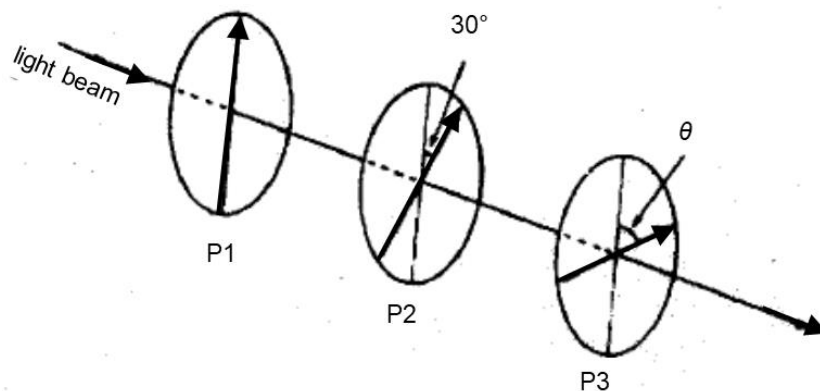


- 14 A beam of unpolarised light passes through three polaroids  $P_1$ ,  $P_2$  and  $P_3$ . The polarising axis of each polaroid is shown by an arrow. Polaroids  $P_1$  and  $P_2$  are fixed, with their polarising axes at  $30^\circ$  to each other and  $P_3$  can be set with its polarising axis at a variable angle  $\theta$  to that of  $P_1$ .



For what values of  $\theta$  do the emergent light have the lowest intensity?

- A  $30^\circ, 120^\circ$
- B  $60^\circ, 240^\circ$
- C  $90^\circ, 270^\circ$
- D  $120^\circ, 300^\circ$