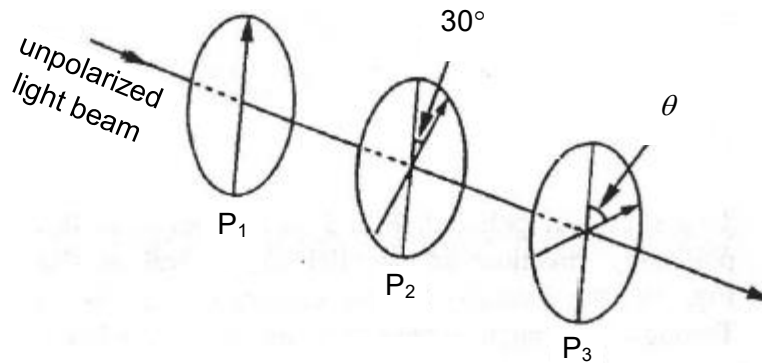


- 14 The figure below shows a beam of initially unpolarised light passing through 3 polarisers P_1 , P_2 and P_3 . The polarising axis of each polaroid is shown by an arrow. Polaroids P_1 and P_2 are fixed, with their polarising axes at 30° to each other, and P_3 can be set with its polarising axis at a variable angle θ to that of P_1 .



The polarised light beam incident on P_2 has an intensity of 30 W m^{-2} while the light beam emerging from P_3 has an intensity of 14 W m^{-2} .

What is a possible value of θ for the light emerging from P_3 ?

- A** 38° **B** 52° **C** 57° **D** 68°