2AND) $CPI_{Ideal} = 1$

Penalty for branch misprediction = 2 cycles.

Penalty for load hazard = 1 cycle

$$CPI_1 = CPI_{Ideal} + (\text{Stall penalty}) \times (\text{penalty cycles})$$

$$= 1 + (0.5 \times 0.4 \times 1) + (0.2 \times 0.4 \times 2)$$

$$= 1 + 0.2 + 0.16$$

$$\therefore \boxed{CPI_1 = 1.36}$$

$$CPI_2 = CPI_{Ideal} + \text{ratio}(\text{load-use hazard}) + \text{ratio}(\text{loads}) \times 1]$$
$$+ [(1 - \text{Accuracy}) \times \text{ratio of branches} \times \text{ratio}(\text{taken branches}) \times 2]$$
$$+ [(1 - \text{Accuracy}) \times \text{ratio of branches} \times \text{ratio}(\text{not taken branches}) \times 2]$$

$$= 1 + [((0.5)(0.4)1) + ((0.5)(0.2)(0.4)(2)) + ((0.3)(0.2)(0.6)(2))$$

$$= 1 + 0.2 + 0.08 + 0.0072$$

$$\boxed{CPI_2 = 1.352}$$

From the above results

$$CPI_1 > CPI_2$$

$$\Rightarrow \boxed{P_2 > P_1}$$