$$P(1,1) = P(1,1|-)P(-) + P(1,1|+)P(+)$$

$$= P(A=1|-)P(B=1|-)P(-)$$

$$+ P(A=1|+)P(B=1|+)P(+)$$

$$= \frac{1}{2} \cdot 1 \cdot \frac{2}{5} + \frac{2}{3} \cdot \frac{2}{3} \cdot \frac{3}{5}$$

$$= \frac{1}{5} + \frac{4}{15} = \frac{7}{15}$$

$$P(-|A=1,B=1) = \frac{P(1,1|-)P(-)}{P(1,1)}$$

$$= \frac{\frac{1}{2} \cdot 1 \cdot \frac{2}{5}}{\frac{7}{15}} = \frac{1}{5} \cdot \frac{15}{7}$$

$$= \frac{3}{7}$$

$$P(+|A=1,B=1) = \frac{P(1,1|+)P(+)}{P(1,1)}$$

$$= \frac{\frac{2}{3} \cdot \frac{2}{3} \cdot \frac{3}{5}}{\frac{7}{15}}$$

$$\frac{1}{15}$$

$$= \frac{4}{15} \cdot \frac{15}{7} = \frac{4}{7}$$

$\therefore P(+|1,1) > P(-|1,1) \quad \therefore T = +$