(a) : Let x be the number shows on dice – 1 and y be the number shows on dice – 2.

Favorable outcomes = $\{(x, y) = (1, 3), (3, 1), (2, 2), (2, 3), (3, 2), (1, 4), (4, 1)\}$

$\therefore$ Required probability

$$= \frac{2}{6} \times \frac{2}{6} + \frac{1}{6} \times \frac{1}{6} + \frac{2}{6} \times \frac{2}{6} + \frac{2}{6} \times \frac{2}{6} + \frac{1}{6} \times \frac{2}{6} + \frac{2}{6} \times \frac{1}{6} + \frac{1}{6} \times \frac{1}{6}$$

$$= \frac{18}{36} = \frac{1}{2}$$