India plays two matches each with West Indies and Australia. In any match the probabilities of India getting points 0, 1, 2 are 0.45, 0.05, 0.50 respectively. Assuming that the outcomes are independent, the probability of India getting at least 7 points is

A   0.8750

B   0.0875

C   0.0625

D   0.0250

Correct option is B)

Since there are just four matches to be played India can get a maximum of 8 points.

$\therefore$ P (India gets at least 7 points) = P (getting exactly 7 points) + P (getting exactly 8 points)

= P (getting 2 in each of the 3 matches and 1 in one match) + P (getting 2 in each of the four matches)

$=^4 C_3(0.5)^3 (0.05) +^4 C_4(0.5)^4 = 0.025 + 0.0625 = 0.0875$