

**29.** You are given:

(i) Each risk has at most one claim each year.

(ii)

Type of Risk	Prior Probability	Annual Claim Probability
I	0.7	0.1
II	0.2	0.2
III	0.1	0.4

One randomly chosen risk has three claims during Years 1-6.

Determine the posterior probability of a claim for this risk in Year 7.

(A) 0.22

(B) 0.28

(C) 0.33

(D) 0.40

(E) 0.46