233. You are pricing a special 3-year temporary life annuity-due on two lives each age x, with independent future lifetimes, each following the same mortality table. The annuity pays 10,000 if both persons are alive and 2000 if exactly one person is alive.

You are given:

(i) $q_{xx} = 0.04$

(ii) $q_{x+1:x+1} = 0.01$

(iii) $i = 0.05$

Calculate the expected present value of this annuity.

(A) 27,800

(B) 27,900

(C) 28,000

(D) 28,100

(E) 28,200