

85. For a special fully continuous whole life insurance on (65):

(i) The death benefit at time t is $b_t = 1000e^{0.04t}$, $t \geq 0$.

(ii) Level benefit premiums are payable for life.

(iii) $\mu_{65+t} = 0.02$, $t \geq 0$

(iv) $\delta = 0.04$

Calculate the benefit reserve at the end of year 2.

(A) 0

(B) 29

(C) 37

(D) 61

(E) 83