

111. For a special fully discrete 3-year term insurance on (x) :

(i) The death benefit payable at the end of year $k+1$ is

$$b_{k+1} = \begin{cases} 0 & \text{for } k = 0 \\ 1,000(11-k) & \text{for } k = 1, 2 \end{cases}$$

(ii)

k	q_{x+k}
0	0.200
1	0.100
2	0.097

(iii) $i = 0.06$

Calculate the level annual benefit premium for this insurance.

(A) 518

(B) 549

(C) 638

(D) 732

(E) 799