

Question #204

Answer: C

Let T be the future lifetime of Pat, and $[T]$ denote the greatest integer in T . ($[T]$ is the same as K , the curtate future lifetime).

$$L = 100,000v^T - 1600\ddot{a}_{\overline{[T]+1}|} \quad 0 < T \leq 10$$

$$= 100,000v^T - 1600\ddot{a}_{\overline{10}|} \quad 10 < t \leq 20$$

$$- 1600\ddot{a}_{\overline{10}|} \quad 20 < t$$

Minimum is $-1600\ddot{a}_{\overline{10}|}$ when evaluated at $i = 0.05$

$$= -12,973$$