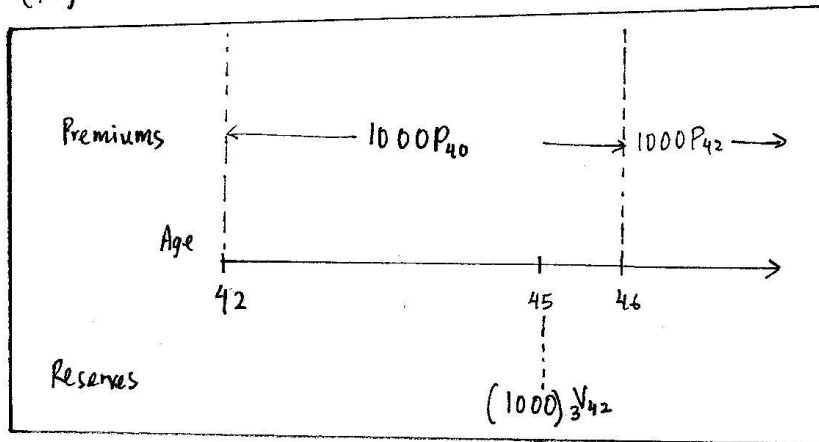


MLC Question 27

FD WL of 1000 on (42)



$${}_tV = E({}_tL) = E({}_tL | T > t)$$

$${}_3V_{42} = E[{}_3L | K(42) \geq 3] = PVFB_t - PVFP_t$$

$$P_{40} = \frac{A_{40}}{\ddot{a}_{40}} = \frac{0.16132}{14.8166} = 0.0108878$$

$$P_{42} = \frac{A_{42}}{\ddot{a}_{42}} = \frac{0.17636}{14.5510} = 0.0121201$$

$$E[{}_3L | K(42) \geq 3] = 1000A_{45} - 1000P_{40} - 1000P_{42} \underbrace{(\ddot{a}_{45} - 1)}_{a_{45}}$$

$$= 201.20 - 10.89 - 13.1121(12.12)$$

$$= 31.39 \approx 31 \quad \text{(B)}$$