

**99.** On January 1, 2002, Pat, age 40, purchases a 5-payment, 10-year term insurance of 100,000:

- (i) Death benefits are payable at the moment of death.
- (ii) Gross premiums of 4000 are payable annually at the beginning of each year for 5 years.
- (iii)  $i = 0.05$
- (iv)  $L$  is the loss random variable at time of issue.

Calculate the value of  $L$  if Pat dies on June 30, 2004.

- (A) 77,100
- (B) 80,700
- (C) 82,700
- (D) 85,900
- (E) 88,000