

**14.** For a fully continuous whole life insurance of 1 on  $(x)$ , you are given:

- (i) The forces of mortality and interest are constant.
- (ii)  ${}^2\bar{A}_x = 0.20$
- (iii)  $\bar{P}(\bar{A}_x) = 0.03$
- (iv)  ${}_0L$  is the loss-at-issue random variable based on the benefit premium.

Calculate  $\text{Var}({}_0L)$ .

- (A) 0.20
- (B) 0.21
- (C) 0.22
- (D) 0.23
- (E) 0.24