

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

- (i) Benefits are payable at the moment of death.
- (ii) Level premiums are payable at the beginning of each year.
- (iii) Deaths are uniformly distributed over each year of age.
- (iv)  $i = 0.10$
- (v)  $\ddot{a}_x = 8$
- (vi)  $\ddot{a}_{x+10} = 6$

Calculate the benefit reserve at the end of year 10 for this insurance.

- (A) 0.18
- (B) 0.25
- (C) 0.26
- (D) 0.27
- (E) 0.30