

190. For a fully discrete 15-payment whole life insurance of 100,000 on (x) , you are given:

- (i) The level gross annual premium using the equivalence principle is 4669.95.
- (ii) $100,000A_x = 51,481.97$
- (iii) $\ddot{a}_{x:\overline{15}|} = 11.35$
- (iv) $d = 0.02913$
- (v) Expenses are incurred at the beginning of the year.
- (vi) Percent of premium expenses are 10% in the first year and 2% thereafter.
- (vii) Per policy expenses are K in the first year and 5 in each year thereafter until death.

Calculate K .

- (A) 10.0
- (B) 16.5
- (C) 23.0
- (D) 29.5
- (E) 36.5