

170. For a fully discrete whole life insurance of 1000 on (50), you are given:

- (i) The annual per policy expense is 1.
- (ii) There is an additional first year expense of 15.
- (iii) The claim settlement expense of 50 is payable when the claim is paid.
- (iv) All expenses, except the claim settlement expense, are paid at the beginning of the year.
- (v) $l_x = 20(100 - x), 0 \leq x \leq 100.$
- (vi) $i = 0.05$

Calculate the level gross premium using the equivalence principle.

- (A) 27
- (B) 28
- (C) 29
- (D) 30
- (E) 31