

235. For a fully discrete whole life insurance of 1000 on (40), you are given:

- (i) Death and withdrawal are the only decrements.
- (ii) Mortality follows the Illustrative Life Table.
- (iii) $i = 0.06$
- (iv) The probabilities of withdrawal are:

$$q_{40+k}^{(w)} = \begin{cases} 0.2, & k = 0 \\ 0, & k > 0 \end{cases}$$

- (v) Withdrawals occur at the end of the year.
- (vi) The following expenses are payable at the beginning of the year:

	Percent of Premium	Per 1000 Insurance
All Years	10%	1.50

- (vii) The cash value at the end of year 1 is 2.93.
- (viii) The asset share at the end of year 2 is 24.

Calculate the gross premium, G .

- (A) 15.4
- (B) 15.8
- (C) 16.3
- (D) 16.7
- (E) 17.2