

**102.** For a fully discrete 20-payment whole life insurance of 1000 on  $(x)$ , you are given:

(i)  $i = 0.06$

(ii)  $q_{x+19} = 0.01254$

(iii) The level annual benefit premium is 13.72.

(iv) The benefit reserve at the end of year 19 is 342.03.

Calculate  $1000 P_{x+20}$ , the level annual benefit premium for a fully discrete whole life insurance of 1000 on  $(x+20)$ .

(A) 27

(B) 29

(C) 31

(D) 33

(E) 35