

**288.** For a special 3-year term life insurance on (50), you are given:

- (i) The death benefit of 10,000 is paid at the end of the year of death.
- (ii) The annual effective rate of interest is 4%.
- (iii) The benefit premium in year 1 is  $10,000A_{50:\overline{1}|}^1$ .
- (iv) The benefit premiums in years 2 and 3 are equal.
- (v) The mortality table has the following values:

$x$	$q_x$
50	0.05
51	0.06
52	0.07
53	0.08

Calculate the reserve at the end of year 2.

- (A) 0
- (B) 48.56
- (C) 50.51
- (D) 52.52
- (E) 53.16