

**289.** For a 3-year term insurance on (60), you are given:

- (i) The death benefit is 1,000,000.
- (ii) The death benefit is payable at the end of the year of death.
- (iii)  $q_{60+t} = 0.014 + 0.001t$
- (iv) Cash flows are accumulated at annual effective rate of interest of 0.06.
- (v) The annual gross premium is 14,500.
- (vi) Expenses prior to issue are 1000 and are paid at time 0.
- (vii) Expenses after issue are 100 payable immediately after the receipt of each gross premium.
- (viii) The reserve is 700 at the end of the first and second years.
- (ix) Profits are discounted at annual effective rate of interest of 0.10.

Calculate the expected present value at issue of profits of the policy.

- (A) -155
- (B) -174
- (C) -177
- (D) -187
- (E) -216