

67. For a continuous whole life annuity of 1 on (x) :

(i) T_x is the future lifetime random variable for (x) .

(ii) The force of interest and force of mortality are constant and equal.

(iii) $\bar{a}_x = 12.50$

Calculate the standard deviation of $\bar{a}_{\overline{T_x}|}$.

(A) 1.67

(B) 2.50

(C) 2.89

(D) 6.25

(E) 7.22