

21. For (x) :

(i) K is the curtate future lifetime random variable.

(ii) $q_{x+k} = 0.1(k+1)$, $k = 0, 1, 2, \dots, 9$

(iii) $X = \min(K, 3)$

Calculate $\text{Var}(X)$.

(A) 1.1

(B) 1.2

(C) 1.3

(D) 1.4

(E) 1.5