100. A special whole life insurance on (x) pays 10 times salary if the cause of death is an accident and 500,000 for all other causes of death.

You are given:

(i) $\mu_{x+t}^{(\tau)} = 0.01, \quad t \geq 0$

(ii) $\mu_{x+t}^{(\text{accident})} = 0.001, \quad t \geq 0$

(iii) Benefits are payable at the moment of death.

(iv) $\delta = 0.05$

(v) Salary of (x) at time t is $50,000e^{0.04t}, \quad t \geq 0$.

Calculate the expected present value of the benefits at issue.

(A) 78,000

(B) 83,000

(C) 92,000

(D) 100,000

(E) 108,000