

- 5.** A whole life policy provides that upon accidental death as a passenger on an airplane a benefit of 1,000,000 will be paid. If death occurs from other accidental causes, a death benefit of 500,000 will be paid. If death occurs from a cause other than an accident, a death benefit of 250,000 will be paid.

You are given:

- (i) Death benefits are payable at the moment of death.
- (ii)  $\mu^{(1)} = 1/2,000,000$  where (1) indicates accidental death as a passenger on an airplane.
- (iii)  $\mu^{(2)} = 1/250,000$  where (2) indicates death from other accidental causes.
- (iv)  $\mu^{(3)} = 1/10,000$  where (3) indicates non-accidental death.
- (v)  $\delta = 0.06$

Calculate the single benefit premium for this insurance.

- (A) 450
- (B) 460
- (C) 470
- (D) 480
- (E) 490