

219. You are given the following information on participants entering a special 2-year program for treatment of a disease:

- (i) Only 10% survive to the end of the second year.
- (ii) The force of mortality is constant within each year.
- (iii) The force of mortality for year 2 is three times the force of mortality for year 1.

Calculate the probability that a participant who survives to the end of month 3 dies by the end of month 21.

- (A) 0.61
- (B) 0.66
- (C) 0.71
- (D) 0.75
- (E) 0.82