

**124.** For a tyrannosaur with a taste for scientists:

- (i) The number of scientists eaten has a binomial distribution with  $q = 0.6$  and  $m = 8$ .
- (ii) The number of calories of a scientist is uniformly distributed on  $(7000, 9000)$ .
- (iii) The numbers of calories of scientists eaten are independent, and are independent of the number of scientists eaten.

Calculate the probability that two or more scientists are eaten and exactly two of those eaten have at least 8000 calories each.

- (A) 0.23
- (B) 0.25
- (C) 0.27
- (D) 0.30
- (E) 0.35