

Ques 1: find the number of ways that you can put 7 letters into three respective envelopes such that exactly 3 go into the right envelope?

a. 350

b. 102

c. 315

d. 530

Solution: -

Number of ways in which 3 correct envelopes can be selected =  ${}^7C_3$

$$= \frac{7 \times 6 \times 5}{1 \times 2 \times 3}$$

$$= 35$$

Re arrangement of the remaining 4 envelopes and letters = 9 ( $4! = 9$ )

So total number of ways of arrangement

$$= 9 \times 35 = 315$$

So option c is correct.