The number of arrangements of the letters of the word BANANA in which the two N's do not appear adjacently is (2002S)

- (a) 40 (b) 60 (c) 80 (d) 100
- (a) Total number of ways of arranging the letters of the word BANANA is $\frac{6!}{2!3!} = 60$. Number of words in which 2 N's come together is $\frac{5!}{3!} = 20$. Hence the required number = 60 - 20 = 40