In a non-leap year, the probability of having 53 Tuesdays or 53 Wednesdays is
A. 1/7
B. 2/7
C. 3/7
D. none of these

Solution:

B. 2/7

Explanation:

We know that in a non-leap year, there are 365 days and we know that there are 7 days in a week

∴ 365 ÷ 7 = 52 weeks + 1 day

This 1 day can be Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday

∴ Total Outcomes = 7

If this day is a Tuesday or Wednesday, then the year will have 53 Tuesday or 53 Wednesday.

∴P (non-leap year has 53 Tuesdays or 53 Wednesdays) = 1/7 + 1/7 = 2/7

Hence, the correct option is (B).