

Given 5 flags of different colours, how many different signals can be generated if each signal requires the use of 2 flags, one below the other?

Solution:

Given 5 flags of different colours

We know the signal requires 2 flags.

The number of flags possible for upper flag is 5.

Now as one of the flag is taken, the number of flags remaining for lower flag in the signal is 4.

The number of ways in which signal can be given = $5 \times 4 = 20$.