

### Corrigendum/Explanation SFG FRC 2026 Test 49

**There is 1 change in today's paper. In Q.56 the correct answer is Option b**

**Q.56)** A doubt was raised that there may be a condition where all the 3 digits are not used while forming the 4 digit number.

**Exp)** Yes, there are 6 such 4 digit numbers where all the 3 digits are not used eg. 1212, 1313, 2323, 2121, 3131, 3232.

**For Future Reference:**

**Q.56)** A 4-digit number is made using digits 1, 2 and 3. All the digits must be used, and any consecutive digit in number must not be the same. How many numbers can be made?

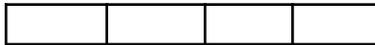
- a) 36
- b) 18
- c) 27
- d) 24

**Ans) b**

**Exp) Option b is the correct answer.**

Consider the blank box represents four-digit number, as shown in the figure.

For finding total numbers we find number of ways to fill all boxes, with given conditions



For the first box there are 3 ways (1,2,3)

For second box there are 2 ways (other two except one used in box 1)

For third box, there are again two options (other two except one used in box 2)

For fourth box, there are again two options (other two except one used in box 3)

Total number of ways =  $3 \times 2 \times 2 \times 2 = 24$

But, we need to exclude the number which do not uses all 3 digits eg. 1212, 1313, 2323, 2121, 3131, 3232.

There are total of 6 such 4 digit numbers in which all the 3 numbers were not used.

So the total 4-digit numbers that can be formed based on the above conditions is  $24 - 6 = 18$

Subject:) CSAT

Topic:)

Subtopic:)