

There are 3 updates in the paper (Q.30, 47 and Q.80)

- In Q.30, there is no matching option, so all the students need to be awarded 2.5 marks.
- In Q.47, there is no matching option, so all the students need to be awarded 2.5 marks.
- In Q.80 the correct answer is Option d.

Q.30) There is no matching option.

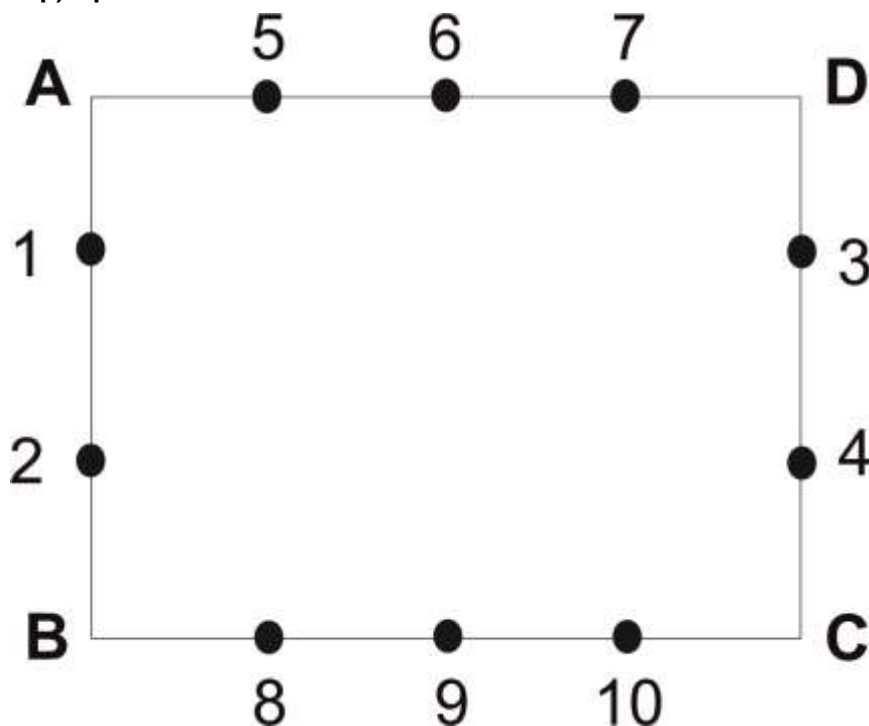
For Future Reference:

Q.30) ABCD is a rectangle. Two points on each side AB and CD and three distinct points on each side BC and CD are chosen. How many distinct triangles can be made using any three points as the vertices out of these 10 points?

- a) 120
- b) 122
- c) 118
- d) 116

Ans) c

Exp) Option c is the correct answer



2 sets of three of these points are collinear.

So, the number of distinct triangles that we can draw using these six points

$${}^{10}C_3 - 2 = (10 \times 9 \times 8) / (3 \times 2 \times 1) - 2 = 118$$

Hence, option (c) is correct.

Q.47) There is no matching option.

For Future Reference:

Q.47) What is the sum of all two-digit numbers formed by using digits 1, 2, 3, 4 and 5?

- a) 925
- b) 825
- c) 800
- d) 700

Ans) b

Exp) Option b is the correct answer.

Number of all two-digit number = $5 \times 5 = 25$.

Each digit will appear 5 times at tenth place and 5 times at unit place.

Suppose 1 at tenth place – contribution to sum = 10×1

Suppose 1 at unit place – contribution to sum = 1×1

Contribution by 1 at unit and tenth place once = 11×1

Similarly for all digits

So, sum = $5 \times 11 \times (1 + 2 + 3 + 4 + 5) = 825$

Q.80) The correct answer is Option d.

For Future Reference:

Q.80) The letters of the word "INTERCHANGEABLENESS" are arranged alphabetically in reverse order. How many positions of the letter/letters will remain unchanged?

- (a) None
- (b) One
- (c) Two
- (d) Three

Ans) d

Exp) Option d is the correct answer

Straight word

I N T E R C H A N G E A B L E N E S S

Reverse word:

S S E N E L B A E G N A H C R E T N I

Now we can easily compare the positions of each letter.

From this comparison, we can see that only the letters "A", "G" and "A" remain unchanged in their positions. Therefore, the correct answer is (d) three.