Friends!

We Used **Smartkeeda** and cracked Bank Exams

बैंक परीक्षाओं के लिए निश्चित रूप से

सर्वश्रेष्ठ मॉक टेस्ट सीरीज

SOUMYADIP BISWAS
IBPS PO 2023

DHAIRYA GAUR
RRB PO 2023

TIYASA ROY
IBPS CLERK & PO 2023

MD. SHABAN
IBSP PO & CLERK 2023

BHAVANA PADALIYA
IBPS CLERK & PO 2023

KAJOL WADHWANI
IBPS PO & CLERK 2023

ESHU SINGH
SBI PO 2023

SACHIN RAI
IBPS PO & CLERK 2023

SUDHEER JANGID
RRB CLERK 2023

VRINDA AGARWAL
SBI PO 2023

SHREYA MAHENDRA MOON
IBPS PO 2023

ANSH GULATI
IBPS PO & CLERK 2023
SBI PO & RRB CLERK 2023

It's Your Turn Now

Take A Free Mock Test

USE CODE **FEST24** for 10% OFF

Seating Arrangement Questions for SBI PO Pre, SBI PO Pre, SBI Clerk Mains, IBPS Clerk Mains and LIC AAO Exams.

Set No 132

Directions: Study the following information carefully and answer the questions given beside:

Seven bikes namely P to V were parked in a straight line and facing north direction. Distance between two adjacent bikes increases from left to right in consecutive multiples of 7m. The total length of straight line is 189m.

Distance between Bike R and Bike V is 35m.Bike V is parked to the right of Bike R. Distance between Bike P and Bike U is same as the distance between Bike T and Bike Q. Maximum number of bikes are parked between Bike U and Bike R. Bike S is parked to the immediate left of Bike P. At least two bikes are parked to the left of Bike Q.

After the final arrangement, Bikes move as per the following directions:

Bike T turned towards Bike V and moved 11m then took a left turn moved 16m.

Bike U turned towards Bike Q and moved 24m then took a right turn moved 21m.

Bike R turned towards south and moved 18m and then took left turn and moved 25m.

From there Bike R took left turn and moved 10m.

Bike Q turned towards Bike V and moved 26m.

Note- New positions of all the bikes are to be denoted by adding ` to their respective names. For example - New position of Bike T will become T`.

1. What is the position of Bike R` with respect to the Bike T`?

A. South B. North C. South-East D. North-West
E. Can't be determined

2. What is the distance between Bike V and Bike S in a straight line?

A. 49m B. 63m C. 28m D. 84m E. None of these

3. Which of the following statements is true?

A. Number of bikes parked between T and Q is same as Q and R is a straight line before movement.
B. Distance between bike S and bike P is same as distance between bike T and bike V.
C. Bike T is in North-west and Bike Q is in south direction of Bike U after movement.
D. Distance between bike R and bike T is twice as the distance between bike V and bike Q.
E. None is true

4. What is the position of Bike T with respect to Bike P in a straight line?

A. Bike T is parked to the left of bike P at a distance of 84m.
B. Bike P is parked to the right of bike T at a distance of 91m.
C. Bike T is parked to the left of bike P at a distance of 126m.
D. Bike P is parked to the right of bike T at a distance of 63m.
E. None of these

5. What is the shortest distance between Bike T` and Bike Q`?

A. 16 m B. 30 m C. 25 m D. 20 m E. None of these

Correct Answers:

1	2	3	4	5
A	B	E	C	D

COMMON EXPLANATION:

References:

Seven bikes namely P to V were parked in a straight line and facing north direction.

Distance between two adjacent bikes increases from left to right in consecutive multiples of 7m.

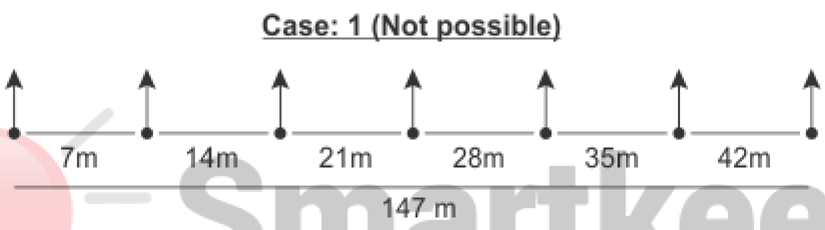
The total length of straight line is 189m.

Inferences:

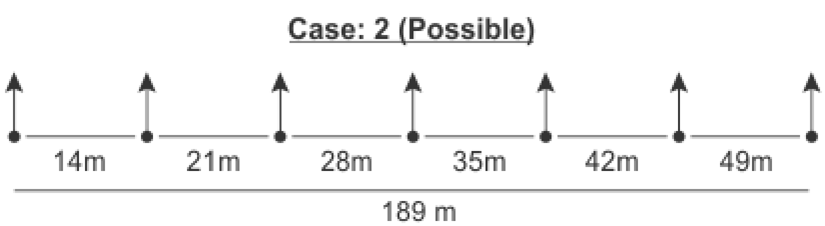
From above statements,

Let us calculate the distance between the bikes from the above hints.

If the distance increased from 7m from left to right, then we get following figure i.e. total length of the straight line is 147 m [7m + 14m + 21m + 28m + 35m + 42m =147 m] which is not possible.



If the distance increased from 14m from left to right, then we get following figure i.e. total length of the straight line is 189 m [14m + 21m + 28m + 35m + 42m +49m =189 m] which is given in the condition. Hence it is possible.



References:

Maximum number of bikes are parked between Bike U and Bike R.

Bike V is parked to the right of Bike R.

Distance between Bike R and Bike V is 35m.

Inferences:

From above statements,

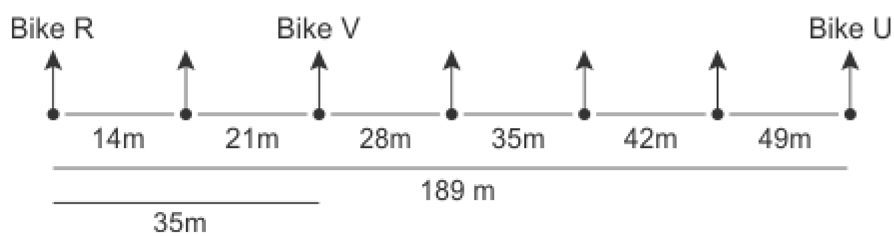
Given, maximum number of bikes is parked between Bike U and Bike R i.e. Bike R and Bike U are parked at extreme ends (reference point-1)

Given, Bike V is parked to the right of Bike R. Therefore it is clearly understood that Bike R is parked at extreme left end and Bike U is parked at extreme right end (reference point-2)

As per 3rd reference point-3, Bike V is parked second to the right of Bike R.

By using above information we get the following figure,

Case: 2



References:
Bike S is parked to the immediate left of Bike P.

At least two bikes are parked to the left of Bike Q.

Distance between Bike P and Bike U is same as the distance between Bike T and Bike Q.

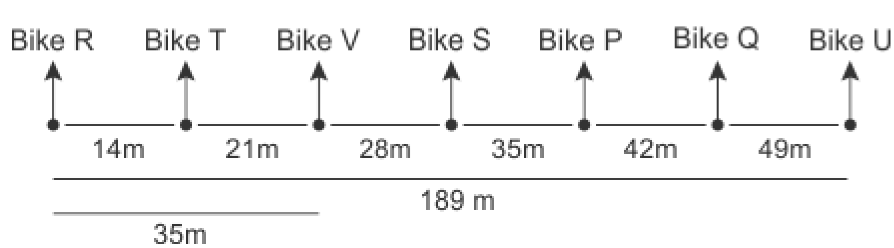
Inferences:
From above statements,

As per 1st reference point, we get two possibilities as shown:

<u>**Case-2:**</u> Bike S and Bike P is to the immediate right and 2nd to the right of Bike V respectively (reference point-1). As per 2nd reference point, Bike Q is parked to the immediate right of Bike P i.e. 5 bikes are parked to the left of Bike Q. Finally Bike T is parked to the immediate right of Bike R.

Now from diagram we get, distance between Bike P and Bike U is 91m [42m +49m =91m]. Therefore distance between Bike T and Bike Q must be 91m. But from diagram we get the distance between Bike T and Bike Q is 126 m [21m +28m + 35m +42m =126m] which is not possible (reference point-3 not satisfied). Hence this case can be eliminated.

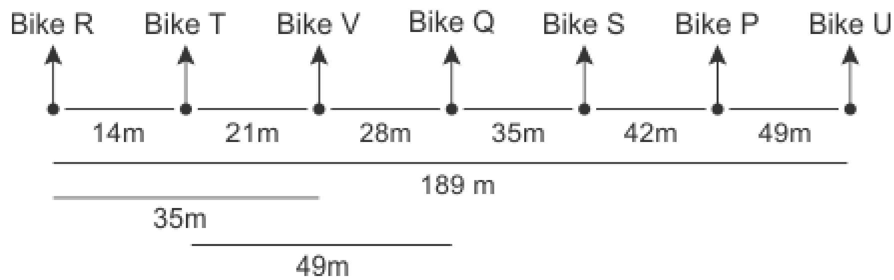
Case: 2 [Eliminated]



<u>**Case-2-A:**</u> Bike S and Bike P is to the 2nd right and 3rd to the right of Bike V respectively (reference point-1). As per 2nd reference point, Bike Q is parked to the immediate right of Bike V i.e. 3 bikes are parked to the left of Bike Q. Finally Bike T is parked to the immediate right of Bike R.

Now from diagram we get, distance between Bike P and Bike U is 49m. Therefore distance between Bike T and Bike Q must be 49m. From diagram we get the distance between Bike T and Bike Q is 49m [21m +28m = 49m, reference point-4]. All conditions get satisfied and we get the final arrangement.

Case: 2-A



References:

Bike T turned towards Bike V and moved 11m then took a left turn moved 16m.

Bike U turned towards Bike Q and moved 24m then took a right turn moved 21m.

Bike R turned towards south and moved 18m and then took left turn and moved 25m.

From there Bike R took left turn and moved 10m.

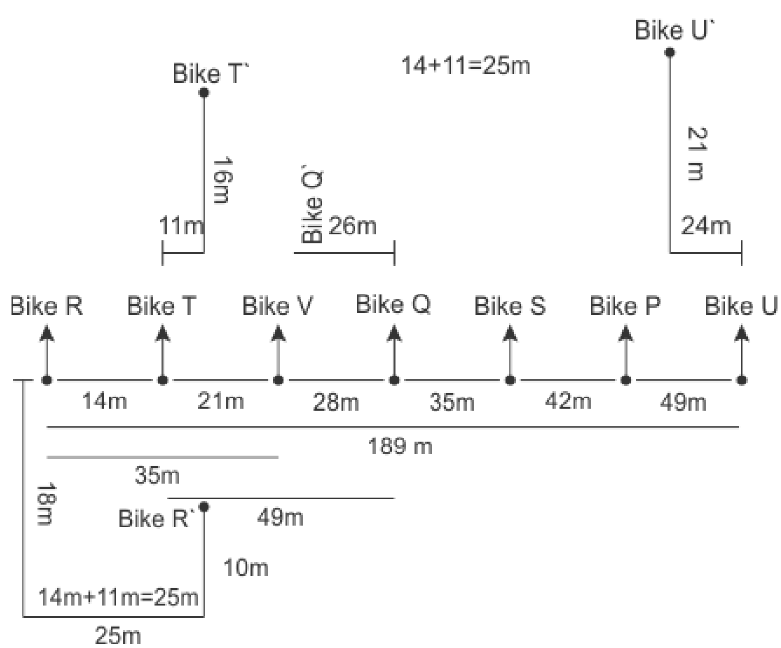
Bike Q turned towards Bike V and moved 26m.

Inferences:

All statements are given directly; by using we get the following figure.

Note: New position of Bike T, Bike U, Bike R and Bike Q are denoted as Bike T', Bike U', Bike R' and Bike Q'.

Case: 2-A



Answers :

1. Following the common explanation, we get "South".

From figure, Bike R’ is exactly South of Bike T’

Hence, option A is correct.

2. Following the common explanation, we get "63m".

The distance between Bike V and Bike S in a straight line is 63m [28m +35m =63m].

Hence, option B is correct.

3. Following the common explanation, we get "None is true".

Hence, option E is correct.

4. Following the common explanation, we get "Bike T is parked to the left of bike P at a distance of 126m".

From figure, we get the distance between Bike T and Bike P is 126m [21m + 28m + 35m + 49m = 126m

Hence, option C is correct.

5. Following the common explanation, we get "20 m".

From below figure, we get

Shortest distance between Bike T` and Bike Q`

$\sqrt{12^2+16^2} = \sqrt{144 + 256} = \sqrt{400}$m = 20 m

Hence option A is correct.


Smartkeeda
The Question Bank
Presents
Testzone
India's Leading Test Series Platform
All Banks Exams
2024-25
12 Months Plan
@Just
Rs. 764
To get 10% Off use code FEST24
Brilliant Test Analysis
Excellent Content
Unmatched Explanation
Buy Now