

### Topic - Stack Based Puzzle

(1-5) Directions: Answer the questions based on the information given below.

11 shelves are kept one above another such that bottommost shelf is numbered as 1 while the topmost as 11. Four of the shelves contains different items among shirt, T-shirt, belt and comb.

Shelf V is two shelves above shelf U and both are odd numbered shelves. There is one shelf between shelf R and shelf X, which contains Shirt. There are five shelves between shelf S and shelf Z, which is prime numbered shelf. There are two shelves between shelf Z and shelf R. Shelf S is above shelf Z and shelf P. Shelf containing T-shirt is two shelves above shelf S. Shelf containing comb is just above shelf containing belt and neither is in shelf 2. Shelf containing comb is below shelf R. Shelf V is not adjacent to shelf X. Shelf T is above shelf Q, which is above shelf Y. Shelf P is just above shelf W.

- 1) Which shelf is the topmost shelf?
  - a) Shelf T
  - b) Shelf containing Shirt
  - c) Shelf P
  - d) Shelf V

Correct Choice: d



### Solution

Starting point: Here, we can start with the clues related to shelf S and shelf Z in order to make initial two cases.

Clues: There are five shelves between shelf S and shelf Z, which is prime numbered shelf. There are two shelves between shelf Z and shelf R. Shelf S is above shelf Z and shelf P. Shelf containing T-shirt is two shelves above shelf S. Shelf containing comb is just above shelf containing belt and neither is in shelf 2. Shelf containing comb is below shelf R. There is one shelf between shelf R and shelf X, which contains Shirt.

Inference: So, shelf S can be shelf 8 or shelf 9.

Case 1: When shelf S is shelf numbered 8.

Shelf numbers	Shelves	Items
11		
10		T-shirt
9		
8	S	
7	Х	Shirt
6		
5	R	
4		Comb
3		Belt
2	Z	



1	



Case 2: When shelf S is shelf numbered 9.

	Case 2(a)		Case 2(b)	
Shelf numbers	Shelves	Items	Shelf numbers	Shelves
11		T- shirt		T-shirt
10				
9	S		S	
8	X	Shirt	X	Shirt
7				
6	R		R	
5		Comb		
4		Belt		Comb
3	Z		Z	Belt
2				



1		

Clues: Shelf V is two shelves above shelf U and both are odd numbered shelves. Shelf V is not adjacent to shelf X.

Inference: So, case 2(a) and 2(b) are rejected as shelf V cannot be placed.

	Case 1(a)		1(a) Case 1(b)	
Shelf numbers	Shelves	Items	Shelves	Items
11	V			
10		T-shirt		T-shirt
9	U			
8	S		S	
7	Х	Shirt	X	Shirt
6				
5	R		R	
4		Comb		Comb
3		Belt	V	Belt
2	Z		Z	
1			U	

Clues: Shelf P is just above shelf W. Shelf T is above shelf Q, which is above shelf Y.

Inference: So, cases 1(b) would be rejected as shelf S is above shelf P.



Shelf numbers	Shelves	Items
11	V	
10	Т	T-shirt
9	U	
8	S	
7	X	Shirt
6	Q	
5	R	
4	Р	Comb
3	W	Belt
2	Z	
1	Y	

Shelf V is the topmost shelf.

Hence, option d.



2)	Shelf T	contains	
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- a. Comb
- b. Belt
- c. T-shirt
- d. Shirt

Correct Choice: c

#### Solution

Starting point: Here, we can start with the clues related to shelf S and shelf Z in order to make initial two cases.

Clues: There are five shelves between shelf S and shelf Z, which is prime numbered shelf. There are two shelves between shelf Z and shelf R. Shelf S is above shelf Z and shelf P. Shelf containing T-shirt is two shelves above shelf S. Shelf containing comb is just above shelf containing belt and neither is in shelf 2. Shelf containing comb is below shelf R. There is one shelf between shelf R and shelf X, which contains Shirt.

Inference: So, shelf S can be shelf 8 or shelf 9.

Case 1: When shelf S is shelf numbered 8.

Shelf numbers	Shelves	Items
11		
10		T-shirt
9		



8	S	
7	X	Shirt
6		
5	R	
4		Comb
3		Belt
2	Z	
1		

Case 2: When shelf S is shelf numbered 9.

	Case 2(a)		Case 2(b)	
Shelf numbers	Shelves	Items	Shelf numbers	Shelves
11		T- shirt		T-shirt
10				
9	S		S	
8	X	Shirt	X	Shirt
7				
6	R		R	



5		Comb		
4		Belt		Comb
3	Z		Z	Belt
2				
1				

Clues: Shelf V is two shelves above shelf U and both are odd numbered shelves. Shelf V is not adjacent to shelf X.

Inference: So, case 2(a) and 2(b) are rejected as shelf V cannot be placed.

	Case 1(a)		Case 1(a) Case 1(b)		
Shelf numbers	Shelves	Items	Shelves	Items	
11	V				
10		T-shirt		T-shirt	
9	U				
8	S		S		
7	X	Shirt	X	Shirt	
6					
5	R		R		
4		Comb		Comb	
3		Belt	V	Belt	



2	Z	Z	
1		U	

Clues: Shelf P is just above shelf W. Shelf T is above shelf Q, which is above shelf Y.

Inference: So, cases 1(b) would be rejected as shelf S is above shelf P.

Shelf numbers	Shelves	Items
11	V	
10	Т	T-shirt
9	U	
8	S	
7	X	Shirt
6	Q	
5	R	
4	Р	Comb
3	W	Belt
2	Z	
1	Y	

Shelf T contains T-shirt.

Hence, option c.



- 3) How many shelves are above shelf P?
  - a. Six
  - b. Seven
  - c. Four
  - d. Five

Correct Choice: b

### Solution

Starting point: Here, we can start with the clues related to shelf S and shelf Z in order to make initial two cases.

Clues: There are five shelves between shelf S and shelf Z, which is prime numbered shelf. There are two shelves between shelf Z and shelf R. Shelf S is above shelf Z and shelf P. Shelf containing T-shirt is two shelves above shelf S. Shelf containing comb is just above shelf containing belt and neither is in shelf 2. Shelf containing comb is below shelf R. There is one shelf between shelf R and shelf X, which contains Shirt.

Inference: So, shelf S can be shelf 8 or shelf 9.

Case 1: When shelf S is shelf numbered 8.



Shelf numbers	Shelves	Items
11		
10		T-shirt
9		
8	S	
7	X	Shirt
6		
5	R	
4		Comb
3		Belt
2	Z	
1		

Case 2: When shelf S is shelf numbered 9.

	Case 2(a)		Case 2(b)	
Shelf numbers	Shelves	Items	Shelf numbers	Shelves
11		T- shirt		T-shirt
10				



9	S		S	
8	Х	Shirt	X	Shirt
7				
6	R		R	
5		Comb		
4		Belt		Comb
3	Z		Z	Belt
2				
1				

Clues: Shelf V is two shelves above shelf U and both are odd numbered shelves. Shelf V is not adjacent to shelf X.

Inference: So, case 2(a) and 2(b) are rejected as shelf V cannot be placed.

	Case 1(a)		Case 1(b)	
Shelf numbers	Shelves	Items	Shelves	Items
11	V			
10		T-shirt		T-shirt
9	U			
8	S		S	
7	X	Shirt	X	Shirt



6				
5	R		R	
4		Comb		Comb
3		Belt	V	Belt
2	Z		Z	
1			U	

Clues: Shelf P is just above shelf W. Shelf T is above shelf Q, which is above shelf Y.

Inference: So, cases 1(b) would be rejected as shelf S is above shelf P.

Shelf numbers	Shelves	Items
11	V	
10	Т	T-shirt
9	U	
8	S	
7	X	Shirt
6	Q	
5	R	
4	Р	Comb
3	W	Belt



2	Z	
1	Y	

Seven shelves are above shelf P.

Hence, option b.

- 4) Which shelf is just below shelf Z?
  - a. Shelf R
  - b. Shelf Y
  - c. Shelf T
  - d. Shelf Q

Correct Choice: b

### Solution

Starting point: Here, we can start with the clues related to shelf S and shelf Z in order to make initial two cases.

Clues: There are five shelves between shelf S and shelf Z, which is prime numbered shelf. There are two shelves between shelf Z and shelf R. Shelf S is above shelf Z and shelf P. Shelf containing T-shirt is two shelves above shelf S. Shelf containing comb is just above shelf containing belt and neither is in shelf 2. Shelf containing comb is below shelf R. There is one shelf between shelf R and shelf X, which contains Shirt.

Inference: So, shelf S can be shelf 8 or shelf 9.

Case 1: When shelf S is shelf numbered 8.

Shelf numbers	Shelves	Items
11		



10	T-shirt



9		
8	S	
7	Х	Shirt
6		
5	R	
4		Comb
3		Belt
2	Z	
1		

Case 2: When shelf S is shelf numbered 9.

	Case 2(a)		Case 2(b)	
Shelf numbers	Shelves	Items	Shelf numbers	Shelves
11		T- shirt		T-shirt
10				
9	S		S	
8	Х	Shirt	X	Shirt
7				



6	R		R	
5		Comb		
4		Belt		Comb
3	Z		Z	Belt
2				
1				

Clues: Shelf V is two shelves above shelf U and both are odd numbered shelves. Shelf V is not adjacent to shelf X.

Inference: So, case 2(a) and 2(b) are rejected as shelf V cannot be placed.

	Case 1(a)		Case 1(b)	
Shelf numbers	Shelves	Items	Shelves	Items
11	V			
10		T-shirt		T-shirt
9	U			
8	S		S	
7	X	Shirt	X	Shirt
6				
5	R		R	
4		Comb		Comb



3		Belt	V	Belt
2	Z		Z	
1			U	

Clues: Shelf P is just above shelf W. Shelf T is above shelf Q, which is above shelf Y.

Inference: So, cases 1(b) would be rejected as shelf S is above shelf P.

Shelf numbers	Shelves	Items
11	V	
10	Т	T-shirt
9	U	
8	S	
7	X	Shirt
6	Q	
5	R	
4	Р	Comb
3	W	Belt
2	Z	
1	Y	

Shelf Y is just below shelf Z.



Hence, option b.



- 5) How many shelves are between shelf T and shelf Q?
  - a. Three
  - b. One
  - c. Two
  - d. Four

Correct Choice: a

#### Solution

Starting point: Here, we can start with the clues related to shelf S and shelf Z in order to make initial two cases.

Clues: There are five shelves between shelf S and shelf Z, which is prime numbered shelf. There are two shelves between shelf Z and shelf R. Shelf S is above shelf Z and shelf P. Shelf containing T-shirt is two shelves above shelf S. Shelf containing comb is just above shelf containing belt and neither is in shelf 2. Shelf containing comb is below shelf R. There is one shelf between shelf R and shelf X, which contains Shirt.

Inference: So, shelf S can be shelf 8 or shelf 9.

Case 1: When shelf S is shelf numbered 8.

Shelf numbers	Shelves	Items
11		
10		T-shirt
9		



8	S	
7	X	Shirt
6		
5	R	
4		Comb
3		Belt
2	Z	
1		

Case 2: When shelf S is shelf numbered 9.

	Case 2(a)		Case 2(b)	
Shelf numbers	Shelves	Items	Shelf numbers	Shelves
11		T- shirt		T-shirt
10				
9	S		S	
8	X	Shirt	X	Shirt
7				
6	R		R	



5		Comb		
4		Belt		Comb
3	Z		Z	Belt
2				
1				

Clues: Shelf V is two shelves above shelf U and both are odd numbered shelves. Shelf V is not adjacent to shelf X.

Inference: So, case 2(a) and 2(b) are rejected as shelf V cannot be placed.

	Case 1(a)		Case 1(b)	
Shelf numbers	Shelves	Items	Shelves	Items
11	V			
10		T-shirt		T-shirt
9	U			
8	S		S	
7	X	Shirt	X	Shirt
6				
5	R		R	
4		Comb		Comb
3		Belt	V	Belt



2	Z	Z	
1		U	

Clues: Shelf P is just above shelf W. Shelf T is above shelf Q, which is above shelf Y.

Inference: So, cases 1(b) would be rejected as shelf S is above shelf P.

Shelf numbers	Shelves	Items
11	V	
10	Т	T-shirt
9	U	
8	S	
7	X	Shirt
6	Q	
5	R	
4	Р	Comb
3	W	Belt
2	Z	
1	Y	

Three shelves are between shelf T and shelf Q.

Hence, option a.



### Topic – North - South Facing Sitting Arrangement

(30-34) Directions: Answer the questions based on the information given below.

Eight persons A, B, C, D, E, F, G and H are sitting in row facing either north or south. Number of persons facing north is more than number of persons facing south. Persons at the extreme ends face north. Not more than two adjacent persons face in same direction. C and D sit second to the left of each other. At least three persons sit between A and G, who faces south. B sits third to the right of C. A is not adjacent to F. E faces south and sits at least two places away from C. One person sits between D and F. E is not to the immediate left of B.

- 6) Find the odd one out.
  - a. B
  - b. H
  - c. F
  - d. G

Correct Choice: d

### **Solution**

Starting point: Here, we can start directly by C and D such that either of them face south or north.

Clues: C and D sit second to the left of each other. B sits third to the right of C. One person sits between D and F.

Inference: So, B and F must be at the extreme end.

Case 1: When C faces south.



B(North)	C(South)	D(North)	F(North)



Case 2: When C faces north.

F(North)		D(South)		C(North)			B(North)	
Clues: At I	east	three nerson	ne ei	t hetween A	and	G $W$	vho faces so	ı

t three persons sit between A and G, who faces south. A is not adjacent to F.

Case 1(a):

B(North)		Α	C(South)	D(North)	G(South)	F(North)
Case 1(b):						
B(North)	Α		C(South)	D(North)	G(South)	F(North)

 $D(North) \mid G(South)$ F(North)

Case 2(a):

F(Nort	G(Sout	D(Sout	(Nort	C(Nort	A(Sout	B(Nort
h)	h)	h)	h)	h)	h)	h)

Case 2(b):

	F(Nort h)	G(Sout h)	D(Sout h)	(Nort h)	C(Nort h)	(Sout h)	A	B(Nort h)
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Clues: E faces south and sits at least two places away from C. E is not immediate left of B.

Inference: So, case 1(b) and 2(b) would be rejected. Also, case 2(a) is rejected as E is not immediate left of B. As, number of persons facing north is more than that of persons facing south. So, H must face north.

B(Nor th)	E(So	A(Nor	C(Sou	H(Nor	D(Nor	G(Sou	F(Nor
	uth	th)	th)	th)	th)	th)	th)

All face north except G.

Hence, option d.



7)	Who sits	second	to	the	right	of	C?	?
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- a. A
- b. D
- c. E
- d. G

Correct Choice: c

### Solution

Starting point: Here, we can start directly by C and D such that either of them face south or north.

Clues: C and D sit second to the left of each other. B sits third to the right of C. One person sits between D and F.

Inference: So, B and F must be at the extreme end.

Case 1: When C faces south.

B(North)	C(South)	D(North)	F(North)
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Case 2: When C faces north.

F(North) D(South) C(North) B(North)
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Clues: At least three persons sit between A and G, who faces south. A is not adjacent to F.

Case 1(a):



B(North)	Α	C(South)	D(North)	G(South)	F(North)



### Case 1(b):

B(North)	A	C(South)	D	(North)	G(South)	F(I	North)		
Case 2(a	a):			1					
F(Nort h)	G(Sout h)	D(Sout h)	(Nort h)	C(Nort h)	A(Sout h)		B(Nort h)		
Case 2(b):									
F(Nort h)	G(Sout h)	D(Sout h)	(Nort h)	C(Nort h)	(Sout h)	Α	B(Nort h)		

Clues: E faces south and sits at least two places away from C. E is not immediate left of B.

Inference: So, case 1(b) and 2(b) would be rejected. Also, case 2(a) is rejected as E is not immediate left of B. As, number of persons facing north is more than that of persons facing south. So, H must face north.

B(Nor th)	E(So	A(Nor	C(Sou	H(Nor	D(Nor	G(Sou	F(Nor
	uth	th)	th)	th)	th)	th)	th)

E sits second to the right of C.

Hence, option c.



- 8) How many persons sit between H and F?
  - a. Three
  - b. Four
  - c. Two
  - d. One

Correct Choice: c

### Solution

Starting point: Here, we can start directly by C and D such that either of them face south or north.

Clues: C and D sit second to the left of each other. B sits third to the right of C. One person sits between D and F.

Inference: So, B and F must be at the extreme end.

Case 1: When C faces south.

B(North)		C(South)		D(North)		F(North)
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Case 2: When C faces north.

F(North)	D(South)	C(North)		B(North)

Clues: At least three persons sit between A and G, who faces south. A is not adjacent to F.

Case 1(a):



B(North)	Α	C(South)	D(North)	G(South)	F(North)



Case 1(b):

B(North)	А	C(South)		D(North)		G	G(South)		North)
Case 2(a	ı):	'	l	ı		<u> </u>		ı	
F(Nort h)	G(So h)	ut D(Sout h)	(No h)	rt	C(Nort h)		A(Sout h)		B(Nort h)
Case 2(b	):	·		·		·			
F(Nort h)	G(So h)	out D(Sout h)	(No h)	rt	C(Nort h)		(Sout h)	Α	B(Nort h)

Clues: E faces south and sits at least two places away from C. E is not immediate left of B.

Inference: So, case 1(b) and 2(b) would be rejected. Also, case 2(a) is rejected as E is not immediate left of B. As, number of persons facing north is more than that of persons facing south. So, H must face north.

B(Nor	E(So	A(Nor	C(Sou	H(Nor	D(Nor	G(Sou	F(Nor
th)	uth	th)	th)	th)	th)	th)	th)

Two persons sit between H and F.

Hence, option c.

- 9) Who sits third to the right of B?
  - a. A
  - b. D
  - c. G
  - d. C

Correct Choice: d

**Solution** 

Starting point: Here, we can start directly by C and D such that either of them face south or north.

Clues: C and D sit second to the left of each other. B sits third to the right of



C. One person sits between D and F.



Inference: So, B and F must be at the extreme end.

Case 1: When C faces south.

B(North)			C(South)			D(North)		F(North)	
Case 2: W	hen	C face	s north	-					
F(North)		D(So	uth)		C(I	North)		B(North)	

Clues: At least three persons sit between A and G, who faces south. A is not adjacent to F.

Case 1(a):

B(North)		Α	C(South)		D(	North)	G	S(South)	F(N	North)
Case 1(b	):									
B(North)	Α		C(South)		D(	North)	G	S(South)	F(N	North)
Case 2(a	ı):									
F(Nort h)	G(S h)	out	D(Sout h)	(Nor h)	rt	C(Nort h)		A(Sout h)		B(Nort h)
Case 2(b	):									
F(Nort h)	G(S h)	out	D(Sout h)	(Noi h)	rt	C(Nort h)		(Sout h)	Α	B(Nort h)

Clues: E faces south and sits at least two places away from C. E is not immediate left of B.

Inference: So, case 1(b) and 2(b) would be rejected. Also, case 2(a) is rejected as E is not immediate left of B. As, number of persons facing north is more than that of persons facing south. So, H must face north.

B(Nor th) E(So A(Nor C(Sou H(Nor D(Nor G(Sou F(Nor th) th) th) th) th)
--



C sits third to the right of B.



Н	len	ce,	on	tic	n	d
		oo,	VΡ	LIC	,,,	u

- 10) Who sits exactly between E and D?
  - a. G
  - b. C
  - c. F
  - d. B

Correct Choice: b

#### Solution

Starting point: Here, we can start directly by C and D such that either of them face south or north.

Clues: C and D sit second to the left of each other. B sits third to the right of C. One person sits between D and F.

Inference: So, B and F must be at the extreme end.

Case 1: When C faces south.

B(North)	C(South)	D(North)	F(North)
----------	----------	----------	----------

Case 2: When C faces north.

F(North)	D(South)	C(North)		B(North)

Clues: At least three persons sit between A and G, who faces south. A is not adjacent to F.

Case 1(a):

B(North)	Α	C(South)	D(North)	G(South)	F(North)
Case 1(b):					

B(North)	А	C(South)	D(North)	G(South)	F(North)

# TCS NQT Reasoning Questions & Answers with Solutions - Paper 2



Case 2(a):



F(Nort G(Sout D(Sout h) h) h) (Nort h)	C(Nort A(Sout h)	B(Nort h)
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#### Case 2(b):

F(Nort	G(Sout	D(Sout	(Nort	C(Nort	(Sout	A	B(Nort
h)	h)	h)	h)	h)	h)		h)

Clues: E faces south and sits at least two places away from C. E is not immediate left of B.

Inference: So, case 1(b) and 2(b) would be rejected. Also, case 2(a) is rejected as E is not immediate left of B. As, number of persons facing north is more than that of persons facing south. So, H must face north.

B(Nor	E(So	A(Nor	C(Sou	H(Nor	D(Nor	G(Sou	F(Nor
th)	uth	th)	th)	th)	th)	th)	th)

C sits exactly between E and D.



### Topic – Alphabet Test

11) Which of the following letter will be 10<sup>th</sup> letter from the left end if the letters at even positions are replaced by succeeding letter in the word "LIMITEDEDITION" such that from left end "L" is at odd position and "I" is at even position and so on?

- a. F
- b. T
- c. O
- d. J

Correct Choice: d

#### Solution

If we replace the even positioned letters with their respective succeeding letter then we would get the following word "LJMJTFDFDJTJOO".

So, the letter, which is 10<sup>th</sup> from the left end is 'J'.



## Topic – Uncertain Circular Sitting Arrangement

(36-40) Directions: Answer the questions based on the information given below.

Certain number of persons are sitting around the circular table. All of them are facing towards the center. Q sits third to the right of M. One person sits between R and M. Three persons sit between N and P. O sits adjacent to R. M sits exactly between N and Q. N sits second to the left of O. One person sits between P and Q. At least three persons sit between R and P.

- 12) Who sits second to the left of P?
  - a. N
  - b. O
  - c. M
  - d. Q

Correct Choice: d

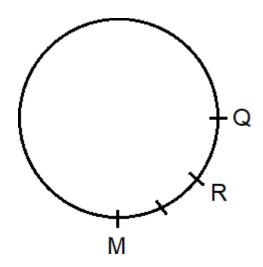
Solution

Starting point: Here, we can start with M in order to make initial two cases.

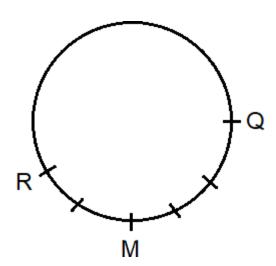
Clues: Q sits third to the right of M. One person sits between R and M.

Inference: So, R sits second to the right of M or second to the left of M.



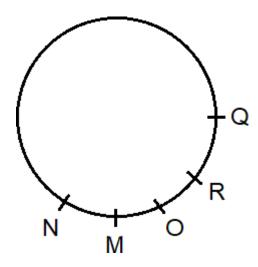


Case 2:

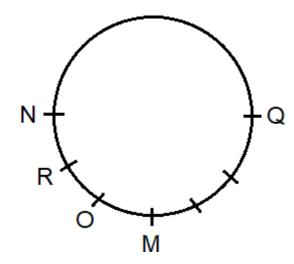


Clues: O sits adjacent to R. N sits second to the left of O.



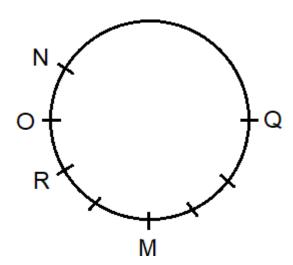


# Case 2(a):



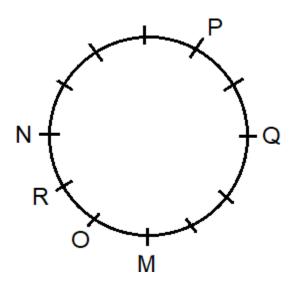
Case 2(b):





Clues: One person sits between P and Q. At least three persons sit between R and P. Three persons sit between N and P. M sits exactly between N and Q.

Inference: So, case 1 is rejected as number of persons between P and R are at least three. Case 2(b) are rejected as M sits exactly between N and Q.



Q sits second to the left of P.



13) How many persons sit in the circular arrangement?

a. 13

b. 12

c. 10

d. 11

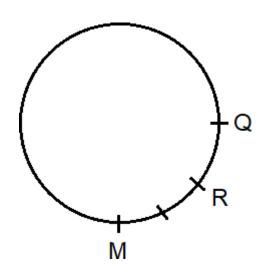
Correct Choice: b

#### **Solution**

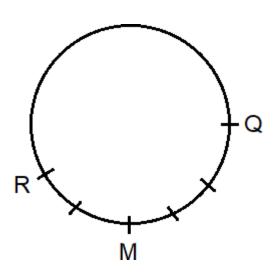
Starting point: Here, we can start with M in order to make initial two cases.

Clues: Q sits third to the right of M. One person sits between R and M.

Inference: So, R sits second to the right of M or second to the left of M.

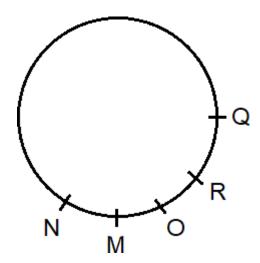






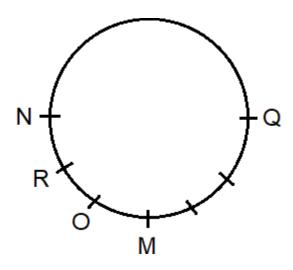
Clues: O sits adjacent to R. N sits second to the left of O.

## Case 1:

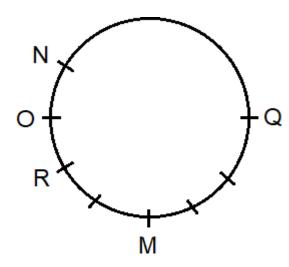


Case 2(a):





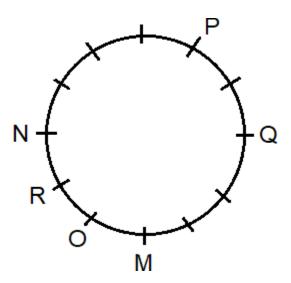
### Case 2(b):



Clues: One person sits between P and Q. At least three persons sit between R and P. Three persons sit between N and P. M sits exactly between N and Q.

Inference: So, case 1 is rejected as number of persons between P and R are at least three. Case 2(b) are rejected as M sits exactly between N and Q.





12 persons sit in the circular arrangement.

Hence, option b

14) \_\_\_ sits immediate left of R.

- a. N
- b. O
- c. M
- d. Q

Correct Choice: a

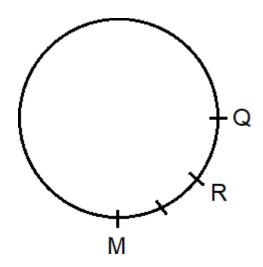
#### **Solution**

Starting point: Here, we can start with M in order to make initial two cases.

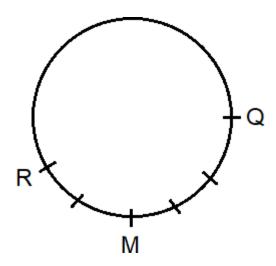
Clues: Q sits third to the right of M. One person sits between R and M.

Inference: So, R sits second to the right of M or second to the left of M.



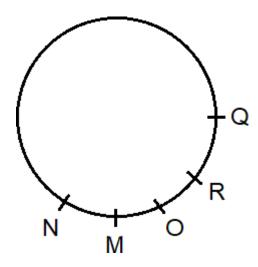


Case 2:

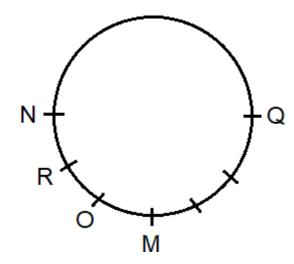


Clues: O sits adjacent to R. N sits second to the left of O.



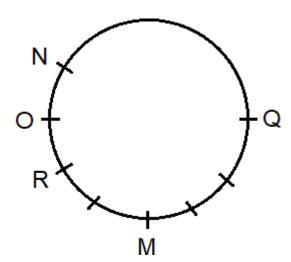


# Case 2(a):



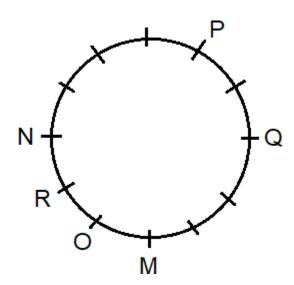
Case 2(b):





Clues: One person sits between P and Q. At least three persons sit between R and P. Three persons sit between N and P. M sits exactly between N and Q.

Inference: So, case 1 is rejected as number of persons between P and R are at least three. Case 2(b) are rejected as M sits exactly between N and Q.



N sits immediate left of R.



15) Who sits fourth to the left of N?

a. O

b. R

c. M

d. P

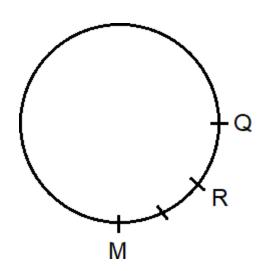
Correct Choice: d

#### **Solution**

Starting point: Here, we can start with M in order to make initial two cases.

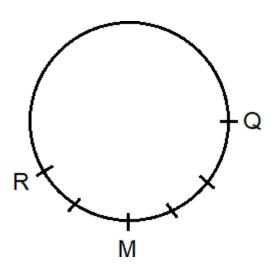
Clues: Q sits third to the right of M. One person sits between R and M.

Inference: So, R sits second to the right of M or second to the left of M.



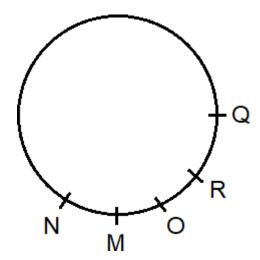
Case 2:





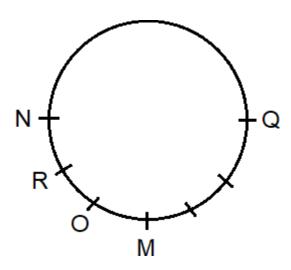
Clues: O sits adjacent to R. N sits second to the left of O.

## Case 1:

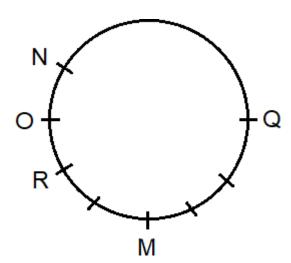


Case 2(a):





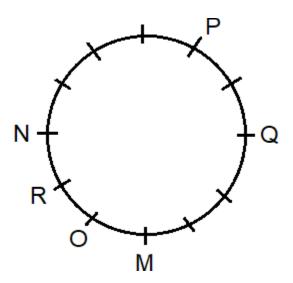
### Case 2(b):



Clues: One person sits between P and Q. At least three persons sit between R and P. Three persons sit between N and P. M sits exactly between N and Q.

Inference: So, case 1 is rejected as number of persons between P and R are at least three. Case 2(b) are rejected as M sits exactly between N and Q.





P sits fourth to the left of N.

Hence, option d.

16) How many persons sit between O and Q when counted from the right of O?

- a. Three
- b. Four
- c. Two
- d. Five

Correct Choice: a

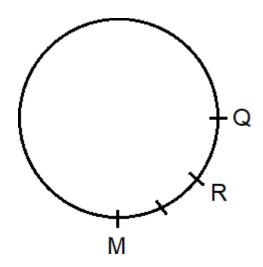
Solution

Starting point: Here, we can start with M in order to make initial two cases.

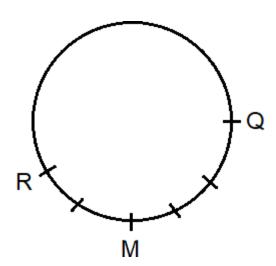
Clues: Q sits third to the right of M. One person sits between R and M.

Inference: So, R sits second to the right of M or second to the left of M.



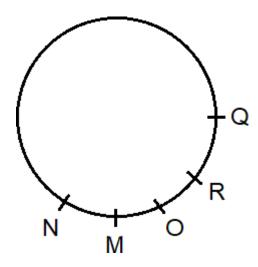


Case 2:

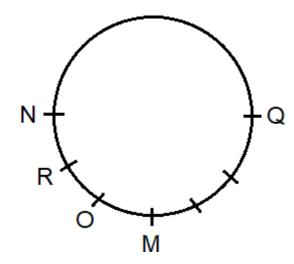


Clues: O sits adjacent to R. N sits second to the left of O.



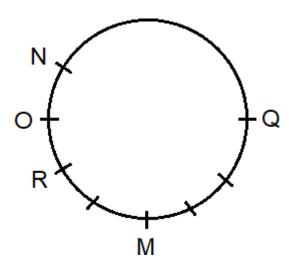


# Case 2(a):



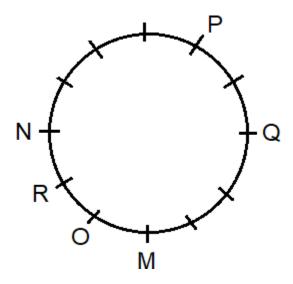
Case 2(b):





Clues: One person sits between P and Q. At least three persons sit between R and P. Three persons sit between N and P. M sits exactly between N and Q.

Inference: So, case 1 is rejected as number of persons between P and R are at least three. Case 2(b) are rejected as M sits exactly between N and Q.



Three persons sit between O and Q when counted from the right of O. Hence, option a.



### Topic - Logical Inequalities

(41-42) In the question, assuming the given statements to be true, find which of the conclusion (s) among given three conclusions is /are definitely true and then give your answer accordingly.

17)

Statements:  $O > W \le K$ ;  $W > S \ge R$ ;  $F \le E \le R$ 

Conclusions:

I. O > F

II. E < K

III. F≤W

- a) Only conclusion II is true.
- b) Both conclusions I and II are true.
- c) Only conclusion I is true.
- d) Both conclusions I and III are true.

Correct Choice: b

#### Solution

Given statements: O>W≤K; W>S≥R; F≤E ≤ R

On combining, we get

 $O>W>S\geq R \geq E \geq F$ ;  $K \geq W >S\geq R \geq E \geq F$ 

Conclusions:

I. O>F: True (As O>W>S $\geq$ R  $\geq$  E  $\geq$  F, so, O > F)

## TCS NQT Reasoning Questions & Answers with Solutions - Paper 2



II. E<K: True (As  $K \ge W > S \ge R \ge E$ , so K > E)



III.  $F \le W$ : False (As  $W > S \ge R \ge E \ge F$ , so, W > F)

Hence, option b.

(41-42) In the question, assuming the given statements to be true, find which of the conclusion (s) among given three conclusions is /are definitely true and then give your answer accordingly.

18) Statements:  $Y \ge E > S \ge P \ge O$ ;  $D \le M < P$ ;  $D \le L = I$ 

Conclusions:

I. Y > I

II. E ≥ D

III. L > M

- a) Only conclusion II is true.
- b) Only conclusion I is true.
- c) Only conclusion III is true.
- d) All conclusions I, II and III are false.

Correct Choice: d

Solution

Given statements:  $Y \ge E > S \ge P \ge O$ ;  $D \le M < P$ ;  $D \le L = I$ 

On combining, we get

 $Y \ge E > S \ge P > M \ge D \le L = I$ 

Conclusions:

I. Y>I: False (As  $Y \ge E>S \ge P>M \ge D \le L=I$ , the relation between Y and I cannot be determined)

II.  $E \ge D$ : False (As  $E > S \ge P > M \ge D$ , so E > D)

III. L>M: False (As  $M \ge D \le L$ , the relation between L and M cannot be determined)

# TCS NQT Reasoning Questions & Answers with Solutions - Paper 2





### Topic – Ordering & Ranking

(43-44) Directions: Answer the questions based on the information given below.

Seven cars P, Q, R, S, T, U and V have different weights. Car Q is lighter than only V. Car T is heavier than car U and car S. Number of cars heavier and lighter than car R is equal. Car P is heavier than car U, which is not the lightest.

- 19) How many cars are heavier than car T?
  - a. Three
  - b. Two
  - c. Four
  - d. Cannot be determined

Correct Choice: d

**Solution** 

Clues: Car Q is lighter than only V. Car T is heavier than car U and car S. Number of cars heavier and lighter than car R is equal. Car P is heavier than car U, which is not the lightest.

Inference: So, car V must be the heaviest. Also, car R must be the 4<sup>th</sup> heaviest as equal number of cars are heavier and lighter than car R. Since, car U is not the lightest. So, car S must be the lightest.

Either two or four cars are heavier than car T.



20) Which of the following car is the lightest?

a. Car U

b. Car Q

c. Car V

d. Car S

Correct Choice: d

#### **Solution**

Clues: Car Q is lighter than only V. Car T is heavier than car U and car S. Number of cars heavier and lighter than car R is equal. Car P is heavier than car U, which is not the lightest.

Inference: So, car V must be the heaviest. Also, car R must be the 4<sup>th</sup> heaviest as equal number of cars are heavier and lighter than car R. Since, car U is not the lightest. So, car S must be the lightest.

Car S is the lightest.



### Topic – Conditions Based Puzzle

(45-46) Directions: Answer the questions based on the information given below.

Seven persons P, Q, R, S, T, U and V go for a trip to cities among Lucknow, Delhi, Mumbai, Pune, Patna and Chennai. Two persons go for a trip to same city. Each of them has different number of bags from 1 to 7.

Person, who goes to Delhi has 4 bags. T has one more bag than that of U. V goes to Patna and has 7 bags. Only S goes to Pune. P has 3 bags. Q has prime number of bags. Neither P nor Q goes to Chennai or Delhi. Persons, who go to the same city have even number of bags. R and T go to same city. No one goes to same city to which U goes. S does not have 4 bags. Person, who goes to Chennai, does not have 1 bag.

- 21) T goes to \_\_\_\_\_.
  - a. Delhi
  - b. Chennai
  - c. Mumbai
  - d. Pune

Correct Choice: a

#### Solution

Starting point: Here, we can start with the directly given information and then using the statement related to Q in order to make two cases.

Clues: V goes to Patna and has 7 bags. Only S goes to Pune. P has 3 bags. Q has prime number of bags. Neither P nor Q goes to Chennai or Delhi. Persons, who go to the same city have even number of bags. No

## TCS NQT Reasoning Questions & Answers with Solutions - Paper 2



one goes to same city to which U goes.



Inference: So, Q has either 2 or 5 bags.

## Case 1:

Persons	Cities	Number of bags
Р		3
Q		2
R		
S	Pune	
Т		
U		
V	Patna	7

## Case 2:

Persons	Cities	Number of bags
Р		3
Q		5
R		
S	Pune	
Т		
U		

# TCS NQT Reasoning Questions & Answers with Solutions - Paper 2



V	Patna	7



Clues: T has one bag more than that of U. S does not have 4 bags.

## Case 1:

Persons	Cities	Number of bags
Р		3
Q		2
R		4
S	Pune	1
Т		6
U		5
V	Patna	7

## Case 2:

Persons	Cities	Number of bags
Р		3
Q		5
R		4
S	Pune	6
Т		2
U		1

# TCS NQT Reasoning Questions & Answers with Solutions - Paper 2



V	Patna	7



Clues: Person, who goes to Delhi has 4 bags. Person, who goes to Chennai, does not have 1 bag.

Inference: So, case 2 is rejected as person, who goes to Chennai does not have 1 bag.

Persons	Cities	Number of bags
Р	Lucknow/Mumbai	3
Q	Mumbai/Lucknow	2
R	Delhi	4
S	Pune	1
Т	Delhi	6
U	Chennai	5
V	Patna	7

So, T goes to Delhi.

Hence, option a.

22) What is the sum of number of bags of R and P?

- a. 6
- b. 7
- c. 2
- d. 3

Correct Choice: b

#### Solution

Starting point: Here, we can start with the directly given information and

## TCS NQT Reasoning Questions & Answers with Solutions - Paper 2



then using the statement related to Q in order to make two cases.



Clues: V goes to Patna and has 7 bags. Only S goes to Pune. P has 3 bags. Q has prime number of bags. Neither P nor Q goes to Chennai or Delhi. Persons, who go to the same city have even number of bags. No one goes to same city to which U goes.

Inference: So, Q has either 2 or 5 bags.

#### Case 1:

Persons	Cities	Number of bags
Р		3
Q		2
R		
S	Pune	
Т		
U		
V	Patna	7

### Case 2:

Persons	Cities	Number of bags
Р		3
Q		5
R		
S	Pune	

# TCS NQT Reasoning Questions & Answers with Solutions - Paper 2



Т		



U		
V	Patna	7

Clues: T has one bag more than that of U. S does not have 4 bags.

## Case 1:

Persons	Cities	Number of bags
Р		3
Q		2
R		4
S	Pune	1
Т		6
U		5
V	Patna	7

## Case 2:

Persons	Cities	Number of bags
Р		3
Q		5
R		4
S	Pune	6

# TCS NQT Reasoning Questions & Answers with Solutions - Paper 2



Т	2



U		1
V	Patna	7

Clues: Person, who goes to Delhi has 4 bags. Person, who goes to Chennai, does not have 1 bag.

Inference: So, case 2 is rejected as person, who goes to Chennai does not have 1 bag.

Persons	Cities	Number of bags
Р	Lucknow/Mumbai	3
Q	Mumbai/Lucknow	2
R	Delhi	4
S	Pune	1
Т	Delhi	6
U	Chennai	5
V	Patna	7

The sum of number of bags of R and P = 4 + 3 = 7.



# Topic – Counting the Number of Figures

23) How many triangles are there in the following figure?



- a. 2
- b. 3
- c. 4
- d. More than 4

Correct Choice: c

Solution

There are 4 triangles present in the figure.



## Topic – Coding – Decoding (Direct Letter Coding)

24) In a code language, PRIVACY is written as IRPCAYV. How would FOUNDER be written in the same code?

- a. UOFEDRN
- b. UOFERDN
- c. UOEFDRN
- d. UOFEDNR

Correct Choice: a

#### Solution

First three letters of the word are written in reverse order followed by the second last letter of the word. Fifth letter (from the left end) is not unchanged. Last letter becomes the second last letter and fourth letter becomes the last letter, so FOUNDER is written as UOFEDRN.



# Topic – Letter Series

25) A letter series is given below in which some letters are missing. Select the option that gives the letters that can fill these blanks in that order.

cd\_efgg\_cd\_efg\_h\_dde\_ggh

- a. Dhdgef
- b. Dhegcf
- c. Dhdgcf
- d. Dhdgce

Correct Choice : c Solution

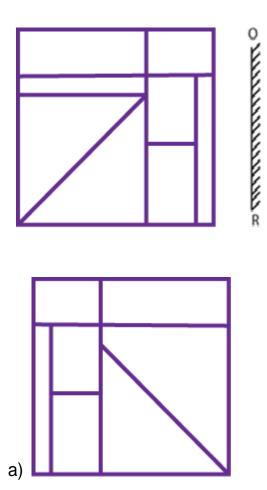
From option (c),

c d d e f g g h/c d d e f g g h

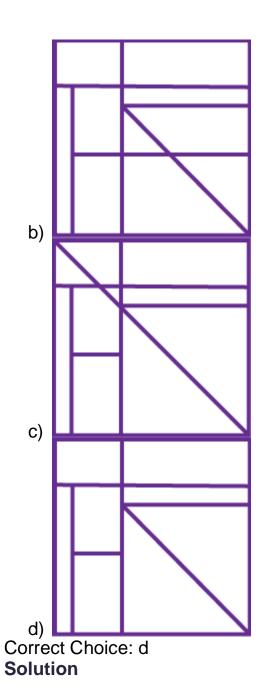


# Topic - Mirror Image

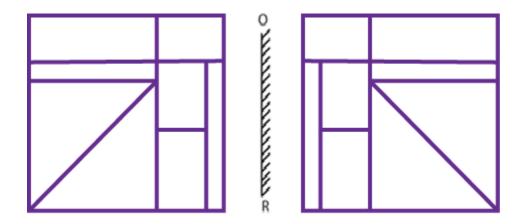
26) If a mirror is placed on the line OR, then which of the answer figures is the right image of the given figure?











Hence, option d.

# Topic - Matrix Coding - Decoding

27) In the question, a word is represented by only one set of number as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by 2 classes of alphabets as in two matrices given below. The columns and rows of matrix I are numbers from 0-4 and that of matrix II are numbers from 5-9. A letter from this matrix can be represented 1<sup>st</sup> by its row and next by its column. Ex- 'A' can be represented by 30 etc. and 'B' can be represented by 23, 43, 57 etc. Similarly, you have to identify the set of word 'POVERTY'.

Matrix - I

	0	1	2	3	4
0	U	J	G	D	E
1	М	С	Н	J	K
2	Т	0	Р	В	Χ
3	А	N	V	X	Z

# TCS NQT Reasoning Questions & Answers with Solutions - Paper 2



4	Н	Υ	R	В	С



#### Matrix - II

	5	6	7	8	9
5	U	K	В	С	D
6	K	Р	С	Х	W
7	М	В	Н	F	R
8	S	Y	Е	F	V
9	I	Α	K	Υ	R

- a) 22, 12, 23, 04, 79, 20, 41
- b) 66, 21, 32, 87, 24, 02, 98
- c) 66, 21, 32, 87, 42, 20, 98
- d) 66, 21, 32, 78, 42, 20, 98

Correct Choice: c

#### **Solution**

As the digits of the numbers represented by columns and rows respectively,

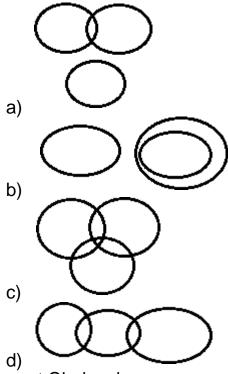
Р	0	V	Е	R	Т	Υ
22, 66	21	32, 89	04, 87	42, 79, 99	20	41, 98, 86



# Topic - Logical Venn Diagram type -1

28) Select the Venn diagram that best illustrates the relationship between the following classes:

Neptune, Sun, Stars

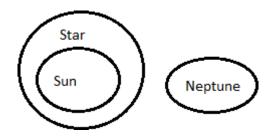


Correct Choice: b

**Solution** 

Following Venn diagram represents the relation between Neptune, Sun and Stars





Hence, option b.

### Topic – Completing the Analogous pair

29) Select the option that is related fifth term in the same way as the second term is related to the first term and the fourth term is related to the third term:

9643 : 11 :: 3278 : 10 :: 8976 : ?

a. 17

b. 14

c. 15

d. 13

Correct Choice: c

Solution

Second term is half the sum of all the digits of first term.

i.e. Second term =  $\frac{1}{2}$  × (9 + 6 + 4 + 3) =  $\frac{1}{2}$  × 22 = 11.

Fourth term is twice the sum of all the digits of third term.

i.e. Fourth term =  $1/2 \times (3 + 2 + 7 + 8) = \frac{1}{2} \times 20 = 10$ .

Sixth term is twice the sum of all the digits of fifth term, so

Sixth term =  $\frac{1}{2} \times (8 + 9 + 7 + 6) = \frac{1}{2} \times 30 = 15$ .



### Topic – Syllogisms

30) Three statements are given followed by three conclusions numbered I, II, and III assuming the statements to be true, even if they seem to be at variance with commonly known facts. Decide which of conclusion logically follow(s) from the statement.

Statements: https://www.freshersnow.com/placement-papers-download/

No planets are stars.

All stars are satellites.

No satellites are mars.

Conclusions:

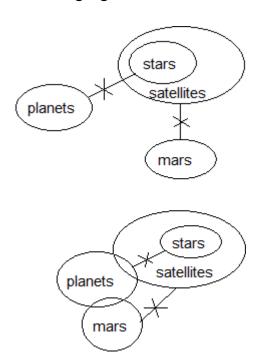
- I. No planets are satellites.
- II. Some stars are mars.
- III. Some mars being planets is a possibility.
  - a) Only conclusion I follows
  - b) Only conclusion III follows
  - c) Conclusion I and conclusion III follow
  - d) Conclusion II and conclusion III follow

Correct Choice:b



### **Solution**

Following figure can be formed from the statements:



Only conclusion III follows.