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Part 3 of 5

# **Introduction Part 3 of 5**

After tremendous feedback from of group members, I am presenting this 3<sup>rd</sup> Part of short notes series. Pehlay 2 parts main main nay taqreban tamam basic chezain discuss ki hain jo Analytical Reasoning k problems ko solve karnay k liye zarori ho sakti hain. In part 3, main nay ye discuss kiya hai

- Different Categories of Analytical Reasoning Problems
- Explanation of First two categories of Analytical Reasoning Problems with the help of solved example problem

Ab baqi 2 parts main b main different categories ka aik aik question with explanation solve karon ga aur apko suggest karon ga k first 2 parts achi tara parh lain q k agar apko first 2 parts clear hain to apko questions solve karnay main koi masla nahein hoga.

Aur jatay jatay wohi purani bat kahon ga k is portion ko karnay k liye aik shart hai aur wo hai PRACTICE. With practice aap is section main surely 70% plus score kar saktay hain.

#### DIFFERENT CATEGORIES OF ANALYTICAL REASONING PROBLEMS

On the basis of nature of questions, Analytical Reasoning problems can be divided into one of the following categories.

- 1. Straight Order
- 2. Scattered Order
- 3. Suitable Selections
- 4. Table Seating Arrangements
  - a. Circular Table Arrangements
  - b. Rectangular Table Arrangements
- 5. Comparison Problems
- 6. Networking Problems
- 7. Matrix Problems
- 8. Relationship Problems

Ho sakta hai k different books main ye method kisi aur name say available hon. Main nay wo name use kiye hain jo us book main diye gaye hain jisko main follow kar raha hon.

In GAT General about 90% and sometimes 100% questions belong to first four categories. Jitnay test main nay abi tak diye hain un main mostly 40% questions first category k hotay thay. 30% second category k. 20% third category k aur 10% fourth category k. Lekin iska ye har giz matlab nahein k baqi 4 categories ka kabi question nahein aaya. So, prepare all methods but give more concentrattion on first four categories as compared to last four categories. Now, I will explain first two categories in this part.

#### 1) Straight Order

The simplest and most commonly analytical reasoning questions are straight order questions. This kind of problems normally starts with this kind of statements;

- Five people standing in a line
- Twelve people in a street in twelve houses
- Six runners in a race etc

## 2) Scattered Order

A little bit tough as compared to Straight Order problems but not toughest.

These kind of problems normally start with

- There are five chairs and four persons
- There are ten people and six rooms
- There are three people and five dishes etc . . .

In dono ka faraq ab ko main tabular form main samjata hon

Straight Order	Scattered Order			
Ye Analytical Problems ki sab say simple type	Ye Analytical Problems ki thori c tough type			
hoti hai	hoti hai			
Is main aam tor par tamam individuals ko 1, 1	Is main aam tor par tamam individuals ko 1, 1			
jaga mil jati hai. Is ko main nay nechay aik	y nechay aik jaga nahein milti. Is ko main nay nechay aik			
example say clear kiya hai	example say clear kiya hai			
Example: Aik street main 6 ghar hain aur un	Example: Aik street main 6 ghar hain aur un			
main total 6 log rehtay hain. Is main zarori hai	main total 10 log rehtay hain. Is main zarori			
k har ghar main 1 he banda aaye. Aur koi b	b nahein k har ghar main 1 he banda aaye. Kisi			
ghar khali na ho.	main 1 say zayada b ho saktay hain aur kisi			
	main koi b nahein ho sakta.			
Ye mostly symbols main summarize kar k	In main aksar symbols k sath sath graphically b			
solve ho jatay hain	conditions ko summarize karna parta hai			
Mostly GAT main nearly 40% questions	Mostly GAT main nearly 30% questions			
Straight order k hotay hain.	Scattered order k hotay hain.			
Ye solve honay main sab say kam time lete	Ye solve honay main zayada time lete hain.			
hain				

*Important Note:* Analytical Problems chahay kisi b category k hon agar hum wo tamam basic rules aur precautions ko follow karain jo pehlay 2 parts main explain ki gai hain to ap har type k questions ko easily solve kar lain gay.

Now let us solve one question of straight order. But before solving please make it sure k pehlay 2 parts apko mukamal clear hain.

## <u>Problem Statement – Straight Ordering:</u>

In a school function six students J,K,L,M,N and O are sitting in front row of six seats. All six seats are numbered from 1 to 6. Only one person is sitting in one seat.

- i) J is sitting neither in seat 1 nor in seat 6.
- ii) N is not sitting next to L.
- iii) N is not sitting next to K.
- iv) O is sitting to the immediate left of N.

# **Questions 1 to 6:**

- 1 Which of the following seating arrangements, given in order from seat 1 to 6, is acceptable?
  - A) L, M, K, O, N, J
  - B) L, J, M, O, N, K
  - C) L, N,O, J, M, K
  - D) K, J, L, O, M, N
  - E) M, K, O, N, J, L
- 2 All of the following seating arrangements, given in order from 1 to 6, are acceptable EXCEPT:
  - A) M, J, L, K, O, N
  - B) K, J, O, N, M, L
  - C) K, O, N, J, M, L
  - D) L, O, N, J, K, M
  - E) K, J, O, N, L, M
- 3 If L is in seat 1 and K is in seat 5, which of the following must be true?
  - A) J is in seat 2
  - B) M is in seat 3

C) N is in seat 4
D) O is in seat 4
E) M is in seat 6
4 – If M and O are in seats 2 and 3 respectively, which of the following must be true?
A) J is in seat 5
B) K is in seat 3
C) L is in seat 1
D) L is in seat 6
E) N is in seat 5
5 – If K and L are separated by exactly three seats, what is the maximum number of differen
arrangements in which the six people could be seated?
A) 1
B) 2
C) 3
D) 4
E) 5
6 – If K is in seat 2, which of the following is a complete and accurate listing of the seats which
O could occupy?
A) 1
B) 3
C) 3 and 4
D) 1, 3 and 4
E) 3, 4 and 5

# **Solution**

First of all we will summarize our initial conditions either as per methods given in many books or by our own developed signs.

- i)  $J \neq (1 \text{ v } 6)$
- ii)  $N \neq L$
- iii)  $N \neq K$
- iv)  $O \longrightarrow N$

Ab hum ye dekhain gay k kaya hum initial conditions ko use kartay hoye further conclusions nikaal saktay hain ya nahein.

G han hum yahan say further conclusions nikaal saktay hain. Hum in conditions ko use kartay hovay kai possible seating arrangements nikaal saktay hain lekin is kaam main kafi zayada time lag jaye ga is liye filhaal hum further conclusions ko chor kar agay move karain gay. Pehlay main sab questions k just answer don ga aur aap b inko pehlay khud hal kar k dekhain k kaya aap k answer nechay diye gaye answers k sath tally kartay hain ya nahein. Us k baad in answers ki main explanation don ga.

# **Answers**

- 1 E
- 2 E
- 3 E
- 4 A
- 5 D
- 6 E

#### **Explanations**

#### **Question – 1**

Which of the following seating arrangements, given in order from seat 1 to 6, is acceptable?

- A) L, M, K, O, N, J
- B) L, J, M, O, N, K
- C) L, N,O, J, M, K

- D) K, J, L, O, M, N
- E) M, K, O, N, J, L

# **Explanatory Answer**

Is par hum wohi "Choice Elimination Method" use karain gay.

Aur main isko "Elimination of Choices by using Initial Conditions" solve karon ga.

Is method main hum bari bari kar k aik aik initial condition pakrain gay aur usay tamam options par apply karain gay. Jo rule kisi b option par satisfy nahein hoga wo choice hum eliminate kar dain gay. Is tara end par hamaray pas sirf aik he option bachay ge jis par tamam rules apply hon gay aur wohi hamara answer hoga.

#### Let us check Condition i:

- Not Satisfied with Option A
- Satisfied with Option B
- Satisfied with Option C
- Satisfied with Option D
- Satisfied with Option E

Condition i k mutabiq J 1<sup>st</sup> ya 6<sup>th</sup> seat par nahein ho sakta jab k option A main J 6<sup>th</sup> seat par hai. Is live option A yaheen par eliminate ho jaye ge

#### Let us check Condition ii:

- Option A is already eliminated so no need to check
- Satisfied with Option B
- Not Satisfied with Option C
- Satisfied with Option D
- Satisfied with Option E

Condition ii main bara clear likha hova hai k N, L k sath nahein bethay ga. Jab k option C main N aur L ekathay bethay hoye hain so, option C is also eliminated.

#### Let us check Condition iii:

- Option A is already eliminated so no need to check
- Not Satisfied with Option B
- Option C is already eliminated so no need to check
- Satisfied with Option D
- Satisfied with Option E

Condition iii main likha hova hai k N aur K aik sath nahein bethain gay. Jab k option B main N aur K ekathay bethay hoye hain so, option B is eliminated as well.

#### Let us check Condition iv:

- Option A is already eliminated so no need to check
- Option B is already eliminated so no need to check
- Option C is already eliminated so no need to check
- Not Satisfied with Option D
- Satisfied with Option E

Condition iv kehti hai k O hamesha N k foran left side par aaye ga jab k option D main aisa nahein hai. So, after testing all initial conditions on Answering options, only E is left which satisfies all given initial conditions. So, right answer is E.

Precautionary Note: Agar choice elimination method k baad aap k paas aik say zayada answering options aa rahi hain to iska matlab hai k aap koi chez overlook kar gaye hain. Aur agar koi b choice nahein aa rahi to iska matlab hai k aap nay summarize kartay waqt koi condition galat interpret kar de hai. So, be careful.

#### Question -2

All of the following seating arrangements, given in order from 1 to 6, are acceptable EXCEPT:

- A) M, J, L, K, O, N
- B) K, J, O, N, M, L
- C) K, O, N, J, M, L

- D) L, O, N, J, K, M
- E) K, J, O, N, L, M

## **Explanatory Answer**

Jab b aap question ko parhain to ye zaror dekhain k akhar hum say pocha kaya gaya hai. Jesa k is question main 5 arrangements de gai hain aur pocha gaya hai k kon c arrangement thek nahein hai. To iska matlab ye hoa k hamari de gai conditions question main de gai 4 options ko completely satisfy karain ge aur sirf aik option aisi ho ge jis par koi na koi condition violate ho ge.

Again ye question b "Choice Elimination Method" say ho jaye ga. Aur main isko b "Elimination of Choices by using Initial Conditions" solve karon ga.

#### Let us check Condition i:

- Satisfied with Option A
- Satisfied with Option B
- Satisfied with Option C
- Satisfied with Option D
- Satisfied with Option E

Kisi b option main J na to 1<sup>st</sup> position par hai aur na he 6<sup>th</sup> par. Iska matlab hai k pehli condition to sab he options ko satisfy kar rai hai so now we will move towards another option.

#### Let us check Condition ii:

- Satisfied with Option A
- Satisfied with Option B
- Satisfied with Option C
- Satisfied with Option D
- Not Satisfied with Option E

Option E main N aur L ekathay bethay hain jo hamari condition ki violation hai. Question main jo chez pochi gait hi hamain us ka answer mil gaya hai k Option E ki arrangement acceptable nahein ho ge.

Agar aap chahain to yaheen par ye question chor kar next question ki taraf move kar saktay hain lekin main apko suggest karon ga k aap baqi dono conditions b lazmi check kar lain ta k apko pata chal jaye k aap nay kahein koi galiti to nahein ki.

#### Let us check Condition iii:

- Satisfied with Option A
- Satisfied with Option B
- Satisfied with Option C
- Satisfied with Option D
- Option E is already eliminated so no need to check

Condition iii b pehli 4 options par fully satisfied hai.

#### Let us check Condition iv:

- Satisfied with Option A
- Satisfied with Option B
- Satisfied with Option C
- Satisfied with Option D
- Option E is already eliminated so no need to check

Condition iii b pehli 4 options par fully satisfied hai. Iska matlab k hum nay question main koi galti nahein ki hai. Sirf option E aik aisi arrangement hai jis par condition violate hoti hai so our Answe is Option E.

#### Question -3

If L is in seat 1 and K is in seat 5, which of the following must be true?

- A) J is in seat 2
- B) M is in seat 3

C) N is in seat 4

D) O is in seat 4

E) M is in seat 6

## **Explanatory Answer**

Ye question tricky hai q k is main 2 extra conditions de hoi hain. Aur main nay part 1 main explain kiya tha k agar kisi question main koi extra condition ho to wo sirf usi question k liye valid hoti hai aur agar extra condition kisi b initial condition k sath contradict kar rahi ho to wo initial condition sirf is aik question k liye invalid ho ge.

Chalain hum zara dekh he lete hain k kaya koi initial condition extra condition k sath contradict to nahein kar rahi

#### **Initial Conditions**

i)  $J \neq (1 \text{ v } 6)$ 

ii)  $N \neq L$ 

iii)  $N \neq K$ 

iv)  $O \longrightarrow N$ 

#### Extra Conditions given in question number 3

a) L=1

b) K = 5

Oper de gai conditions say clear hai k koi b extra condition initial condition k sath contradict nahein kar rahi. Is liye question 3 ko solve karnay k liye hum ye sari 6 ki 6 conditions ko use karain gay.

Ab atay he sawal ki taraf to hum say "MUST BE TRUE" pocha gaya hai. Is question ko solve karnay k liye hamain dekhna paray ga k de gai conditions say kitnay possible seating arrangements ban saktay hain. All possible seating arrangements with Initial conditions and Extra conditions are given below,

According to extra conditions, L 1<sup>st</sup> seat par hoga aur K 5<sup>th</sup> seat par hoga.

1 2 3 4 5 6 L K

Ab Initial condition i ko dekhain to hamain ye zaror pata chalta hai k J 1<sup>st</sup> ya 6<sup>th</sup> par nahein aaye ga. To iska matlab J 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> ya 5<sup>th</sup> par aaye ga. Lekin 5<sup>th</sup> par to K aa chukka hai to it means J ab 2<sup>nd</sup>, 3<sup>rd</sup> ya 4<sup>th</sup> par aaye ga lekin clear nahein hai k kis par aaye ga. Is liye waqt tor par hum is condition ko chor kar agay move karain gay.

Ab initial condition ii kehti hai N aur L ekathay nahein aa saktay isi tara initial condition iii kehti hai k N aur K ekathay nahein aa saktay. Yahan say ye pata chalta hai k hum N ko 2<sup>nd</sup>, 4<sup>th</sup> aur 6<sup>th</sup> seat par nahein bitha saktay to phir sirf 3<sup>rd</sup> seat he bachti hai jahan N beth sakta hai. So,

1 2 3 4 5 6 L N K

Initial condition iv k hisaab say O hamesha N k left main hona chahiye, so,

1 2 3 4 5 6 L O N K

Ab first initial condition k hisab say J 6<sup>th</sup> par nahein hoga, so

1 2 3 4 5 6 L O N J K

Ab aik he student bacha hai lehaza last seat usay mil jaye ge

1 2 3 4 5 6 L O N J K M

Oper jo seating arrangement de gai hai given conditions k hisaab say sirf yehe 1 possible arrangement hai.

Ab hum apni answering options ko bari bari is arrangement say compare karain gay.

**Option A**: False, q k oper de gai arrangement main J to 4<sup>th</sup> par hai.

**Option B**: False, q k oper de gai arrangement main M to 6<sup>th</sup> seat par hai.

**Option C**: False, q k oper de gai arrangement main N to 3<sup>rd</sup> seat par hai.

**Option D**: False, q k oper de gai arrangement main O 2<sup>nd</sup> seat par hai.

**Option E**: True, M waqai oper de gai arrangement main 6<sup>th</sup> seat par hai.

So, our correct answer is option E.

## **Question – 4**

If M and O are in seats 2 and 3 respectively, which of the following must be true?

- A) J is in seat 5
- B) K is in seat 3
- C) L is in seat 1
- D) L is in seat 6
- E) N is in seat 5

## **Explanatory Answer**

Ab is question main b 2 extra conditions de hoi hain. Aur isko b hum pichlay question ki tara apni initial conditions say compare karain gay.

Chalain hum zara dekh he lete hain k kaya koi initial condition extra condition k sath contradict to nahein kar rahi

## **Initial Conditions**

- v)  $J \neq (1 \text{ v } 6)$
- vi)  $N \neq L$
- vii)  $N \neq K$
- viii) O —> N

Extra Conditions given in question number 3

- c) M=2
- d) O = 3

Oper de gai conditions say clear hai k koi b extra condition initial condition k sath contradict nahein kar rahi. Is liye question 3 ko solve karnay k liye hum ye sari 6 ki 6 conditions ko use karain gay.

Ab atay he sawal ki taraf to hum say "MUST BE TRUE" pocha gaya hai. Is question ko solve karnay k liye hamain dekhna paray ga k de gai conditions say kitnay possible seating arrangements ban saktay hain. All possible seating arrangements with Initial conditions and Extra conditions are given below,

According to extra conditions, L 1<sup>st</sup> seat par hoga aur K 5<sup>th</sup> seat par hoga.

1 2 3 4 5 6 M O

According to Initial condition iv, O hamesha N k left main hoga, so,

1 2 3 4 5 6 M O N

According to Initial condition i, J 1<sup>st</sup> aur 6<sup>th</sup> par nahein aaye ga aur oper wali arrangement main J k liye sirf aik he seat bachti hai aur wo hai 5<sup>th</sup> seat.

1 2 3 4 5 6 M O N J

According to initial condition ii and iii, K aur L kabi b N k sath nahein hon gay, lehaza 1<sup>st</sup> aur 6<sup>th</sup> main hum jahan b K ya L ko rakh lain koi b condition violate nahein ho ge. It means hamari 2 arrangements possible ho jayein ge is question main jo main nay nechay likh de hain.

1 2 3 4 5 6 K M O N J L

## L M O N J K

Oper jo 2 seating arrangements nikli hain ab hum apni answering options ko is k sath compare karain gay.

**Option A**: True, q k oper de gai arrangement main J to 5<sup>th</sup> par hai.

**Option B**: False, q k oper de gai arrangement main K ya to 1<sup>st</sup> par hai aur ya to 6<sup>th</sup> seat par hai.

**Option C**: May be, q k oper de gai 1 arrangement main L 1<sup>st</sup> par aa to raha hai lekin dosri arrangement main L 6<sup>th</sup> par aa raha hai.

**Option D**: May be, q k oper de gai 1 arrangement main L  $6^{th}$  par aa to raha hai lekin dosri arrangement main L  $1^{st}$  par aa raha hai.

**Option E**: False, q k oper de gai dono arrangements main N 4<sup>th</sup> seat par hai.

An yahan par masla ye hai k answer kaya hai. Hamain lagay ga k A b answer hai C b answer hai D b answer hai. Lekin answer to sirf 1 he hona chahiye. It means we are overlooking something. Lekin Kaya . . .

Zara question dobara parhain hum say pocha gaya tha "MUST BE TRUE"

It means aisa answer jo har possible arrangement main true ho. Option C aur D ka answer aik arrangement main to true ho sakta hai magar dosri arrangement main galat hai. Jab k Option A dono arrangement main true result day rahi hai,

So, our correct answer is option A.

# $\underline{Ouestion-5}$

If K and L are separated by exactly three seats, what is the maximum number of different arrangements in which the six people could be seated?

- A) 1
- B) 2
- C) 3
- D) 4

E) 5

# **Explanatory Answer**

Ab is question main b extra condition day de gai hai jo hamari initial condition say contradict nahein kar rahi.

Is question main hum say pocha gaya hai "COULD BE". Iska matlab hai k answer tamam possible solutions hon gay. Now, let us move towards its solution

According to given extra condition, K aur L k darmayan 3 seats ka difference hona chaiye. Is condition say hum dekh lete hain k kitnay possible seating arrangement ban saktay hain.

1 2 3 4 5 6
L K
K
K
L L

Given extra condition nay hamain 4 possible arrangement diye hain. Lekin ab hum in par Initial condition apply kar k dekhain gay k 4 ki 4 arrangements pori hoti b hain k nahein

Ab Initial condition iv k mutabiq

1 2 3 5 6 4 L  $\mathbf{0}$ K  $\mathbf{N}$ K L 0 N K  $\mathbf{N}$  $\mathbf{L}$ 0 K 0 N  $\mathbf{L}$ 

Ab condition i k mutabiq

2 3 4 5 6 1 L  $\mathbf{0}$ N J K  $\mathbf{L}$ N J 0 K K 0 N J  $\mathbf{L}$ K  $\mathbf{L}$  $\mathbf{0}$ N J

Ab aik he student bacha hai lehaza wo last vacant seat par aa jaye ga

2 5 6 1 3 4 L  $\mathbf{0}$ N J K  $\mathbf{M}$ M L N J K 0  $\mathbf{0}$ N J  $\mathbf{L}$ M K K L  $\mathbf{M}$  $\mathbf{0}$  $\mathbf{N}$ J

Oper diye gaye charo arrangements hamari tamam initial plus extra conditions ko satisfy karti hain.

So, correct answer is option D

# **Question-6**

If K is in seat 2, which of the following is a complete and accurate listing of the seats which O could occupy?

- A) 1
- B) 3
- C) 3 and 4
- D) 1, 3 and 4
- E) 3, 4 and 5

# **Explanatory Answer**

One more question with an extra condition asking us about "COULD BE". So, all possible arrangements with different placement of O will be our solution.

According to given extra condition

According to Initial condition iv O hamesha N k immediate left main hoga. Iska matlab hai k O ko hum 1<sup>st</sup> aur 6<sup>th</sup> par nahein rakh saktay. Is k elawa har jaga yani 3<sup>rd</sup>, 4<sup>th</sup> aur 5<sup>th</sup> par aa sakta hai.

Now let us check these possible arrangements with placing O at number 3, 4 and 5.

So, our correct answer is option E.

# **Problem Statement - Scattered Ordering**

Six individuals P, Q, R, S, T and U live in a five story building flats. Each person lives on one of the floors in the building.

- I) Exactly one of the six lives on the first floor.
- II) Exactly one of them lives on the fourth floor.
- III) At least two of them lived on the second floor.
- IV) P lives on the highest floor.
- V) No one lives on the same floor as P.
- VI) Q does not live on the first floor or on the second floor.
- VII) Neither R nor S lives on the second floor.

## **Questions 7 to 9:**

- 7 All of the following must be true EXCEPT
  - A) Exactly two persons live on the second floor
  - B) At most, one person lives on fifth floor
  - C) At least one person lives on fifth floor
  - D) At least one person lives on third floor
  - E) P does not live on second floor
- 8 Which of the following could be true?
  - A) Either Q or R lives on the third floor
  - B) T and U do not live on the second floor
  - C) T and U live on the third floor
  - D) T lives on the first floor
  - E) U lives on the fourth floor
- 9 If P lives on a floor directly above the floor on which R lives, then which of the following must be true?
  - A) R lives on a higher floor than Q
  - B) R and Q live on the same floor

- C) T and U live on the different floor
- D) Q lives on the third floor
- E) S lives on the second floor

## **Solution**

In this question we will summarize initial conditions with symbols as well as with graphical representation.

## Summarization of initial conditions with the help of symbols

- I) Floor 1 = 1 person only
- II) Floor 4 = 1 person only
- III) Floor  $2 \ge 2$  persons
- IV) Highest Floor = P only
- V)  $P \neq Q v R v S v T v U$
- VI)  $Q \neq \text{Floor 1 v Floor 2}$
- VII) R v S  $\neq$  Floor 2

*Important Note:* Yaad rakhiye ga k aap Scattered Order ka question solve kar rahay hain. So, it is not compulsory k tamam floors par koi n koi rahay.

## Summarization of initial conditions with the help of graph

Number of Floor	Persons
5	
4	Exactly One
3	
2	At least Two, Not Q, Not R, Not S
1	Exactly 1, Not Q

Important Note: Zarori nahein k initial conditions hamesha symbols say he represent hon. Hum graph b use kar saktay hain aur bul k agar zarorat paray to hum symbols aur graph dono ko apnay method main use kar sakty hain.

#### Further conclusions

Kaya hum yahan say further conclusions nikaal saktay hain? G han bilkul hum nikaal saktay hain. Aur yahan par further conclusions ye hain.

Q k ye Scattered Order ka question hai to is liye ye zarori nahein hai highest floor 5<sup>th</sup> he hoga jis main P rehta hoga. Q k ho sakta hai k 5<sup>th</sup> Floor main koi b na rahay. So make it sure k P 5<sup>th</sup> main ho b sakta hai aur 4<sup>th</sup> main b.

Aik aur chez hum initial condition say nikaal saktay hain k q k diya gaya hai k floor 2 par kam az kam 2 log rahain gay. Aur ye b diya gaya hai k wo na to Q hoga na R hoga aur na he S hoga. Aur jahan tak baat hai P ki to wo  $2^{nd}$  par aa he nai sakta Q k us nay highest floor per rehna hai. To iska matlab hai k phir  $2^{nd}$  Floor par T aur U he rahain gay.

Number of Floor	Persons
5	
4	Exactly One
3	
2	Exactly Two, T and U
1	Exactly 1, Not Q

Ab ye further conclusions b hamain questions ko solve karnay main help karain gay.

#### **Answers**

7 - C

8 - A

9 - D

## **Explanations**

#### Question -7

All of the following must be true EXCEPT

- A) Exactly two persons live on the second floor
- B) At most, one person lives on fifth floor
- C) At least one person lives on fifth floor
- D) At least one person lives on third floor
- E) P does not live on second floor

## **Explanatory Answer**

"MUST BE TRUE" wala question hai to ap ye to samaj he gaye hon gay karna kaya hai. Is main pocha gaya hai k kon c choice thek nahein hai. Hamain koi extra condition nahein de gai to hum wohi apna all time favorite choice elimination method use karain gay. Lekin is dafa main choice elimination method ko apnay dono graphs k sath compare karon ga.

**Option A**: True, q k hamara further conclusion wala table ye zahar karta hai k waqai 2<sup>nd</sup> floor par sirf 2 he persons rehtay hain

**Option B:** True, q k highest floor par sirf P he ho sakta hai aur P k sath koi b nahein aa sakta lehaza 5<sup>th</sup> par zayada say zayada 1 he banda ho sakta hai.

**Option C:** False, 5<sup>th</sup> highest floor hai jahan par sirf P aa sakta hai aur P k sath koi b nahein reh sakta to wahan par zayada say zayada 1 banda reh sakta hai.

**Option D:** True, q k agar P 5<sup>th</sup> main aata hai to de hoi conditions k mutabiq aik person 4<sup>th</sup> par b rahay ga. Aik person 1<sup>st</sup> par rahay ga aur do 2<sup>nd</sup> par rahain gay. To phir jo aik banda bacha wo zahri baat hai 3<sup>rd</sup> floor par rahay ga.

**Option E:** True, q k highest floor jahan P rahay ga wo ya to 4<sup>th</sup> hai ya 5<sup>th</sup> hai.

So, our correct choice is Option C.

#### Question -8

Which of the following could be true?

- A) Either Q or R lives on the third floor
- B) T and U do not live on the second floor
- C) T and U live on the third floor

D) T lives on the first floor

E) U lives on the fourth floor

## **Explanatory Answer**

Contrarily to question number 7, is question main hum say pocha gaya hai de gai options main say "What Could be True"

So let us compare our options with our tables developed by Initial Conditions and Further Conclusions.

**Option A:** True, De hoi conditions k hisab say 3<sup>rd</sup> par waqai ya to Q aa sakta hai ya R aa sakta hai ya phir dono b aa saktay hain.

**Option B:** False, q k hamara further conclusion wala table ye bara clear batata hai k T aur U dono he  $2^{nd}$  Floor par hon gay.

**Option C:** False, same logic jo abi oper de hai.

**Option D:** False, q k as per Further Conclusion table, T lives on 2<sup>nd</sup> Floor

**Option E:** False, q k as per Further Conclusion table, U lives on 2<sup>nd</sup> Floor

So, correct answer is Option A.

## Question - 9

If P lives on a floor directly above the floor on which R lives, then which of the following must be true?

- A) R lives on a higher floor than Q
- B) R and Q live on the same floor
- C) T and U live on the different floor
- D) Q lives on the third floor
- E) S lives on the second floor

## **Explanatory Answer**

Hamain is question main aik extra condition de gai hai aur hum say pocha gaya hai k which "MUST BE TRUE".

Pehlay hum zara dekh lete hain k hum R ko kahan place kar saktay hain.

Number of	Persons	Number of Floor	Persons
Floor			
5		5	P
4	P	4	R
3	R	3	
2	T and U	2	T and U
1		1	

Iski sirf 2 he possible places hain. Q k hamain pata hai k highest floor par P aye ga. To P ya to 5<sup>th</sup> main ho ga ya 4<sup>th</sup> main. Lekin agar P ko 4<sup>th</sup> main rakhain to Baqi saray log 1<sup>st</sup> ya 3<sup>rd</sup> Floor par rakhnay parain gay lekin Q first par nahein aa sakta. Lehaza Q ko hum dono tables main 3<sup>rd</sup> Floor par he rakhain gay. Aur 1 person pehlay floor par hona b zarori hai. Dono possible arrangements nechay de gai hain.

Number of	Persons	Number of Floor	Persons
Floor			
5		5	P
4	P	4	R
3	R and Q	3	Q
2	T and U	2	T and U
1	S	1	S

Ab hum is table ko apni options k sath compare karain gay.

**Option A:** May be, q k left table main R aur Q aik he floor par hain jab k right walay table main R, Q say oper hoga. So this is not our answer q k hum nay must be true find karna hai.

**Option B:** May be, q k left table main R aur Q aik he floor par hain jab k right walay table main R, Q say oper hoga. So this is not our answer q k hum nay must be true find karna hai.

**Option C:** False, q k as per both tables T and U lives on the same floor.

**Option D:** True, as per both tables Q is placed in 3<sup>rd</sup> Floor.

**Option E:** False, q k both tables main S 1<sup>st</sup> floor par hai.

So, our correct answer is Option D.

# The End