

Analytical Reasoning – Short Notes

By Muhammad Usman Yousaf

Part 5 of 5

Introduction Part 5 of 5

At last with the grace of Allah, I am representing the last part of short notes series. It is unbelievable for me that at last I have done it. I am also thankful to all group members who encouraged me to keep writing.

Ye sab say lengthy part hai lekin is k pages k number dekh kar tension mat le jiye ga q k is main 5 categories k 1, 1 example ko discuss kiya gaya. Is main main ne ye cheezain cover ki hain.

- Table Seating Arrangement Problems with solved example
- Comparison Problems with solved example
- Networking Problems with solved example
- Matrix Problems with solved example
- Relationships Problems with solved example

In last but not least, I will say same thing . . . Key to Success to solve Analytical Problems is PRACTICE. With practice you can answer all questions correctly.

Important Note: Q k ye part bohat lengthy hai aut time b short hai is liye main nay examples k explanatory answers dene ki bajaye hints and answers diye hain. Baqi aap inko pehlay 2 parts main de gai techniques ko use kar k easily solve kar saktay hain.

DIFFERENT CATEGORIES OF ANALYTICAL REASONING PROBLEMS

Pehlay main zara apko remind karva don k different categories k name ye hain.

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

In main say pehli 3 categories ko main nay Part 3 aur Part 4 main explain kar diya hai. Ab is last main hum baqi sari types ko discuss kar lain gay.

4) Table Seating Arrangements

As per my information har GAT k test main at least 1 question table k relevant zaror hota hai. Table seating arrangement k questions normally 2 tara k hotay hain. Rectangle table aur Round table. Dono types k questions hum unhi basics ko follow kar k solve karain gay jo hum part 1 aur part 2 main discuss kar chukhay hain. Is type k questions mostly is tara start hotay hain.

- Six people sitting around a circular table
- 8 people sitting around a rectangle table etc

Ab zara hum dono types k baray main kuch faraq dekh lete hain.

Rectangle Table Problems	Circular Table Problems
Ye Circular Table Problems ki nisbat easy hotay hain	Ye Rectangle Table Problems ki nisbat tough hotay hain
Is may seating arrangement ka starting point easily define kiya ja sakta hai. K left side say karain ya right side say	Is main seating arrangement ka starting point define nahein kiya ja sakta q k table round hota hai to jahan say marzi start kar saktay hain
Easy to make arrangement q k hum aik table k 4 protions kar k dekh saktay hain k kon kahan aaye ga	Difficult to make arrangement q k hum table ko divide nahein kar saktay
Example: 8 Peoples seating around a rectangle table . . .	Example: 6 Peoples seating around a circular table . . .

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 Rectangle Table Seating Arrangement

Problem Statement – Rectangle Table Seating Arrangement:

Ten persons will sit around a table. The ten persons will be seated in two rows of five chairs that face each other along the two long sides of the rectangular table. The chairs are numbered consecutively from 1 to 10 with chairs 1 through 5 on one side of the table and chairs 6 through 10 on the other side, with chair 6 opposite chair 5. Five of the ten persons are men— F, G, H, J, and L—and five of the persons are women—M, R, S, T, and Y. The seating is governed by following rules:

- I) On each long side of the table, no more than two consecutive chairs can be occupied by men.
- II) T cannot sit beside H.
- III) F cannot sit beside G.
- IV) M must sit beside R.
- V) H must sit beside J.

Questions 13 to 17

13 – Which of the following can be the arrangement of people in chairs 1 through 5 ?

Chair 1 Chair 2 Chair 3 Chair 4 Chair 5

- A) F H J M R
- B) F G M T L
- C) L M R J H
- D) M G R Y L
- E) S F T H J

14 – If J is in chair 7, H is in chair 8, and F is in chair 10, which of the following can be in chair 9?

- A) L
- B) M
- C) R
- D) T
- E) Y

15 – If G, Y, and J are in chairs 1 through 3, respectively, which of the following must be in chair 5?

- A) F
- B) L
- C) R
- D) S
- E) T

16 – If T, S, F, L, and Y are in chairs 1 through 5, respectively, then G must be either in chair

- A) 6 or in chair 8
- B) 6 or in chair 10
- C) 7 or in chair 10
- D) 8 or in chair 9
- E) 8 or in chair 10

17 – If as many women as possible are seated on the side that has chairs numbered 1 through 5, which of the following statements must be true?

- A) Chair 3 is occupied by a man.
- B) Chair 8 is occupied by a woman.
- C) Chairs 1 and 2 are each occupied by a woman.
- D) Chairs 4 and 5 are each occupied by a woman.
- E) Chairs 5 and 6 are each occupied by a woman.

Solution

Due to shortage of time I am just providing hints to solution and answers. So try yourself.

Summarizing of statement and Initial conditions are given below,

Two Row of five Chairs

Men	F	G	H	J	L
Women	M	R	S	T	Y

Rules

Rule I, Men cannot sit on more than two consecutive Chairs

Rule II, $T \neq H \pm 1$

Rule III, $F \neq G \pm 1$

Rule IV, $M = R \pm 1$

Rule V, $H = J \pm 1$

Answers

13 – C

14 – E

15 – D

16 – B

17 – B

Hints

Question – 13

Which of the following can be the arrangement of people in chairs 1 through 5?

Chair 1 Chair 2 Chair 3 Chair 4 Chair 5

A) F H J M R

B) F G M T L

C) L M R J H

D) M G R Y L

E) S F T H J

Answer with Hints

1st Step: Check Rule I: A is wrong

2nd Step: Check Rule II: E is wrong

3rd Step: Check Rule III: B is wrong

4th Step: Check Rule IV: D is wrong

So, the correct answer is Option C

Question – 14

If J is in chair 7, H is in chair 8, and F is in chair 10, which of the following can be in chair 9?

- A) L
- B) M
- C) R
- D) T
- E) Y

Answer with Hints

	6	7	8	9	10
As question		J	H		F
As Rule I, G & L cannot sit,					
As Rule II, $T \neq H \pm 1$, so T cannot sit,					
As Rule IV, $M = R \pm 1$, so both M & R cannot sit					
Then remaining S & Y can sit		J	H	S/Y	F
Check the choices,					
So, the correct answer is Option E					

Question – 15

If G, Y, and J are in chairs 1 through 3, respectively, which of the following must be in chair 5?

- A) F
- B) L
- C) R
- D) S
- E) T

Answer with Hints

	1	2	3	4	5
As question	G	Y	J		
As Rule V, $H = J \pm 1$, so $H = 4$	G	Y	J	H	
As Rule I, Men cannot sit at 5					
As Rule II, $T \neq H \pm 1$, so T cannot sit					

As Rule IV, $M = R \pm 1$, so both M & R cannot sit

Then remaining S must be sit at 5

G Y J H S

So, the correct answer is Option D

Question – 16

If T, S, F, L, and Y are in chairs 1 through 5, respectively, then G must be either in chair

- A) 6 or in chair 8
- B) 6 or in chair 10
- C) 7 or in chair 10
- D) 8 or in chair 9
- E) 8 or in chair 10

Answer with Hints

Remaining Men = G, H, J

Remaining Women = R, M

As Rule I, G, H, J cannot sit together

As Rule V, $H = J \pm 1$, so H & J must sit together

As Rule IV, $M = R \pm 1$, so M & R must sit together

Then only two possibility of sitting are as

6 7 8 9 10

Option 1

G R M H J

Option 2

J H M R G

Check the choices,

So, the correct answer is Option B

Question – 17

If as many women as possible are seated on the side that has chairs numbered 1 through 5, which of the following statements must be true?

- A) Chair 3 is occupied by a man.
- B) Chair 8 is occupied by a woman.

- C) Chairs 1 and 2 are each occupied by a woman.
- D) Chairs 4 and 5 are each occupied by a woman.
- E) Chairs 5 and 6 are each occupied by a woman.

Answer with Hints

As many Women as possible are Chaired on first bench, then on second bench few Women as possible as will be chaired.

There is only one restriction of Rule I, if four Men are Chaired on second bench then one Woman will

be Chaired between them and that Chair will be 8th.

6	7	8	9	10
M	M	W	M	M

So, the correct answer is Option B

Problem Statement – Circular / Round Table Seating Arrangement:

Six students—F, G, H, I, J, and K—are to be seated at a round table for group study. There are six seats around the table. Each student sits facing the center of the table and is directly opposite a student across the table. The seating arrangement is subject to the following restrictions:

- I) K cannot sit next to H.
- II) J cannot sit next to F.
- III) I must sit next to F.

Questions 18 to 22

18 – If I sit next to J on J's right side, who must sit next to I on I's right side?

- A) F
- B) G
- C) H
- D) J
- E) K

19 – Which of the following is an acceptable sequence of students around the table?

- A) F, J, I, K, H, G
- B) F, J, K, H, I, G
- C) K, G, H, J, F, I
- D) K, I, F, H, J, G
- E) K, J, I, F, G, H

20 – If F sits next to H, which of the following is a complete and accurate list of those who can sit next to H on H's other side?

- A) G
- B) G, J
- C) G, J, I
- D) I, J, K
- E) G, I, J, K

21 – If K sits next to F and J sits next to I, which of the other students must sit next to J?

- A) F
- B) G
- C) H
- D) I
- E) K

22 – If K sits directly across the table from G, who must sit on either side of H?

- A) F and G
- B) F and J
- C) G and I
- D) G and J
- E) I and K

Solution

Due to shortage of time I am just providing hints to solution and answers. So try yourself.

Summarizing of statement and Initial conditions are given below,

Students	F	G	H	I	J	K
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Rules

Rule I: $K \neq H \pm 1$

Rule II: $J \neq F \pm 1$

Rule III: $I = F \pm 1$

Answers

18 – A

19 – D

20 – B

21 – C

22 – D

Hints

Question – 18

If I sit next to J on J's right side, who must sit next to I on I's right side?

- A) F
- B) G
- C) H
- D) J
- E) K

Answer with Hints

As Rule III, $I = F \pm 1$, so F will sit on right side of I

So, the correct answer is Option A

Question – 19

Which of the following is an acceptable sequence of students around the table?

- A) F, J, I, K, H, G
- B) F, J, K, H, I, G
- C) K, G, H, J, F, I
- D) K, I, F, H, J, G
- E) K, J, I, F, G, H

Answer with Hints

1st Step: Check Rule I: E, A, B is wrong

2nd Step: Check Rule II: C is wrong

So, the correct answer is Option D

Question – 20

If F sits next to H, which of the following is a complete and accurate list of those who can sit next to H on H's other side?

- A) G
- B) G, J
- C) G, J, I
- D) I, J, K
- E) G, I, J, K

Answer with Hints

Q k table round hai is liye seat number 1 say start kar k ghom kar wapas 1 par aa jayein gay

	1	2	3	4	5	6	1
As question	F	H					F
As Rule III, $I = F \pm 1$, so $I = 6$	F	H				I	F
As Rule I, K cannot sit with H							
Then G and J can sit with H, so	F	H	G/J			I	F

Check the choices,

So, the correct answer is Option B

Question – 21

If K sits next to F and J sits next to I, which of the other students must sit next to J?

- A) F
- B) G
- C) H
- D) I
- E) K

Answer with Hints

	1	2	3	4	5	6	1
As question and Rule III	K	F	I	J			K
Then remaining as Rule I, $K \neq H \pm 1$, so	K	F	I	J	H	G	K

So, the correct answer is Option C

Question – 22

If K sits directly across the table from G, who must sit on either side of H?

- A) F and G
- B) F and J
- C) G and I
- D) G and J
- E) I and K

Answer with Hints

Let $K = 1$, then $G = K + 3 = 1 + 3 = 4$

	1	2	3	4	5	6	1
As question	K			G			K

As Rule I, $H \neq 2, 6$, then $H = 3, 5$

Option 1	K		H	G			K
----------	---	--	---	---	--	--	---

Option 2	K			G	H		K
----------	---	--	--	---	---	--	---

Remaining as Rule III

Option 1	K	J	H	G	I	F	K
----------	---	---	---	---	---	---	---

Option 2	K	I	F	G	H	J	K
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Check the choices,

So, the correct answer is Option D

Important Note: GAT Test main mostly pehli 4 categories k he questions aatay hain so ziyada unhi par concentrate karain

5) Comparison Problems

Category k name say he pata chal raha hai k kis tara k question ho saktay hain. In main hum nay compare karna hota hai. Is type k question normally is tara ki statement rakhtay hain.

- Aslam is taller than Bilal but shorter than Chand
- Irfan is heavier than Jamil but lighter than Kashif etc

Question solving techniques wohi hai which I have already explained in Part 1 and Part 2. Now let us solve an example,

Problem Statement – Comparison Problems

A Doctor is doing an informal study of the growth of exactly seven dogs—G, N, O, U, V, W and X—all six-month-old doggies from the same area . The Doctor assistant collected the following comparative data concerning the dogs' heights:

- I) V is taller than X.
- II) U is taller than W.
- III) G is taller than X.
- IV) O is taller than N, but X is taller than O.

None of the seven dogs is exactly the same height as any other dog from the area.

Questions 23 to 26

23 – Which of the following could be the correct ordering of the dogs from tallest to shortest?

- A) G, V, X, N, U, O, W
- B) U, W, G, X, O, V, N
- C) V, G, X, O, U, N, W
- D) V, X, U, O, W, G, N
- E) W, V, G, X, O, U, N

24 – Which of the following must be true?

- A) G is taller than O.

- B) G is taller than V.
- C) U is taller than O.
- D) W is taller than N.
- E) X is taller than W.

25 – If W is taller than X which of the following must be true?

- A) U is taller than G.
- B) U is taller than O.
- C) U is taller than V.
- D) V is taller than G.
- E) X is taller than U.

26 – If X is taller than U, any of the following can be true EXCEPT:

- A) N is taller than U.
- B) U is taller than O.
- C) U is taller than V.
- D) W is taller than N.
- E) W is taller than O.

Solution

Due to shortage of time I am just providing hints to solution and answers. So try yourself.

Summarizing of statement and Initial conditions are given below,

Dogs = G, N, O, U, V, W, X

Rules

Rule I, $V > X$

Rule II, $U > W$

Rule III, $G > X$

Rule IV, $X > O > N$

New Rule

Arrange the dogs according to Rules

V, G > X > O > N

Answers

23 – C

24 – A

25 – B

26 – C

Hints

Question – 23

Which of the following could be the correct ordering of the dogs from tallest to shortest?

- A) G, V, X, N, U, O, W
- B) U, W, G, X, O, V, N
- C) V, G, X, O, U, N, W
- D) V, X, U, O, W, G, N
- E) W, V, G, X, O, U, N

Answer with Hints

1st Step: Check New Rule: A, B, D is wrong

2nd Step: Check Rule II: E is wrong

So, the correct answer is Option C

Question – 24

Which of the following must be true?

- A) G is taller than O.
- B) G is taller than V.
- C) U is taller than O.
- D) W is taller than N.

E) X is taller than W.

Answer with Hints

As per New Rule the correct answer is Option A

Question – 25

If W is taller than X which of the following must be true?

A) U is taller than G.

B) U is taller than O.

C) U is taller than V.

D) V is taller than G.

E) X is taller than U.

Answer with Hints

If $W > X$

As Rule II: $U > W$ and as Rule IV: $X > O > N$, then sequence will be as

$U > W > X > O > N$

Check the choice

So, the correct answer is Option B

Question – 26

If X is taller than U, any of the following can be true EXCEPT:

A) N is taller than U.

B) U is taller than O.

C) U is taller than V.

D) W is taller than N.

E) W is taller than O.

Answer with Hints

If $X > U$ then as New Rule will be as

$V, G > X > O, U$

Check the choice,

So, the correct answer is Option C

6) Networking Problems

Networking k questions mostly roads ya stations k relevant hotay hain. Yani aik jaga say dosri jaga travelling karni ho to kon kon say roads udhar jatay. Wo roads One way hain ya Two way hain. Phir different conditions day kar pocha jata hai. K aik jaga say dosri jaga tak kis kis tara ja sakta hai. Is type k problems main normally is tara ki statements hoti hain.

- There are six stations on a railway track.
- In a city 3 two way roads and 4 one way roads from a square . . . etc

Question solving techniques wohi hai which I have already explained in Part 1 and Part 2. Now let us solve an example,

Important Note: Is type k question solve kartay hoie is bat ka khayal rakhna hota hai k road TWO WAY hai ya ONE WAY. Agar is cheiz ki care ki jaye to question kabi b galat solve nahein hoga.

Problem Statement – Networking Problems

A boy uses a motor cycle to pick up aids of unsold food and garmenting from stores and deliver them to locations where they can be distributed. He drives only along a certain network of roads. In the network there are two-way roads connecting each of the following pairs of points: A with B, A with C, A with E, B with F, C with G, E with F, and F with G. There are also one-way roads going from B to D, from C to B, and from D to C. There are no other roads in the network, and the roads in the network do not intersect. To make a trip involving pickups and deliveries, the boy always takes a route that for the whole trip passes through the fewest of the points A through G, counting a point twice if he boy passes through it twice. The boy's house is at point C. Aids can be picked up at a General Store at point A, a garmenting store at point E, and a bakery at point D, Deliveries can be made as needed to a tutoring center at point B, a distribution center at point F, and a supermarket at point G.

Questions 27 to 30

27 – If the boy starts at the General Store and next is to go to the supermarket, the-first intermediate point of his route passes through must be

- A) B
- B) C
- C) E
- D) F
- E) G

28 – If, starting from house, the boy next is to make pickups for the supermarket at the General Store and the bakery (in either order), the first two intermediate points on his route, beginning with the first, must be

- A) A and B
- B) A and C
- C) B and A
- D) B and D
- E) D and B

29 – If, starting from the garmenting store, the boy next is to pick up bread at either the General Store or the bakery (whichever stop makes his route go through the fewest of the points) and then is to go to the supermarket, the first two points he reaches after the garmenting store, beginning with the first, must be

- A) A and B
- B) A and C
- C) D and B
- D) F and B
- E) F and D

30 – If the boy is to make a trip starting at the supermarket, next going to the bakery for a pickup, and then ending at the distribution center, the first two intermediate points on his route, beginning with the first, can be

- A) C and A
- B) C and D
- C) D and B

- D) F and B
E) F and E

Solution

Due to shortage of time I am just providing hints to solution and answers. So try yourself.

Networking ka question solve karnay k liye hamesha diagram banana parti hai. Agar 2 destinations k darmayan line k dono ends par arrow bana ho to wo Two Way Road hota hai aur agar sirf 1 end par arrow bana ho to wao One Way Road hota hai aur uski direction Tail say Head ki taraf hoti hai. For example nechay de gai diagram main line between A and B is two way. Jab k line between B and C is one way jis ki direction C say B ki taraf hai.

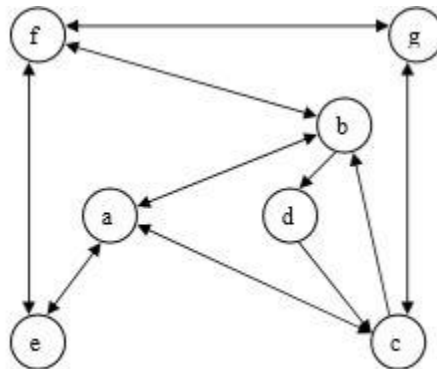
Summarizing the conditions

Two Way Roads	$a \leftrightarrow (b, c, e)$	$b \leftrightarrow f$	$c \leftrightarrow g$	$e \leftrightarrow f$	$f \leftrightarrow g$
One Way Roads	$b \rightarrow d$	$c \rightarrow b$	$d \rightarrow c$		

Object passes through fewest points.

H = c G.S = a G = e B = d T.C = b D = f S.M = g

Diagram



Answers

27 – B

28 – A

29 – B

30 – D

Hints

Question – 27

If the boy starts at the General Store and next is to go to the supermarket, the-first intermediate point of his route passes through must be

- A) B
- B) C
- C) E
- D) F
- E) G

Answer with Hints

G.S \rightarrow S.M or $a \rightarrow g$

Shortest Route $a \rightarrow c \rightarrow g$

So, the correct answer is Option B

Question – 28

If, starting from house, the boy next is to make pickups for the supermarket at the General Store and the bakery (in either order), the first two intermediate points on his route, beginning with the first, must be

- A) A and B
- B) A and C
- C) B and A
- D) B and D
- E) D and B

Answer with Hints

H \rightarrow G.S \rightarrow B or $c \rightarrow a \rightarrow d$

Shortest Route $c \rightarrow a \rightarrow b \rightarrow d$

Two intermediate a and b

So, the correct answer is Option A

Question – 29

If, starting from the garmenting store, the boy next is to pick up bread at either the General Store or the bakery (whichever stop makes his route go through the fewest of the points) and then is to go to the supermarket, the first two points he reaches after the garmenting store, beginning with the first, must be

- A) A and B
- B) A and C
- C) D and B
- D) F and B
- E) F and D

Answer with Hints

$G \rightarrow G.S/B \rightarrow S.M$ or $e \rightarrow a, d \rightarrow g$

Shortest Route $e \rightarrow a \rightarrow c \rightarrow g$

Intermediates a and c

So, the correct answer is Option B

Question – 30

If the boy is to make a trip starting at the supermarket, next going to the bakery for a pickup, and then ending at the distribution center, the first two intermediate points on his route, beginning with the first, can be

- A) C and A
- B) C and D
- C) D and B
- D) F and B
- E) F and E

Answer with Hints

$S.M \rightarrow B \text{ and } D$ or $g \rightarrow d \text{ \& } f$

Shortest Route

Option 1 $g \rightarrow c \rightarrow b \rightarrow d \rightarrow c \rightarrow b \rightarrow f$

Option 2 $g \rightarrow f \rightarrow b \rightarrow d \rightarrow c \rightarrow b \rightarrow f$

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First two Intermediates c and b or f and b

Check the choices,

So, the correct answer is Option D

7) Matrix Problems

Sometime aisa hota hai k kisi question k main kisi banday ki aik say zayada skills de hoti hain aur uski skills k mutabiq hum nay us say kaam lene hotay hain. Yani aik he bada ho kabi us say mechanic ka kaam lain kabi carpenter ka. Ab aisi problems ko hal karnay k liye usay tabular form main likh diya jata hai jisay matrix b kaha jata hai. Phir us table k madad say question solve karnay bohat asaan ho jatay hain. Is type k questions main is tara ki statements hoti hain.

- Ali can work as mechanic, carpenter and packer
- Bilal has the ability to do work as driver and cook . . . etc

Now let us solve an example,

Problem Statement – Matrix Problems

5 people Ghazi, Hamid, Imran, Jamil and Kashif work in a factory. On any given shift, a person can be assigned to one of five jobs: Mechanic, Truck Driver, Packer, Weigher or Dispatcher.

- I) Ghazi can work as mechanic, packer or weigher
- II) Hamid can work as either packer or weigher
- III) Imran can work as mechanic, truck driver or dispatcher
- IV) Jamil can work as truck driver or dispatcher
- V) Kashif can work as truck driver or weigher

Questions 31 to 32

31 – If Jamil is not assigned to function as dispatcher, then all of the following must be true EXCEPT:

- A) Ghazi is mechanic
- B) Hamid is the dispatcher
- C) Jean is the truck driver
- D) Hamid is the packer
- E) Kashif is the weigher

32 – If Ghazi is assigned as mechanic, which of the following must be true?

- A) Hamid is packer
- B) Kashif is weigher
- C) Imran is truck driver
- D) Jamil is dispatcher
- E) Hamid is weigher

Solution

Is main hum aik matrix bana lain gay jis k column main hum Persons k name aur row main un k functions likh lain gay.

It will be like this

	Mechanic	Truck Driver	Packer	Weigher	Dispatcher
Ghazi					
Hamid					
Imran					
Jamil					
Kashif					

Ab hum bari bari apni initial condtns ko dekhtay hovay isko fill kartay jayein gay.

After applying Initial Condition I, the table values are given below,

	M	TD	P	W	D
G	•		•	•	
H					
I					
J					
K					

After applying Initial Condition II, the table values are given below,

	M	TD	P	W	D
G	•		•	•	
H			•	•	
I					
J					
K					

After applying Initial Condition III, the table values are given below,

	M	TD	P	W	D
G	•		•	•	
H			•	•	
I	•	•			•
J					
K					

After applying Initial Condition IV, the table values are given below,

	M	TD	P	W	D
G	•		•	•	
H			•	•	
I	•	•			•
J		•			•
K					

After applying Initial Condition V, the table values are given below,

	M	TD	P	W	D
G	•		•	•	
H			•	•	

I	•	•			•
J		•			•
K		•		•	

So, after summarizing all initial conditions we find above matrix giving us a picture k kon kaya kaya kar sakta hai.

Answers

31 – B

32 – A

Hints

Question – 31

If Jamil is not assigned to function as dispatcher, then all of the following must be true EXCEPT:

- A) Ghazi is mechanic
- B) Hamid is the dispatcher
- C) Jean is the truck driver
- D) Hamid is the packer
- E) Kashif is the weigher

Explanatory Answer

Is question main hamain jo extra condition de gai hai hum us ko apnay matrix main daal ka solution nikaal lain gay.

	M	TD	P	W	D
G	•		•	•	
H			•	•	
I	•	•			•
J		•			
K		•		•	

Table say bara wazaya pata chal raha hai k Hamid dispatcher ho he nahein sakta.

So, the correct answer is Option B

Question – 32

If Ghazi is assigned as mechanic, which of the following must be true?

- A) Hamid is packer
- B) Kashif is weigher
- C) Imran is truck driver
- D) Jamil is dispatcher
- E) Hamid is weigher

Explanatory Answer

Is question main hamain jo extra condition de gai hai hum us ko apnay matrix main daal ka solution nikaal lain gay.

	M	TD	P	W	D
G	•		•	•	
H			•	•	
I	•	•			•
J		•			•
K		•		•	

Table say bara wazaya pata chal raha hai k agar Ghazi mechanic hai to wo Packer ya Weigher ki job nahein kar sakta to phir Packer sirf Hamid he ho sakta hai.

So, the correct answer is Option A

8) Relationships Analytical Problems

Ye wo questions hotay hain jin main pocha jata hai k Kon kis ka kaya lagta hai . . . yani family relationships ka pocha jata hai. Aisay questions ko hum FAMILY TREE bana kar easily solve kar saktay hain. Is type k questions is tara say start hotay hain.

- Ali has a mother, wife and two children.
- Bilal is son of Ali, Ali is son of Akbar, Akbar is brother of Jamal . . . etc

Useful Relationships:-

Ye relationship is tara say diye gaye hain k aap nay khud ko base lena hai.

- a. Mother's or father's son- Brother
- b. Mother's or father's Daughter - Sister
- c. Mother's or father's Sister - Aunt
- d. Mother's or father's Mother- Grand mother
- e. Mother's or father's Father - Grand Father
- f. Son's wife - daughter in law
- g. Daughter's husband – Son in law
- h. Brother's son - Nephew
- i. Brother's Daughter – Niece
- j. Uncle or Aunt's son or daughter - Cousin
- k. Grandfather's only daughter in law- Mother
- l. Grandfather's Son – Father Or Uncle

Now let us solve an example,

Problem Statement – Relationships

Bira, an only child, is married and she and her husband have two children, Nasir and Samina. Nasir is Parveen's nephew by blood and Vicky's grandson. Vicky and his wife had only two children Fahad and his sister plus four grandchildren (Two boys and Two girls). Warda is Samina's grandmother.

Questions 33 to 34

33 – All of the following must be true EXCEPT:

- A) Warda is Vicky's wife
- B) Vicky is Samina's grandfather
- C) Vicky is Bilal's father in law
- D) Parveen is Bilal's sister in law
- E) Fahad is Samina's father

34 – Which of the following could be true?

- A) Samina is Nasir's sister
- B) Nasir has exactly two cousins
- C) Parveen has one son and one daughter
- D) Bilal has only one nephew
- E) Warda is Fahad's mother


Solution

Is k solution k liye hamain Family Tree banana paray ga us ki madad say hamara question palak jhapaktay solve ho jaye ga.

Male k liye  ka sign use kiya gaya hai

Female k liye  ka sign use kiya gaya hai

Mian aur BV k relation double line '=' say zahir kiya gaya hai

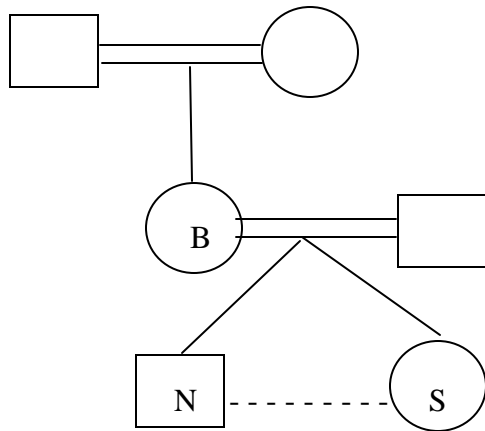
Mian aur BV ki aulad ko Down line  say zahar kiya gaya hai

Bhai aur Behan k liye dotted signle line - - - - ko use kiya gaya hai

Ab zara hum question ki statement ko parhtay hoie family tree develop kar lete hain.

Bira, an only child, is married and she and her husband have two children, Nasir and Samina.

Yaha tak hamain ye pata chal raha hai k Bira apnay maa baap ki akloti beti hai aur us k 2 bachay hain Nasir aur Samina

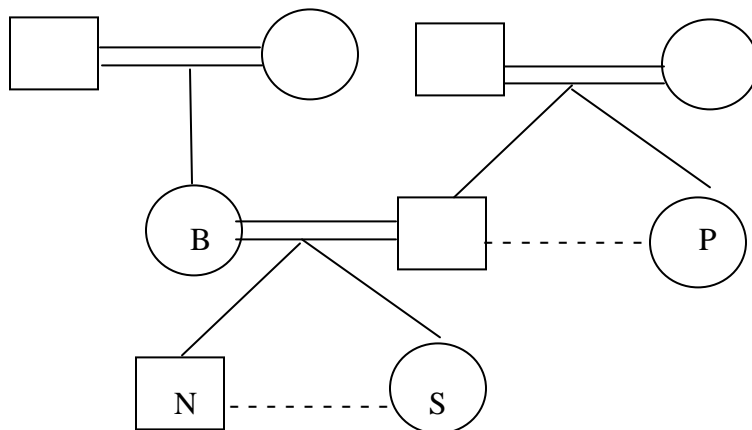


Jab b family tree banana ho to ye zarori nahein hota k sirf un ko show kiya jaye jin j name hain. Hamain puri Husband Wife ki theory ko follow karna parta hai. Jis ka pata ho k kon hai usay label kar dete hain aur agar kisi ka na pata ho to usay blank chor dete hain.

Ab statement thori mazeed parh kar dekhtay hain.

Nasir is Parveen's nephew by blood and Vicky's grandson

Ab yahan say ye pata chalta hai k Parveen Nasir ki Phupho yani Bira k husband ki behan hai aur Vicky Nasir ka Dada hai ya Nana abi ye clear nahein hai. Lekin sawal ye paida hota hai k ye kese pata chala k Parveen Nasir ki phupho hai Khala nahein to jawab bara simple hai k Bira to apnay maa baap ki akloti beti hai us ka koi behan bhai nahein hai.



Ab hum baqi information lay kar apna family tree complete kartay hain.

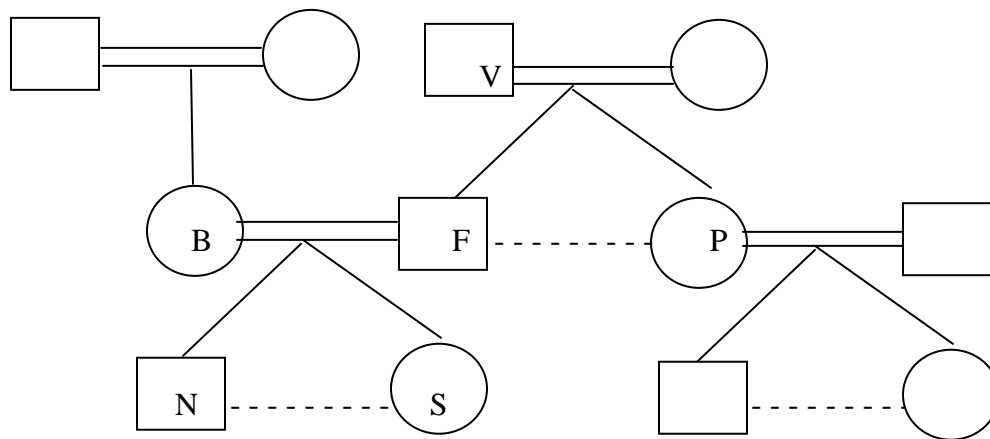
Vicky and his wife had only two children Fahad and his sister plus four grandchildren (Two boys and Two girls). Warda is Samina's grandmother

Ab yahan say ye sabat ho gaya k gaya k Vicky Nasir ka dada hai q k Bira to akloti hai jab k Vicky k 2 bachay hain Parveen aur Fahad. Iska ye b matlab hai k Fahad Bira ka husband hai.

Aik aur chez clear hoti hai k Vicky k 2 potay 2 potiyan hain. 2 to Fahad k through hain iska matlab baqi 2 Parveen k through hain.

Lekin aik chez abi b unclear hai wo hai Warda. Us k baray main hum ye clear nahein keh saktay k wo Samina ki Dadi hai ya Nani.

Complete Family Tree



Answers

33 – A

32 – E

Explanations

Question – 33

All of the following must be true EXCEPT:

- A) Warda is Vicky's wife
- B) Vicky is Samina's grandfather
- C) Vicky is Bira's father in law
- D) Parveen is Bira's sister in law
- E) Fahad is Samina's father

Explanatory Answer

Hum apnay question ko family tree say check karain gay to hamain pata chalta hai k tamam options correct hain swaye A k. Q k Warda ka clear nahein hai ko Wo Victor ki bv hai ya nai.

So, the correct answer is Option A

Question – 34

Which of the following could be true?

- A) Samina is Nasir's sister
- B) Nasir has exactly two cousins
- C) Parveen has one son and one daughter
- D) Bira has only one nephew
- E) Warda is Fahad's mother

Explanatory Answer

Is question main pocha gaya hai k kaya sach ho sakta hai. Agar hum sab options ko family tree say compare karain to hamain pata chalta hai k har chez exactly true hai swaye option E k. Q k wo ho b sakta hai aur nahein b. Aur q k hum say COULD BE ka question kiya gaya hai is liye.

The correct answer is Option E

THE END

Please remember me in your prayers (Muhammad Usman Yousaf)