Reasoning

Order & Ranking

Level-2

Q1 Directions: Study the following information carefully and answer the below questions

In the class, V gets fifth rank from the top. Only one person is ranked between V and N. Q gets 8th rank from the bottom. S gets two ranks after Q. Only three persons are ranked between V and Q. N gets exactly in the middle rank of V and Q. L is the top scorer.

How many students are ranked between L and Q?

(A) Six

(B) Seven

(C) Five

(D) Four

(E) Three

Q2 Directions: Study the following information carefully and answer the below questions

In the class, V gets fifth rank from the top. Only one person is ranked between V and N. Q gets 8th rank from the bottom. S gets two ranks after Q. Only three persons are ranked between V and Q. N gets exactly in the middle rank of V and Q. L is the top scorer.

What is the rank of N from the bottom?

(A) Eleventh

(B) Sixth

(C) Seventh

(D) Ninth

(E) Tenth

Q3 Directions: Study the following information carefully and answer the below questions.

Five persons – P, Q, R, S, and T participated in three different events viz.- Comedy, Singing, and Painting. Each person gets different ranks from 1 to 5 in each event. No person gets the same rank in any of the events. Rank 1 is the highest whereas Rank 5 is the lowest. R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in

Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. S and P get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy and rank of T in Painting is the same. The rank of T in Comedy is an immediately higher rank than the rank of T in Painting. The rank of Q in Singing is an immediately higher rank than the rank of S in Comedy.

The sum of the ranks of who among the following person is third highest taken all three events together?

(A) Q

(B) P

(C) R

(D) S

(E) T

Q4 Directions: Study the following information carefully and answer the below questions.

Five persons - P, Q, R, S, and T participated in three different events viz.- Comedy, Singing, and Painting. Each person gets different ranks from 1 to 5 in each event. No person gets the same rank in any of the events. Rank 1 is the highest whereas Rank 5 is the lowest. R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. S and P get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy

and rank of T in Painting is the same. The rank of T in Comedy is an immediately higher rank than the rank of T in Painting. The rank of Q in Singing is an immediately higher rank than the rank of S in Comedy.

Which of the following is the correct relation in singing?

- (A) T < P < S < R
- (B) S > P > Q > T
- (C) T < S < R < Q
- (D) S < T < R < P
- (E) None of these

Q5 Directions: Study the following information carefully and answer the below questions.

Five persons - P, Q, R, S, and T participated in three different events viz.- Comedy, Singing, and Painting. Each person gets different ranks from 1 to 5 in each event. No person gets the same rank in any of the events. Rank 1 is the highest whereas Rank 5 is the lowest. R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. S and P get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy and rank of T in Painting is the same. The rank of T in Comedy is an immediately higher rank than the rank of T in Painting. The rank of Q in Singing is an immediately higher rank than the rank of S in Comedy.

Which of the following statement is not true?

- (A) R gets second highest rank in comedy
- (B) S doesn't get rank 5 in any event
- (C) Q gets rank 5 in Comedy
- (D) Both P and T doesn't get rank 3 in singing
- (E) All are true

Directions: Study the following information carefully and answer the below questions.

Five persons - P, Q, R, S, and T participated in three different events viz.- Comedy, Singing, and Painting. Each person gets different ranks from 1 to 5 in each event. No person gets the same rank in any of the events. Rank 1 is the highest whereas Rank 5 is the lowest. R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. S and P get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy and rank of T in Painting is the same. The rank of T in Comedy is an immediately higher rank than the rank of T in Painting. The rank of Q in Singing is an immediately higher rank than the rank of S in Comedy.

Who among the following person gets rank 1 in comedy?

- (A) P
- (B) The one who gets rank 4 in Painting
- (C) Q
- (D) T
- (E) R

Q7 Directions: Study the following information carefully and answer the below questions.

Five persons – P, Q, R, S, and T participated in three different events viz.- Comedy, Singing, and Painting. Each person gets different ranks from 1 to 5 in each event. No person gets the same rank in any of the events. Rank 1 is the highest whereas Rank 5 is the lowest. R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. S and P

get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy and rank of T in Painting is the same. The rank of T in Comedy is an immediately higher rank than the rank of T in Painting. The rank of Q in Singing is an immediately higher rank than the rank of S in Comedy.

Who among the following person gets second lowest rank in Singing?

(A) S

(B) Q

(C) T

(D) P

(E) R

Q8 Directions: Analyze the data carefully and answer the questions accordingly.

Five people have a different height and likes different colors. M does not like pink. O is shorter than the one, who like yellow. T is taller than H and shorter than O, who does not like white. Two people are taller than G. The one, who likes blue, is shorter than the one, who likes white. H does not like green. The one, who likes green, is shorter than G.

Find the correct combination from the following.

(A) H - Yellow

(B) G - Blue

(C) M - Yellow

(D) O - White

(E) None is correct

Q9 Directions: Analyze the data carefully and answer the questions accordingly.

Five people have a different height and likes different colors. M does not like pink. O is shorter than the one, who like yellow. T is taller than H and shorter than O, who does not like white. Two people are taller than G. The one, who likes blue, is shorter than the one, who likes white. H does not like green. The one, who likes green, is shorter than G.

How many people are shorter than M?

(A) 3

(B) 2

(C) 4

(D) 1

(E) None

Q10 Directions: Analyze the data carefully and answer the questions accordingly.

Five people have a different height and likes different colors. M does not like pink. O is shorter than the one, who like yellow. T is taller than H and shorter than O, who does not like white. Two people are taller than G. The one, who likes blue, is shorter than the one, who likes white. H does not like green. The one, who likes green, is shorter than G.

Who among the following likes pink?

(A) T

(B) H

(C) G

(D) O

(E) None of these

Q11 Directions: Analyze the data carefully and answer the questions accordingly.

Six people F, G, H, J, K, and L are there of different weights. The weight of L is less than 60kg. The one, who is the second heaviest, is 72kg. F is lighter than J and heavier than G, who is not the lightest. The one, who is the second lightest, is 48kg. J is lighter than K. Only one person is heavier than K.

How many people are lighter than H?

(A) 1

(B) 2

(C)3

(D) 5

(E) None of these

Q12 Directions: Analyze the data carefully and answer the questions accordingly.

Six people F, G, H, J, K, and L are there of different weights. The weight of L is less than 60kg. The one, who is the second heaviest, is 72kg. F is lighter than J and heavier than G, who is not the lightest. The one, who is the second lightest, is 48kg. J is lighter than K. Only one person is heavier than K.

If the weight of G and F is 103kg than what is difference between the weights of K and F?

(A) 14kg

(B) 17kg

- (C) 20kg
- (D) 19kg
- (E) None of these

Q13 Directions: Analyze the data carefully and answer the questions accordingly.

Six people F, G, H, J, K, and L are there of different weights. The weight of L is less than 60kg. The one, who is the second heaviest, is 72kg. F is lighter than J and heavier than G, who is not the lightest. The one, who is the second lightest, is 48kg. J is lighter than K. Only one person is heavier than K.

Who is the heaviest?

- (A) F
- (B) J
- (C) H
- (D) L
- (E) None of these

Q14 Directions: Analyze the data carefully and answer the questions accordingly.

Six people has different number of pens. H has less number of pens than L. U does not have the maximum pens. The one, who has second lowest pens has 30 pens. H has more pens than T and K. Z has more pens than L, who has less number of pens than U.

How many pens does K has?

- (A) 29
- (B) 15
- (C) 18
- (D) 23
- (E) Can't be determined

Q15 Directions: Analyze the data carefully and answer the questions accordingly.

Six people has different number of pens. H has less number of pens than L. U does not have the maximum pens. The one, who has second lowest pens has 30 pens. H has more pens than T and K. Z has more pens than L, who has less number of pens than U.

How many people has more pens than L?

(A) 3

(B) 2

(C) 1

- (D) None
- (E) None of these

Q16 Directions: Analyze the data carefully and answer the questions accordingly.

Six people has different number of pens. H has less number of pens than L. U does not have the maximum pens. The one, who has second lowest pens has 30 pens. H has more pens than T and K. Z has more pens than L, who has less number of pens than U.

Who has the maximum pens?

(A)T

(B) H

(C) L

- (D) Z
- (E) None of these

Q17 Directions:Consider the following information and answer the questions accordingly.

Six police officers A, B, C, D, E, and F work in the same city. Their designations are different and the decreasing order of their designations is DGP, ADGP, IGP, DIG, SSP and ASP. Only two officers are ranked between D and F. At least two officers are senior to B. A is immediate senior to D and E is immediate junior to C. The number of officers senior to A is an even number. A is not the person with seniormost designation.

How many officers are ranked above B?

- (A) 5
- (B)3
- (C)1
- (D) 4

(E) 2

Q18 Directions:Consider the following information and answer the questions accordingly.

Six police officers A, B, C, D, E, and F work in the same city. Their designations are different and the decreasing order of their designations is DGP, ADGP, IGP, DIG, SSP and ASP. Only two officers are ranked between D and F. At least two officers are senior to B. A is immediate senior to D and E is immediate junior to C. The number of officers senior to A is an even number. A is not the person with seniormost designation.

Select the correct pair.

(A) ASP - C

(B) SSP - A

(C) ADGP - B

(D) DGP - F

(E) None of these

Q19 Directions: Study the following data carefully and answer the questions accordingly.

Eight people (K,L,M,N,O,P,Q and R) go to Paris. L goes before P but after O. Two people go between R and P. R goes before L. Only one person goes before N. R doesn't go before N. P goes immediately before Q. No one goes after M. Two people go between K and N.

How many people go to Paris between O and M?

(A) Six

(B) Five

(C) Four

(D) Three

(E) None of these

Q20 Directions: Study the following data carefully and answer the questions accordingly.

Eight people (K,L,M,N,O,P,Q and R) go to Paris. L goes before P but after O. Two people go between R and P. R goes before L. Only one person goes before N. R doesn't go before N. P goes immediately before Q. No one goes after M. Two people go between K and N.

Who goes immediately after K?

(A) N

(B) P

(C) Q

(D) M

(E) L

Q21 Directions: Study the following data carefully and answer the questions accordingly.

Eight people (K,L,M,N,O,P,Q and R) go to Paris. L goes before P but after O. Two people go between R and P. R goes before L. Only one person goes before N. R doesn't go before N. P goes immediately before Q. No one goes after M. Two people go between K and N.

Who goes to Paris immediately after R?

(A) M

(B) L

(C) K

(D) Q

(E) O

Q22 Directions:Consider the following information and answer the questions accordingly.

Six police officers A, B, C, D, E, and F work in the same city. Their designations are different and the decreasing order of their designations is DGP, ADGP, IGP, DIG, SSP and ASP. Only two officers are ranked between D and F. At least two officers are senior to B. A is immediate senior to D and E is immediate junior to C. The number of officers senior to A is an even number. A is not the person with seniormost designation.

Which of the following statements is/are true?

I. F is senior to C.

II. E is ranked as the ADGP.

III. Only one officer is ranked below A.

(A) Only I

(B) Only II

(C) Only I and II

(D) Only I and III

(E) Only II and III

Answer Key

- (B) Q1
- (E) Q2
- (E) Q3
- (A) Q4
- (E) Q5
- (D) Q6
- (D) Q7
- (C) Q8
- (C) Q9
- (D) Q10
- (D) Q11

- (B) Q12
- Q13 (C)
- Q14 (E)
- Q15 (B)
- (D) Q16
- (B) Q17
- (B) Q18
- (A) Q19
- Q20 (B)
- Q21 (B)
- Q22 (E)

Hints & Solutions

Q1 Text Solution:

V gets fifth rank from the top.

only one person is ranked between V and N.

V>N

Q gets 8th rank from the bottom.

S gets two ranks after Q.

Q> >S

Only three persons are ranked between V and Q

N gets exactly in the middle rank of V and Q. L is the top scorer.

Q2 Text Solution:

V gets fifth rank from the top.

only one person is ranked between V and N.

V>N

Q gets 8th rank from the bottom.

S gets two ranks after Q.

Q> >S

Only three persons are ranked between V and Q

N gets exactly in the middle rank of V and Q. L is the top scorer.

Q3 Text Solution:

We have: R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. That means, P gets rank 3 in Comedy. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|----------|---------|-----------|
| Nume | Conticuy | Singing | i dinting |
| Р | 3 | 4 | 5 |
| Q | | | |
| R | | | 4 |
| S | | | |
| Т | | 5 | |

Again, we have: S and P get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy and rank of T in Painting is the same.

Thus, the only possible rank of T in painting is either 1 or 2. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | 5 | | 2/1 |
| R | 1/2 | | 4 |
| S | | 2 | 3 |
| Т | | 5 | 1/2 |

Again, we have: The rank of T in Comedy is immediately higher than the rank of T in Painting. Thus, T gets rank 1 in Comedy. The rank of Q in Singing is immediately higher than the rank of S in Comedy. That means, Q gets rank 3 in singing. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | 5 | 3 | 1 |
| R | 2 | 1 | 4 |
| S | 4 | 2 | 3 |
| Т | 1 | 5 | 2 |

Q4 Text Solution:

We have: R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. That means, P gets rank 3 in Comedy. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | | | |
| R | | | 4 |
| S | | | |
| Т | | 5 | |

Again, we have: S and P get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy and rank of T in Painting is the same.

Thus, the only possible rank of T in painting is either 1 or 2. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | 5 | | 2/1 |
| R | 1/2 | | 4 |
| S | | 2 | 3 |
| Т | | 5 | 1/2 |

Again, we have: The rank of T in Comedy is immediately higher than the rank of T in Painting. Thus, T gets rank 1 in Comedy. The rank of Q in Singing is immediately higher than the rank of S in Comedy. That means, Q gets rank 3 in singing. Based on the above given information we have:

| Name | Comedy | | Singing | Painting |
|------|--------|---|---------|----------|
| Р | | 3 | 4 | 5 |
| Q | | 5 | 3 | 1 |
| R | | 2 | 1 | 4 |
| S | | 4 | 2 | 3 |
| Т | | 1 | 5 | 2 |

Q5 Text Solution:

We have: R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. That means, P gets rank 3 in Comedy. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | | | |
| R | | | 4 |
| S | | | |
| Т | | 5 | |

Again, we have: S and P get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy and rank of T in Painting is the same.

Thus, the only possible rank of T in painting is either 1 or 2. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | 5 | | 2/1 |
| R | 1/2 | | 4 |
| S | | 2 | 3 |
| Т | | 5 | 1/2 |

Again, we have: The rank of T in Comedy is immediately higher than the rank of T in Painting. Thus, T gets rank 1 in Comedy. The rank of Q in Singing is immediately higher than the rank of S in Comedy. That means, Q gets rank 3 in singing. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | 5 | 3 | 1 |
| R | 2 | 1 | 4 |
| S | 4 | 2 | 3 |
| Т | 1 | 5 | 2 |

Q6 Text Solution:

We have: R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. That means, P gets rank 3 in Comedy. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | | | |
| R | | | 4 |
| S | | | |
| Т | | 5 | |

Again, we have: S and P get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy and rank of T in Painting is the same.

Thus, the only possible rank of T in painting is either 1 or 2. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | 5 | | 2/1 |
| R | 1/2 | | 4 |
| S | | 2 | 3 |
| Т | | 5 | 1/2 |

Again, we have: The rank of T in Comedy is immediately higher than the rank of T in Painting. Thus, T gets rank 1 in Comedy. The rank of Q in Singing is immediately higher than the rank of S in Comedy. That means, Q gets rank 3 in singing. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | 5 | 3 | 1 |
| R | 2 | 1 | 4 |
| S | 4 | 2 | 3 |
| Т | 1 | 5 | 2 |

Q7 Text Solution:

We have: R gets rank four in painting. P gets consecutive rank in descending order in Comedy, Singing, and Painting respectively. T gets an immediately lower rank in Singing as compared to the rank of P in Singing. Neither P nor S gets rank 1 in comedy. That means, P gets rank 3 in Comedy. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | | | |
| R | | | 4 |
| S | | | |
| Т | | 5 | |

Again, we have: S and P get the same rank in Painting and Comedy respectively. The rank of R in Painting is two ranks lower than the rank of S in Singing. The sum of ranks of S in Singing and Painting is equal to the rank of Q in Comedy. The rank of R in Comedy and rank of T in Painting is the same.

Thus, the only possible rank of T in painting is either 1 or 2. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | 5 | | 2/1 |
| R | 1/2 | | 4 |
| S | | 2 | 3 |
| T | | 5 | 1/2 |

Again, we have: The rank of T in Comedy is immediately higher than the rank of T in Painting. Thus, T gets rank 1 in Comedy. The rank of Q in Singing is immediately higher than the rank of S in Comedy. That means, Q gets rank 3 in singing. Based on the above given information we have:

| Name | Comedy | Singing | Painting |
|------|--------|---------|----------|
| Р | 3 | 4 | 5 |
| Q | 5 | 3 | 1 |
| R | 2 | 1 | 4 |
| S | 4 | 2 | 3 |
| Т | 1 | 5 | 2 |

Q8 Text Solution:

- 1) Two people are taller than G.
- 2) The one, who likes green, is shorter than G.

CASE I

CASE II

- 3) T is taller than H and shorter than O, who does not like white.
- 4) H does not like green.
- 5) O is shorter than the one, who like yellow.

(Here, case 2 will be eliminated)

Yellow>O>G>(green)T>H(Blue)

Yellow>O>G>T>(green)H

CASE I

CASE II

6) The one, who likes blue, is shorter than the one, who likes white.

(Refer point 3)

7) M does not like pink.

Yellow(M)>Pink(O)>White(G)>Green(T)>Blue(H)

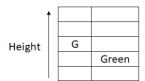
This is the final arrangement

Text Solution: Q9

- 1) Two people are taller than G.
- 2) The one, who likes green, is shorter than G.

Case1

Case 2



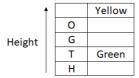


- 3) T is taller than H and shorter than O, who does not like white.
- 4) H does not like green.

5) O is shorter than the one, who like yellow. (Here, case 2 will be eliminated)

Case1

Case 2



| | Yellow |
|---|--------|
| 0 | |
| G | |
| Т | |
| Н | Green |

6) The one, who likes blue, is shorter than the one, who likes white.

(Refer point 3)

7) M does not like pink.

Μ Yellow Pink 0 G White Height Т Green Blue

Q10 Text Solution:

1) Two people are taller than G.

Case1

2) The one, who likes green, is shorter than G.

G Height Green



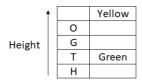
Case 2

- 3) T is taller than H and shorter than O, who does not like white.
- 4) H does not like green.
- 5) O is shorter than the one, who like yellow.

(Here, case 2 will be eliminated)

Case1

Case 2



| | | Yellow |
|---|---|--------|
| C |) | |
| (| ŝ | |
| 1 | | |
| H | 1 | Green |

6) The one, who likes blue, is shorter than the one, who likes white.

(Refer point 3)

7) M does not like pink.

| † | М | Yellow |
|----------|---|--------|
| | 0 | Pink |
| Height | G | White |
| | Т | Green |
| | Н | Blue |

Q11 Text Solution:

- 1) Only one person is heavier than K.
- 2) F is lighter than J and heavier than G, who is not the lightest.
- 3) J is lighter than K.

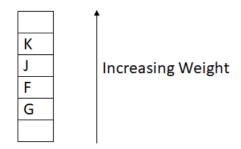


- 4) The one, who is the second heaviest, is 72kg.
- 5) The one, who is the second lightest, is 48kg.
- 6) The weight of L is less than 60kg.

| Н | | |
|---|------|-------------------|
| K | 72kg | |
| J | | Increasing Weight |
| F | | |
| G | 48kg | |
| L | | |

Q12 Text Solution:

- 1) Only one person is heavier than K.
- 2) F is lighter than J and heavier than G, who is not the lightest.
- 3) J is lighter than K.



4) The one, who is the second heaviest, is 72kg.

- 5) The one, who is the second lightest, is 48kg.
- 6) The weight of L is less than 60kg.

| Н |] ' | |
|---|------|-------------------|
| K | 72kg | |
| J | | Increasing Weight |
| F | | |
| G | 48kg | |
| L | | |

Q13 Text Solution:

- 1) Only one person is heavier than K.
- 2) F is lighter than J and heavier than G, who is not the lightest.
- 3) J is lighter than K.



- 4) The one, who is the second heaviest, is 72kg.
- 5) The one, who is the second lightest, is 48kg.
- 6) The weight of L is less than 60kg.

| Н | | |
|---|------|-------------------|
| K | 72kg | |
| J | | Increasing Weight |
| F | | |
| G | 48kg | |
| L | | |

Q14 Text Solution:

- 1) H has more pens than T and K.
- 2) Z has more pens than L, who has less number of pens than U.
- 3) H has less number of pens than L.
- 4) U does not have the maximum pens.
- 5) The one, who has second lowest pens has 30 pens.

| Z | | ↑ |
|-----|----|----------|
| U | | Pens |
| L | | |
| Н | | |
| T/K | 30 | |
| T/K | | |

Q15 Text Solution:

- 1) H has more pens than T and K.
- 2) Z has more pens than L, who has less number of pens than U.
- 3) H has less number of pens than L.
- 4) U does not have the maximum pens.
- 5) The one, who has second lowest pens has 30 pens.

| Z | |
|-----|----|
| U | |
| L | |
| Н | |
| T/K | 30 |
| T/K | |

Pens

Q16 Text Solution:

- 1) H has more pens than T and K.
- 2) Z has more pens than L, who has less number of pens than U.
- 3) H has less number of pens than L.
- 4) U does not have the maximum pens.
- 5) The one, who has second lowest pens has 30 pens.

| Z | |
|-----|----|
| U | |
| L | |
| Н | |
| T/K | 30 |
| T/K | |

Pens

Q17 Text Solution:

It is given that,

The six police officers are A, B, C, D, E and F. Their designations are DGP, ADGP, IGP, DIG, SSP and ASP.

The number of officers senior to A is an even number.

A is not the person with seniormost designation.

A is immediate senior to D.

We get,

| Designation | Case 1 | Case 2 |
|-------------|--------|--------|
| DGP | | |
| ADGP | | |
| IGP | Α | |
| DIG | D | |
| SSP | | Α |
| ASP | | D |

Only two officers are ranked between D and F. E is immediate junior to C.

We get,

| Designation | Case 1 | Case 2 |
|-------------|--------|--------|
| DGP | F | С |
| ADGP | В | E |
| IGP | А | F |
| DIG | D | В |
| SSP | С | Α |
| ASP | E | D |

At least two officers are senior to B.

Here, case 1 is invalid.

The final arrangement is,

| | - |
|-------------|------|
| Designation | Name |
| DGP | С |
| ADGP | E |
| IGP | F |
| DIG | В |
| SSP | Α |
| ASP | D |

Here, three officers are ranked above B.

Q18 Text Solution:

It is given that,

The six police officers are A, B, C, D, E and F.

Their designations are DGP, ADGP, IGP, DIG, SSP and ASP.

The number of officers senior to A is an even number.

A is not the person with seniormost designation. A is immediate senior to D.

We get,

| Designation | Case 1 | Case 2 |
|-------------|--------|--------|
| DGP | | |
| ADGP | | |
| IGP | Α | |
| DIG | D | |
| SSP | | Α |
| ASP | | D |

Only two officers are ranked between D and F. E is immediate junior to C.

We get,

| Designation | Case 1 | Case 2 |
|-------------|--------|--------|
| DGP | F | С |
| ADGP | В | E |
| IGP | Α | F |
| DIG | D | В |
| SSP | С | Α |
| ASP | E | D |

At least two officers are senior to B.

Here, case 1 is invalid.

The final arrangement is,

| | _ |
|-------------|------|
| Designation | Name |
| DGP | С |
| ADGP | E |
| IGP | F |
| DIG | В |
| SSP | Α |
| ASP | D |

Here, the correct pair is 'SSP - A'.

Q19 Text Solution:

- 1. Only one person goes before N.
- 2. No one goes after M.
- 3. Two people go between K and N.

CASE 1

| 1st | |
|------|---|
| 2nd | N |
| 3rd | |
| 4th | |
| 5th | К |
| 6th | |
| 7th | |
| LAST | М |

4. P goes immediately before Q.

CASE 1

| 1st | |
|------|---|
| 2nd | N |
| 3rd | Р |
| 4th | Q |
| 5th | К |
| 6th | |
| 7th | |
| LAST | М |

CASE 2

| 1st | |
|------|---|
| 2nd | N |
| 3rd | |
| 4th | |
| 5th | К |
| 6th | Р |
| 7th | Q |
| LAST | М |

- 5. L goes before P but after O. Therefore, case 1 is no longer valid.
- 6. Two people go between R and P.
- 7. R goes before L.
- 8. R doesn't go before N.

CASE 2

| 1st | 0 |
|------|---|
| 2nd | N |
| 3rd | R |
| 4th | L |
| 5th | К |
| 6th | Р |
| 7th | Q |
| LAST | M |

Q20 Text Solution:

- 1. Only one person goes before N.
- 2. No one goes after M.
- 3. Two people go between K and N.

CASE 1

| 1st | |
|------|---|
| 2nd | N |
| 3rd | |
| 4th | |
| 5th | К |
| 6th | |
| 7th | |
| LAST | М |

4. P goes immediately before Q.

CASE 1

| 1st | |
|------|---|
| 2nd | N |
| 3rd | Р |
| 4th | Q |
| 5th | K |
| 6th | |
| 7th | |
| LAST | М |

CASE 2

| 1st | |
|------|---|
| 2nd | N |
| 3rd | |
| 4th | |
| 5th | К |
| 6th | Р |
| 7th | Q |
| LAST | М |
| | |

- 5. L goes before P but after O. Therefore, case $1\,$ is no longer valid.
- 6. Two people go between R and P.
- 7. R goes before L.
- 8. R doesn't go before N.

CASE 2

| 1st | 0 |
|------|---|
| 2nd | N |
| 3rd | R |
| 4th | L |
| 5th | К |
| 6th | Р |
| 7th | Q |
| LAST | М |

Q21 Text Solution:

- 1. Only one person goes before N.
- 2. No one goes after M.
- 3. Two people go between K and N.

CASE 1

| 1st | |
|------|---|
| 2nd | N |
| 3rd | |
| 4th | |
| 5th | К |
| 6th | |
| 7th | |
| LAST | М |

4. P goes immediately before Q.

CASE 1

| 1st | |
|------|---|
| 2nd | N |
| 3rd | Р |
| 4th | Q |
| 5th | K |
| 6th | 7 |
| 7th | |
| LAST | М |

CASE 2

| N |
|---|
| |
| |
| К |
| Р |
| Q |
| М |
| |

- 5. L goes before P but after O. Therefore, case 1 is no longer valid.
- 6. Two people go between R and P.
- 7. R goes before L.
- 8. R doesn't go before N.

CASE 2

| 1st | 0 |
|------|---|
| 2nd | N |
| 3rd | R |
| 4th | L |
| 5th | K |
| 6th | Р |
| 7th | Q |
| LAST | М |

Q22 Text Solution:

It is given that,

The six police officers are A, B, C, D, E and F. Their designations are DGP, ADGP, IGP, DIG, SSP and ASP.

The number of officers senior to A is an even number.

A is not the person with seniormost designation.

A is immediate senior to D.

We get,

| Designation | Case 1 | Case 2 |
|-------------|--------|--------|
| DGP | | |
| ADGP | | |
| IGP | Α | |
| DIG | D | |
| SSP | | Α |
| ASP | | D |

Only two officers are ranked between D and F. E is immediate junior to C.

We get,

| Designation | Case 1 | Case 2 |
|-------------|--------|--------|
| DGP | F | С |
| ADGP | В | E |
| IGP | Α | F |
| DIG | D | В |
| SSP | С | Α |
| ASP | E | D |

At least two officers are senior to B.

Here, case 1 is invalid.

The final arrangement is,

| Designation | Name |
|-------------|------|
| DGP | С |
| ADGP | E |
| IGP | F |
| DIG | В |
| SSP | Α |
| ASP | D |

Here, statements II and III are true.