

# REASONING 

SEATING
ARRANGEMENT

## Seating Arrangement

## Example-1:

## Directions: Study the information carefully and answer the questions given below.

Certain numbers of persons are sitting around a circular table, which has a Circumference of 546 cm . All the persons are facing towards the center. They are sitting at distances to each other which are consecutive multiple of six. $A$ is 3 rd to the left of $I$. Two persons are sitting between $K$ and $I$. M Is Immediate right to $L$. H sits to the left of G at a distance of 72 cm . The Distance between $A$ and $D$ is 18 cm . The number of persons sitting between $J$ and $B$ is same as between $B$ and $F$. The distance between $E$ and $F$ is LCM of 6 and 5 . Neither $M$ nor $L$ is neighbor of $K$ and $H$. The number of person sitting between $C$ and $I$ is same as between $I$ and $E$. The distance between $K$ And $I$ is not more than 162 cm . Either $C$ or $E$ is neighbor of $K$.

## Explanation (The Approach):

 TMCertain numbers of persons are sitting around a circular table but not given the number of persons, but from some other information we can conclude the number of persons in the circle. As it is given that all persons are sitting at distances to each other which are consecutive multiple of six and Circumference of circle is 546 cm , so between persons distances are 6,12 , $18,24,30,36,42,48,54,60,66,72$ and 78 . From that condition we deduce that there are only 13 persons in the circle. Now we try to solve Puzzle by using some other given information- A is 3 rd to the left of $I$. Two persons are sitting between $K$ and $I$. The distance Between $A$ and $D$ is 18 cm . H sits to the left of G at a distance of 72 cm . The Distance between $K$ and $I$ is not more than 162 cm . also persons are sitting at distances to each other which are consecutive multiple of six, so we can

Get-

## Case-3



## Now from the other conditions-

The distance between $E$ and $F$ is LCM of 6 and 5 that means distance between $E$ and $F$ is 30 . From that Case- 3 is eliminated. Either C or E is neighbor of K . The number of persons sitting between C and I is same as between I and E . from that condition Case- 2 and Case- 4 is eliminated. So Rest Case-1 is left.

## Case-1



Neither M nor L is neighbor of K and $\mathrm{H} . \mathrm{M}$ is immediate right to L . The number of persons sitting between $J$ and $B$ is same as between $B$ and $F$. So the final arrangements are-

Case-1


## Example-2:

Directions: Study the following information carefully and answer the questions given below. There are eight members i.e. A, B, C, D, E, F, G and H are sitting around a square table such that four of them likes flowers i.e. Lily, Rose, orchid and Sunflower and four of them likes fruits i.e. Mango, Kiwi, Apple, Banana but Not necessarily in the same order. Those who like Fruits sit at the corner and those who like flower sits at the middle of the table. Some of them face inside and some of them face outside. The one who likes Orchid sits third to the right of H. A sit second to the right of the one who likes or child? A is not the immediate neighbor of $H$. the one who likes Banana is an immediate neighbor of $A$. The one who likes Banana sits opposite to the one who likes Kiwi. H does not like Kiwi. The One who likes Apple sits second to the left of the one who likes Kiwi, who is Not the immediate neighbor of A. B sits third to the right of the one whom Likes Apple. F likes Lily. Only one person sits between B and the one who Likes Sunflower. F faces the one who likes Sunflower. E and G sit opposite To each other. E does not like Banana. C sits second to the right of G. C does not face inside. C and D face same direction as $G$.

## Explanation (The Approach):

Sol. The one who likes Orchid sits third to the right of H . a sit second to the right of the one who likes or child. A is not the immediate neighbour of H . The one who likes Banana is an immediate neighbour of A. The one who likes Banana sits opposite to the one who likes Kiwi. H does not like Kiwi. Those who like Fruits sit at the corner and those who like flower sits at the middle of the table. So we can get that-


From the other conditions, the one who likes Apple sits second to the left of the one who likes Kiwi, who is not the immediate neighbour of $A$.


Now, B sits third to the right of the one who likes Apple. Only one person sits between B and the one who likes Sunflower. F faces the one who likes sunflower. F likes Lily. From that condition Case-3 and Case-4 are eliminated. So, case-1 is continued.


E and G sit opposite to each other. E does not like Banana, So G likes banana. C sits second to the right of $G$. C does not face inside. C and $D$ face same direction as $G$. From that condition Case-1 is eliminated. Case-2 is continued. So, the final arrangement are-


Directions (1-5): Study the following information carefully and answer the questions that follow:

Seven people having their name as consecutive alphabets are sitting in an alphabetical order from west to east direction in a straight line. Four of them are facing south and remaining of them are facing north. All of them are of different age. The person whose age is square of four sits second to the left of $K$. Two persons sit between the one whose age is square of four and the one whose age is six years. Both the immediate neighbours of the one, whose age is six years faces opposite direction to each other (i.e. if one faces to north then the other faces to south vice versa). L's age is twice of the age of the one who sit second left of $K$. The one whose age is four years more than the half of L's age sits second to the right to L . Only one person sits between M and the one, whose age is $5 / 4$ of L's age. The persons whose age is six years and the one whose age is 0.5 times of 18 are immediate neighbours. The one, whose age is square of five sits third to the right of the person whose age is four years more than the half of L's age. $L$ and $M$ face opposite direction to each other (i.e. if one faces north then the other faces south vice versa). The one whose age is six years faces south. The person whose age is $5 / 4$ of L 's age faces north.

1. Who among the following is sitting in the row?
(a) G
(b) $P$
(c) Q
(d) J
(e) H
2. Who among the following person faces north direction?
(a) K
(b) J
(c) M
(d) Q
(e) 0
3. Which of the following is the age of M ?
(a) 16
(b) 40
(c) 9
(d) 25
(e) None of these
4. If $\mathbf{2 5}$ is related to $K$ and 16 is related to $M$ then $\mathbf{3 2}$ is related to whom?
(a) L
(b) J
(c) Q
(d) G
(e) None of these
5. What will be the age of the one who sit third to the right of $L$ ?
(a) 20
(b) 6
(c) 40
(d) 25
(e) 9

## DID YOU KNOW?

Solving of these questions is similar to a chain process in which each condition or information in some way or the other is linked with each other. If you get that one key root or node of it you will be able to solve it easily.

## Directions (6-10):

Study the following information carefully and answer the given questions.
P, Q, R, S, T, U, V and W are eight cricketers sitting around a circular table. Some of them are facing the center while others are facing opposite to the center. Each of them plays for different team viz. M, K, J, X, N, L, Y and Z but not necessarily in the same order. Each of them except $U$ and $R$ played different number of matches for their team. $S$ played two more matches than his immediate right neighbour. $S$ sits third to the left of $P$. $R$ sits second to the left of $P$. The difference between the numbers of matches played by $Q$ and the one who plays for $J$ is two less than the number of person sitting between them. $\mathbf{Q}$ who plays for $\mathbf{N}$ is an immediate neighbour of both $S$ and $V$. The one who sits to the immediate right of $Q$ plays for $X$. $V$ who plays for $M$ is sitting third to the right of $P$. The sum of the total number of matches played by the immediate neighbours of $P$ is equal to 9 . $W$ who plays for $Y$ Sits third to the right of T. Neither $\mathbf{P}$ nor $\mathbf{W}$ is an immediate neighbour of the person who plays for L . U does not play for J. Only two such persons are there who do not have anyone sitting in front of them. The number of matches played by $T$ is twice the sum of the number of matches played by his immediate neighbors. The person who plays for $Z$ is sitting opposite $T$. the one who plays for N played 5 matches. P and $\mathbf{Q}$ are not facing each other. The one who played for K played 3 matches. No one played more than 8 matches.
6. Who among the following sits fourth to the right of $P$ ?
(a) Q
(b) R
(c) S
(d) T
(e) None of these
7. What is the sum of the total number of matches played by the immediate neighbours of $W$ ?
(a) 11

(b) 8
(c) 7
(d) 9
(e) None of these
8. Who played the least number of matches?
(a) P
(b) Q
(c) R
(d) T
(e) None of these
9. What is the difference between the numbers of matches played by the immediate neighbors of $U$ ?
(a) 6
(b) 3
(c) 2
(d) 4
(e) None of these
10. Who among the following sits fifth to the right of $Q$ ?
(a) P
(b) U
(c) T
(d) V
(e) None of these

## DID YOU KNOW?

New concept of undefined number of persons is introduced in the recent examination. In this type of questions first you should start adjusting the defined persons in the arrangement and after going forward with the given conditions you will be able to find the total number of persons in that arrangement.

## Directions (11-15):

Study the following information carefully and answer the questions given below. Some students are sitting in two rows waiting for their turn to deliver their speech in the annual function such that all are facing towards north Direction. Some are sitting in row 1 which has more number of seats than row 2 . The student sitting on the left end of the row 1 is the first one to deliver the speech.
11. Who among the following pair sits in the row 2 initially?
(a) C and A
(b) B and G
(c) G and D
(d) H and G
(e) None of these
12. Who among the following is the first to deliver the speech on the annual day?
(a) D
(b) H
(c) E
(d) F
(e) None of these
13. Who among the following student replaces $B$ after the second student goes to deliver the speech?
(a) H
(b) E
(c) A
(d) G
(e) None of these
14. How many students are there in the first row?
(a) 5
(b) 6
(c) 7
(d) 4
(e) None of these
15. Who among the following sits second to the right of $F$ ?
(a) A
(b) D
(c) E
(d) H
(e) None of these

## DID YOU KNOW?

There is also a new pattern introduced of linear arrangement in the mains exam in which the total length of the row is given and you have to adjust the given persons in that row and all the persons are at a given multiple from each other, so while solving this the factor of distance should be kept in mind as it plays a major role.

Directions (16-20):
Study the following information carefully to answer the questions given below:

Ten people $K, L, M, N, O, P, Q, R, S$ and $T$ are sitting in a cabin as per the given formation in the figure such that four of them are facing in west direction, four are facing east while the other two are facing north direction.

$R$ is sitting second to the right of $T$. Neither $R$ nor $T$ sits opposite to $P$. $K$ is an immediate neighbor of $P$. $N$ sits opposite to the one who sits immediate left of $L$. Only one person sits between $P$ and $S$. either three persons sit to the left of $N$ or no one sits to the right of $N . S$ is not an immediate neighbor of $\mathbf{N}$ and L. P does not face north direction. $\mathbf{Q}$ sits to the immediate right of $\mathbf{M}$. $\mathbf{O}$ sits opposite to the one who sits third to the left of $\mathbf{N}$. Neither $\mathbf{N}$ nor $T$ is an immediate neighbor of $Q$.?
16. Who among the following sit opposite to O ?
(a) L
(b) $R$
(c) N
(d) S
(e) None of these
17. What is the position of $P$ with respect to $N$ ?
(a) Immediate left
(b) Second to the left
(c) Second to the right
(d) Immediate right
(e) None of these
18. How many persons sit between $Q$ and $K$, counting from the left of $K$ ?
(a) One
(b) Three
(c) Two
(d) No one
(e) None of these
19. Which of the following pair faces north direction?
(a) L, O
(b) $M, Q$
(c) $\mathrm{S}, \mathrm{K}$
(d) R, K
(e) None of these
20. How many persons sit between $O$ and $T$ ?
(a) Two
(b) One
(c) Three
(d) No One
(e) None of these

## DID YOU KNOW?

Sometimes you will see in the exam that the likings of the persons differ according to their position. For ex- those who are sitting at the corner like fruit while those who are sitting in
the middle like colours so be careful while reading the direction also solve the arrangement accordingly.

Directions (21-25):
Study the following information carefully to answer the questions given below:
Seven boxes B, Y, R, I, O, G, V are placed one above another in a loaded truck. All these boxes are placed in a linear row from west to east when truck unloaded. Also after unloading each of the boxes assigned a unique number. initially when boxes are arranged vertically in the truck, the arrangement is-More than three boxes are placed between V and R. Only one box is placed between $G$ and $O$. Box $O$ is placed above $G$. Three boxes are placed between $Y$ and $I$. Box $O$ is not placed above $B$ and $Y$. Box $V$ is above box $I$. after the unloading of the boxes, now only two boxes are placed between the boxes which was third from the bottom vertically and the box which was at top. The box which is third from the west end is assigned a number which is $300 / 6 \%$ of the number of the box which is two places towards east of it. Only one box is placed between the boxes which was at top and the box this was at bottom. Box $I$ is not placed next to box $R$. The number assigned to the box which was at top is 44 . The box which was exactly in the middle is placed adjacent to box $R$. More than three boxes are placed between the boxes which were second from the top and box $O$. The number assigned to box which is at east end is average of the number assigned to boxes $\mathrm{B}, \mathrm{Y}$ and O . Box V is not in the east of box $O$. Box $G$ is placed immediate next to box $B$. Box $G$ is not placed immediate next to the box which was third from the bottom. The number assigned to box 0 is $15 / 11$ of the number assigned to box $B$. The sum of the number assigned to the boxes placed at both the ends is 67 . The number assigned to the box placed immediate next to V is $4 / 7$ of the number assigned to it. The number assigned to box $G$ is twice of the difference of the numbers assigned to box Y and I .
21. How many boxes are placed between box $Y$ and $O$ when boxes are Placed in vertical manner?
(a) One
(b) Three
(c) Two
(d) More than three
(e) None of these
22. Which of the following box is placed second to the right of box $B$ horizontally?
(a) V
(b) 0
(c) $Y$
(d) R
(e) None of these
23. What will be the difference of the number assigned to box $G$ and I?
(a) 25
(b) 26
(c) 28
(d) 24
(e) None of these
24. What is the new position of the box which was placed at the bottom?
(a) Second from right end
(b) Immediate left of box $G$
(c) Third from the left end
(d) Immediate right of box O
(e) None of these
25. What is the number assigned to the box which is placed exactly in the middle horizontally?
(a) 22
(b) 44
(c) 48
(d) 24
(e) None of these

## DID YOU KNOW?

One new thing that has been seen in the arrangement is the figure based arrangement in which a figure is given and you have to place the persons as per the given conditions within that figure, so the method should be that first we should go on with the seating arrangement as start placing the persons around that figure.

Directions (26-30):
Study the information carefully and answers the question given below.
There are nine-person U V T Z S X W Y and E Sitting in a row where some of them are facing north and remaining are facing South direction.

Note: Opposite direction means (if one faces south then another person faces north and vice versa). Also, their ages are between 35-65 (means all nine member's age between 35-65, and none of them have same age). $W$ sits middle of the row, and one person sit between $Y$ and $W$. $E$ sits second to left of $Y$, and face opposite direction with respect of both $W$ and $Y$. $S$ and $T$ both are immediate neighbours and one of them sits extreme end of row and both face same direction with respect of $E$. Number of persons sit between $T$ and $W$ and $Z$ and $W$ are same. One person sits between $Z$ and the one whose age is a perfect square of an even number which is more than $6 . \mathrm{U}$ and V are immediate neighbours and difference between the ages of them is one year. Either U's or V's age is a perfect square of a number which is more than 5. The ages of both the immediate neighbours of $W$ are perfect Squares. $U$, who is 48 -year-old sits third to left of $X$. The person who is 55 - year-old sit sixth to right of $T$. E's age is 10 years less than his neighbour. $Z$ faces opposite direction with respect to both $U$ and $Y$. $\mathbf{W}$ age is 3 years more than $V$. Difference between ages of $Y$ and $T$ is 5 years. $T$ is older than $Y$, who is 2 years younger than $Z$.? Not more than three person faces south direction and $S$ is youngest amongst nine. The one whose age is 37 sits at extreme end. E's age is not 37 . There is only one person sits between $S$ and $U$. There are only 2 persons sit between the one whose age is 37 and the one who sits immediate right of $\mathbf{W}$.
26. Which of the following persons sits third to the left of the one whose age is 64 years?
(a) S
(b) T
(c) U
(d) V
(e) None of these.
27. How many persons sit to the right of $Y$ ?
(a) One
(b) Two
(c) Three
(d) None
(e) More than Three
28. What is the age of the person who is immediate left of $V$ ?
(a) 48
(b) 49
(c) 53
(d) 64
(e) None of these
29. Which group of persons represents whose ages are perfect square?
(a) $\mathrm{ST}^{\mathrm{T}}$
(b) XV
(c) X W
(d) V U
(e) None of these
30. How many persons sit between W and the person whose age is 45 years?
(a) One
(b) Two
(c) Three
(d) None
(e) More than three

## DID YOU KNOW?

A new concept of undefined persons has also been seen in which you get to know that there are seven or eight persons and they are in alphabetical order but those alphabets are not defined so in this type you have to take all the possible combinations as if $K, L$ and $M$ are given then you have to take J, K, L, M... or K, L, M, N.... and so on...

Directions (31-35):
Study the following information carefully and answer the questions that follow:


In the given figure the four-line segments $1,2,3,4$ are PA, QB, RC, SD respectively. The lengths of the line are $50 \mathrm{~m}, 35 \mathrm{~m}, \mathbf{2 4 m}$ and 62 m respectively. Six people Dev, Ram, Ravi, Raju, Sonu and Monu are standing in line 1-PA. All of them are facing north. With distance between them increasing in multiples of 9 from the left end (i.e. suppose Dev is left end of the line at point $P$ then the remaining people will stand at a distance as follows $-9 \mathrm{~m}, 18 \mathrm{~m}, \mathbf{2 7 m}$.... from the end) two persons are standing between Dev and Ram. Dev stands to the left of ram. Ravi stands second to the left of Ram. Monu is an immediate neighbor of Ravi. Only one person stands between Monu and Raju. Dev is not an immediate neighbour of Monu. Raju is neither an immediate neighbour of Dev nor stand at an extreme end. Similarly, six people Diya, Riya, Piya, Jiya, Tia and Kiya are standing in line-4 SD. All of them are facing south. With distance
between them increasing in multiples of 11 from the end (i.e. if first person is at right end of the line at point $S$ and the remaining will be stand at the distance as follows-11m, 22m,33 $\mathrm{m} . .$. from point S ). Piya is standing at 3rd position from the right end. Tia is an immediate neighbor of Piya. Two people are standing between Tia and Kiya. More than three persons stand between Kiya and Diya. Jiya stands to the immediate left of Kiya. Riya and Tia are immediate neighbors.

* Point $Q$ and Point $R$ is left end of the row in line $Q B$ and line $R C$.

31. In the line-4 SD, what is the distance between Tia and point D?
(a) 29 m
(b) 16 m
(c) 22 m
(d) 24 m
(e) None of these
32. If in line-1 PA, if peoples stand at distance of multiples of 11 in the same order, and rest of them move to line-2 QB and stands from left end in the same order. And if in line 4-SD, if people stand at distance of multiples of 13 in the same order and rest of them move to line-3 RC stands from left end in the same order. Then total together how many people are standing in lines 2 and 3?
(a) 1
(b) 2
(c) 3
(d) 4
(e) None of these
33. If in line 4-SD, if people stand in multiples of 14 in the same order and rest of them move to line-3 RC and stands from left end in the same order. Then the distance between Diya and point C is?
(a) 2
(b) 12
(c) 24
(d) 14
(e) None of these
34. Suppose line-1 PA is joined to line2-QB to form a new straight-line PB in such a way that distance between point $A$ and $Q$ is 5 m . If the people of line-1 PA are made to stand in multiples of $\mathbf{1 2}$ in that new line, then how far is Ram from point $B$ ?
(a) 16
(b) 21
(c) 26
(d) 54
(e) None of these
35. If in line-1 PA people stand in distance at multiples of 12 in the same order and rest of them move to line-2 QB in the same order from left end, then who will be standing in line-2?
(a) Raju
(b) Monu
(c) Ram
(d) Ram and Monu
(e) None of these

Direction (36-40): Study the following information carefully and answer the question below-

* Numbers are given in the figure considered as their positions.


Eight persons Ravi, Arjun, Rahul, Ram, Raj, Ayush, Sahil, and Shyam are sitting around the circular table having eight chairs such that some of them are facing towards the center while some are facing outside the center. Shyam sits second to the left of Ravi. Only two persons sit between shyam and Raj. Raj is not an immediate neighbour of Ravi. Both Raj and Ram are facing outside the center. Ayush sits on the immediate right to Raj. Sahil sits third to the right of Arjun. Only Rahul sits between Shyam and Sahil. Both Arjun and Shyam are facing towards the center. Both Ayush and Rahul are facing the same direction as Shyam. Sahil is facing opposite direction of Ravi.Now they start playing cards game. They shuffled a pack of cards. 1. Ravi draws one card and changes his place according to the given conditions, 2. Ram draws one card and changes his place according to the given

Conditions similarly others draw cards given in the condition below-

## Conditions:

1. If the card drawn is spade, the person who draws it first moves to the outer Square at position 5 facing opposite direction of his current direction, then the second person who also draw spade moves to position 6 , similarly 7 and 8.
2. If card drawn is heart, person who draws it moves to the immediate left of his current position facing same direction.
3. If the card drawn is diamond, the person who draws it first moves to the inner square at corner 1 facing same direction, then the second person, who also draw diamond moves to corner 2, similarly 3 and 4.
4. If card drawn is club, person remains on the same position facing opposite direction of current direction.

Draws:

1. Ravi draws queen of Club
2. Ram draws Jack of Club
3. Shyam draws 3 of Spade
4. Rahul draws a King of Diamond
5. Sahil draws Ace of Heart
6. Raj draws 9 of Heart
7. Ayush draws 7 of Diamond
8. Arjun draws 4 of Spade

* Note: All the persons draws card in a serial way as given above.
(Ex- First Ravi draws then Ram draws ..... so on.)

36. After all persons changed their places based on the above conditions, who among the following is sitting at the corner 2 of the square?
(a) Arjun
(b) Rahul
(c) Sahil
(d) Ayush
(e) No one
37. After all persons changed their places based on the above conditions, how many persons will remain in the circle?
(a) Two
(b) Four
(c) One
(d) Three
(e) None of these
38. After all persons changed their places based on the above conditions, then who among the following is sitting to the immediate right of Sahil?
(a) Raj
(b) Ravi
(c) Rahul
(d) Shyam
(e) None of these
39. After all persons changed their places based on the above conditions, then how many persons facing away from the center?
(a) Two
(b) One
(c) Five
(d) Three
(e) None of these
40. After all persons changed their places based on the above conditions, then who among the following is sitting at the position 6 of the square?
(a) Sahil
(b) Ravi
(c) Arjun
(d) Shyam
(e) None of these

Directions (41-45):
Study the following information carefully and answer the question given below:
Eight students namely A, B, C, D, E, F, G and H study in the school. The Class teacher asked them to sit in a circle in one arrangement and after lunch in a straight line in another arrangement. While sitting around a circle each student are facing outward and while sitting in a straight line each student are facing north. But in both arrangements each student likes same cartoons. The cartoons are i.e. Chota bheem, Ben 10, Tom \& Jerry, Oggy, doraemon, Samurai jack, Johnny Bravo and Generator Rex, but not necessarily in the same order. F likes Johnny Bravo. $F$ and $C$ are the immediate neighbours of $B$ in both the arrangements, but $C$ is not at the extreme ends of the line. The one who likes Samurai jack sits immediate right of $\mathbf{G}$ in the circle. One of the immediate neighbours of H in the straight line sits opposite to H in the circle. The one who likes Chota bheem sits third to the right of the one who likes Johnny Bravo in the Straight line. The one who likes Tom \& Jerry sits second to the left of the one who likes Samurai jack in the straight line. The one who sits on the extreme left end sits second to the right of $E$ in the circle. $H$ is not on the immediate left of $F$ in both the arrangements. The Persons who like Chota bheem and Ben 10 sits opposite to each other in the circle. $D$ sits third to the right of $F$ in the straight line. The one who sits on the immediate left of $B$ in the straight line is sitting on the immediate right of $B$ in the circle. $G$ sits on the immediate left of H in the circle, but both are not immediate neighbours of each other in the straight line. Person likes Doraemon sits second to the left of the one who likes Oggy in the straight line. E sits third to the right of B in the circle, while fourth to his left in the straight line.
41. Which of the following pairs sit at the extreme ends of the row?
(a) The Person who likes Samurai jack, E
(b) F, G
(c) Can't be determined
(d) G, the Person who likes Chota bheem
(e) None of these
42. The one who is sitting at the extreme left end of the straight line likes which of the following cartoon?

TESTPREP
(a) Tom \& Jerry
(b) Chota bheem
(c) Ben 10
(d) Generator Rex
(e) None of these
43. Who among the following sits on the immediate right of $E$ in the circle?
(a) A
(b) G
(c) C
(d) D TM
(e) None of these
44. The one who sits third to the right of $C$ in the circle is at what position in the straight line with respect to $\mathbf{G}$ ?
(a) Third to the left
(b) Third to the right
(c) Immediate right
(d) Fourth to the right
(e) None of these
45. The person who is sitting between $E$ and $G$ in the circle is sitting at what position in the straight line?
(a) Extreme left end of the straight line
(b) Fourth from the right end
(c) Third from the left end
(d) Extreme right end of the straight line
(e) None of these

Directions (46-50):
Study the following information carefully and answer the questions given below:
Nine people are sitting in a straight line, some are facing south and some are facing north. Each of them has got married during the years 1972-1980 in the months of Jan to Sept but not necessarily in the same order and only one person got married in one year and in one month. $C$ is not the youngest. C got married in a leap year and in a month of 31 days. I is older than $B$ and faces north direction. E got married in Sept. $D$ is older than $H$ but $H$ is younger than $F$. C sits 3 rd left of $H$ while $I$ sits $2^{\text {nd }}$ right of $D$. The persons sitting adjacent to the ones who got married in a month of 31 days except May but not sitting at extreme ends are facing opposite directions. Oldest of them sit at an extreme end and got married in the month which has 31 days. The person who got married in 1977 sits immediate left of the person, who got married on September. The persons adjacent to the youngest person face opposite direction. While youngest of them got married in July sit adjacent to those, who got married in 31 days month but none of them sit at any extreme position. A sit on the extreme end. And both the youngest and the oldest face the same direction. A sit $3^{\text {rd }}$ left of $G$ and face in same direction as $G$ who is not sitting adjacent to $I$. The one who got married in Jan is facing south and is sitting exactly in the middle and his immediate neighbours face opposite directions. I got married one of the years before B. G got married in 1980. The one who got arrived in Aug is facing south and got married in 1974. The ones who got married in a month having 30 days are sitting adjacent to each other but none of them is E. E got married in 1978. H who is facing north got married in a year between the years of $D$ and $A$ got married and none of them got married in a leap year. The marriage difference between $B$ and $I$ is 7 years and they got married in May and March respectively. H and D sit adjacent to each other facing same direction. $B$ and $E$ faces same direction. Persons sitting adjacent to a face north direction.
46. Who among the following person sits fourth to the right of $\mathbf{C}$ ?
(a) H
(b) A
(c) E
(d) I
(e) None of these
47. In which of the following year B got married?
(a) 1978
(b) 1980
(c) 1975
(d) 1979
(e) None of these
48. How many persons sit between the person who got married in 1979 and the person who got married in the month of June?
(a) Four
(b) Two
(c) Three
(d) Can't be determined
49. In which of the following month D got married?
(a) April
(b) August
(c) June
(d) September
(e) Either (a) or (c)
50. Who among the following person got married in the month of August?
(a) Person, who sits immediate left of $C$
(b) G
(c) Person, who sits immediate left of $D$
(d) Both (a) and (c)

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(e) A

## Directions (51-55):

Read the following information carefully and answer the questions given below:
There are six cars - K, L, M, N, O, P - parked in a row facing north direction, but not necessarily in the same order. The distances between two adjacent cars are multiples of three.

Information regarding all the cars:
The total distance between all the parked cars is 198 m . The distance between ' N ' and ' K ' is 105 m and car ' $N$ ' is second to the left of car ' $K$ '. The distance between the cars ' $N$ ' and ' $M$ ' is 132 m . The car ' $P$ ' is 84 m away from car ' $O$ '. Car ' $P$ ' is at one of the position to the left of car ' $O$ '. Only one Car is parked between $L$ and $P$. $P$ is to the immediate left of $K$ and distance between them is 36 m . Car L is not in the right of car N and more than two cars are parked between car N and car O . Car ' L ' starts moving towards south and after going 10 m , it turns left, then it moves 114 m and then it goes another 5 m to its left and stops at point ' X '. An another Car ' C ' moves 15 m in a certain direction, and then takes a left turn and goes $\mathbf{2 7} \mathbf{~ m}$ straight. Then it turns to its right and moves another 5 m and halts at point ' Y '. Point $Y$ is in the east of point $X$ and is 36 m apart from each other. Now car ' N ' starts moving in north direction. After moving 15m it turns to its right move 105m and stopped at point Z .
51. How many cars are parked there in between cars ' $M$ ' and ' $L$ '?
(a) Two
(b) None
(c) More than three
(d) One
(e) Three
52. What is the distance between point ' $Z$ ' and point ' $\gamma$ '?
(a) 25 m
(b) 18 m
(c) They don't align in the same straight line
(d) 20 m
(e) 27 m
53. What is the distance and direction of final position of Car ' $C$ ' with respect to the Car ' $P$ '?
(a) V1334 m towards north-west
(b) 50 m towards south-east
(c) V1321 m towards south-east
(d) 5V34 m towards south-east
54. Which car will be met first, if ' $L$ ' moves through the shortest distance from point ' $X$ '?
(a) N

TM
(b) 0
(c) K
(d) P
(e) None of these
55. What is the current position of car ' $M$ ' with respect to car ' $O$ '?
(a) 75 m towards right
(b) 21 m to the immediate left
(c) 36 m towards left
(d) 69 m towards left
(e) None of the above

Directions (56-60):
Study the following information to answer the given questions:

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Ten persons are sitting in 2 parallel rows containing 5 persons in each row. In 1st row G, F, H, I and $J$ are seated and face south and in 2 nd row $E, D, A, B$ and $C$ are seated and face north, but not necessarily in the same order. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row. They own different dogs i.e. Great Dane, Dobermann, Pug, Golden Retriever, German sphered, doodle, Pitbull, eagle, Labrador, bull dog but not necessarily in the same order. E sits 2 nd left to $D$, none of them is sitting at the corner. G faces one of the immediate neighbors of D.H and J sit together and only one of them is neighbor of G. The one who owns Pitbull sits at one of the corner. Neither D nor his neighbors face the one who owns Dobermann. B owns pug. Two people sit between $B$ and the one who owns golden retriever. E does not own golden retriever. J faces E. The one who owns German sphered sits opposite to F, who owns Labrador. F does not sit next to the one who owns Great Dane. The one who owns great Dane does not face north. A does not face $G$. Neither I nor his neighbors face the one who owns doodle. The one who owns Dobermann faces south. I does not own Doodle.
56. Who among the following faces the one who owns Pitbull?
(a) The one who owns Pug
(b) I
(c) D
(d) The one who owns bulldog
(e) None of these (e) None of these
57. Who are immediate neighbors of the one who owns Doodle?
(a) E, J
(b) B, C
(c) C, D
(d) $C, A$
(e) None of these
58. Four of the following five from a group, which among the following does not belong to this group?
(a) H
(b) B
(c) C
(d) A
(e) F
59. G owns which of the following dogs?
(a) Pug
(b) Labrador
(c) Golden retriever
(d) Bulldog
(e) None of these
60. How many persons sit to right of the person who owns German sphered?
(a) One
(b) Two
(c) three
(d) No one
(e) Four

## Directions (61-65):

Study the following information to answer the given questions:
There are eight persons namely $P, Q, R, S, T, U, V$ and $W$ sitting around a square table in such a way that two persons sit on each side. All the persons are facing towards the center. They like different cafes in Himachal Pradesh i.e. Johnson, Evergreen, Cafe 1947, Freedom cafe, Moon dance, Jim Mari son, Moon peak espresso, Shiva but not necessarily in the same order.
$S$ and $P$ sit on the same side of the table. Neither $P$ nor his neighbors like Shiva and Moon dance. The one who likes Jim Mari son sits 2nd right to $S$. Three people sit between the one who likes Jim Mari son and W. Neither W nor his neighbors like Johnson. R does not sit next to the one who like Johnson. R who likes evergreen faces S, who likes Cafe 1947.T sits opposite to $\mathbf{Q} . V$ sits 3rd right to U . More than three persons sit between the one who likes Johnson and the one who like Moon dance, when counted in clockwise direction from of the one who likes Johnson. The one who likes Jim Mari son does not face the ones who like Moon peak espresso and Johnson. No one sits between $T$ and the one who likes freedom café.
61. Which among the following represents the correct combination?
(a) V-Cafe 1947
(b)T-Johnson
(c) U-Moon dance
(d) P-Moon peak espresso
(e) None of these
62. Four of the following five form a group, which among the following does not belongs to that group?
(a) $\mathrm{S}-\mathrm{R}$
(b) V-P
(c) $\mathrm{W}-\mathrm{U}$
(d) $\mathrm{T}-\mathrm{Q}$
(e) S-V
63. What is the position of $W$ with respect to $R$ ?
(a) 5th from the left
(b) 2nd to the right
(c) 3rd to the left
(d) 4th to the right
(e) None of these
64. If $S$ and the one who likes Jim Mari son exchange their positions, then who among the following sits 4th right to $S$ ?
(a) R
(b) P
(c) U
(d) T
(e) None of these
65. Which the following is not true regarding $T$ ?
(a) He likes Shiva
(b) He faces the one who likes Jim Mari son
(c) Only V sits between T and R
(d) S sits 3 rd left to T
(e) None of these

Directions (66-70): Study the following information to answer the given questions:
There are eight head of NGO's namely A, B, C, D, E, F, G and H sitting in a linear row facing north. All of them distribute free meals to poor on different festivals i.e. Republic day, Independence Day, Christmas, Diwali, Lohri, Budh Purnima, Eid-ul-fitr, and Mahavir Jayanti but not necessarily in the same order. No two persons sit next to each other according to the English alphabetical order (i.e. a does not sit adjacent to B and B does not sit next to A \& C and so on). A sits at one of the ends of the row. More than four persons sit between A and D. C who is one of the immediate neighbors of H , sits 3rd left to the one who distributes meal on Mahavir Jayanti. Only one person sits between the ones who distribute meal on Christmas and Eid-ul-fitr and none of them sit at the corner. More Than one person sits between the ones distributing meal on Independence Day and Eid-ul-fitr. The ones who distribute meal on Diwali and Lohri sit together. Neither A nor C distributes meal on Lohri and Diwali. H sits 3rd left to $B$, who does not distribute meal on republic day. $A$ is not neighbor of $\mathbf{H}$. Odd number of persons sit between H and D. The one who distributes meal on Budh Purnima sits at extreme
left end. There is one person less sits between $A$ and $G$ as compared to the number of persons sitting between G and F. The one who distributes meal on Mahavir Jayanti sits to the immediate left of $B$. The one who distributes meal on republic day sits 3 rd right to the one who distributes meal on Lohri, who sits immediate left to the one who distributes meal on Diwali.
66. Who among the following sit to immediate right to the one who distributes free meal on republic day?
(a) G
(b) C
(c) $D$
(d) F
(e) None of these
67. Who among the following sit immediate right of $D$ ?
(a) C
(b) F
(c) E
(d) G
(e) $B$
68. How many persons are sitting between the one who distributes on Eid-ul-fitr and F?
(a) No one
(b) One
(c) two
(d) three
(e) More than three
69. Which among the following represents incorrect combination?
(a) C-Eid-ul-fitr
(b) F-Christmas
(c) B-mahavir Jayanti
(d) H-republic day
(e) None of these
70. Which among the following pairs of person represents 2 nd right to $H$ and 4th left to $H$ respectively?
(a) D, A
(b) A, D
(c) G, C
(d) B, E
(e) None of these

## SOLUTIONS:

Directions (1-5):


The person whose age is square of four sits second to the left of $K$. Two persons sit between the one whose age is square of four and the one whose age is six years. The one whose age is six years faces south. Both the immediate neighbours of the one, whose age is six years faces opposite direction to each other.



As there is only one immediate neighbour of the one whose age is 6 years, so case- 4 will be eliminated. Now, L's age is twice of the age of the one who sit second left of K. from this, case $1 \mathrm{a}, \mathbf{2 a}, 3 \mathrm{a}$ will be eliminated as it is clear that L's age is $\mathbf{3 2}$ years.


The one whose age is four years more than the half of L's age sits second to the right to $L$. From this case-1b will be eliminated. Further, only one person sits between $M$ and the one, whose age is $5 / 4$ of L's age.


The persons whose age is six years and the one whose age is 0.5 times of 18 are immediate neighbours. The one, whose age is square of five sits third to the right of the person whose age is four years more than the half of L's age. From this case-2b will be eliminated. Now, with case-3b, 5a, 5b------


L and $M$ face opposite direction to each other. The person whose age is $5 / 4$ of L's age faces north. From this case-5a will be eliminated. Both the immediate neighbours of the one, whose age is six years faces opposite direction to each other. So, from this case-5b also get eliminated as only four persons are facing south. So, the final solution is $\qquad$


1. (d);
2. (e);
3. (a);
4. (a);
5. (c);

Directions (6-10):
Step 1. From the information given in the question, $S$ sits third to the left of $P$. $R$ sits second to the left of $P$. There can be two possible cases i.e. case 1 when $P$ is facing towards the center and case $\mathbf{2}$ when $\mathbf{P}$ is facing outside the center. $\mathbf{Q}$ who plays for $\mathbf{N}$ is an immediate neighbour of both $S$ and $V$. It means $Q$ and $P$ are sitting opposite to each other. $P$ and $Q$ are not facing each other. It means there will three possible cases.

So we have,


Case 1


Case 2


Case 3

Step 2: The one who sits to the immediate right of $Q$ plays for $X$. $V$ who plays for $M$ is sitting third to the right of $P$. So our case 1 and case 2 will be eliminated and we will proceed with case 3. In which $Q$ and $P$ are facing opposite to the center. Only two such persons are there who do not have anyone sitting in front of them. It means all the other persons except $P$ and $Q$ will be facing towards the center. $W$ who plays for $Y$ sits third to the right of $T$. It means $T$ sits to the immediate right of $V$. The person who plays for $Z$ is sitting opposite $T$. It means $R$ plays for $Z$ and $U$ is sitting between $T$ and $P$. The one who plays for $N$ played 5 matches. $S$ played two more matches than his immediate right neighbour.

So we have,


Step 3: Neither P nor W is an immediate neighbour of the person who plays for L. So, clearly T plays for $L$. U does not play for J. Means $P$ plays for $J$ and $U$ plays for $K$. The difference between the number of matches played by $Q$ and the one who plays for $J$ is two less than the number of person sitting between them. The one who played for $K$ played 3 matches. The sum of the total number of matches played by the immediate neighbours of $P$ is equal to 9 . It
means $W$ played 6 matches. $U$ and $R$ are the only two persons who played the same number of matches. It means $R$ played 3 matches and $P$ played four matches. The number of matches played by T is twice the sum of the number of matches played by his immediate neighbors. No one played more than 8 matches. It means V played 1 match while T played eight matches.

So we have our final solution as,

6. (a);
7. (c);
8. (e);
9. (d);
10. (b);

Solutions (11-15):
Student sitting on the immediate left of $B$ is the student who goes to deliver the speech second. $B$ is the last student to deliver the speech on the first day. $A$ and $B$ does not sit in the same row. $G$ is the last students who shift from row 2 to row 1 and sits at an extreme right end of row-2. Only one person sits on the immediate right of $A$. No two students sits adjacent to each other according to the English alphabet (i.e. A does not sit adjacent to $B$ and $B$ does not sits adjacent to $C$ and $A$ and so on). So, A sits in row 2.

Row 1


Row 2


C does not get the chance to deliver the speech on the first day of the annual function. C is not the first person to shift from row 2 to row 1 . $E$ is not the first student to deliver the speech nor he sits in the same row with $A$. Both $F$ and $C$ sit in the same row and at least one student sit between them. F is not the first student to deliver the speech. Total 8 students sit in both the rows.


Row 2

$D$ and $H$ does not sit in the same row. $H$ does not deliver the speech on first day.


Row 2


Now, the students shift according to their chance to deliver the speech as it is given that only three students get the chance to deliver speech so clearly 1st $D$ goes to deliver speech then 2nd $F$ goes and 3rd $B$ goes and accordingly the shifting takes place as 1 st $H$ shifts to row-1 at the right end, 2nd $A$ shifts at right end as $H$ moves to immediate left of $A$, $3 r d$ G shifts at the right end as accordingly. So, the arrangement will be-------

Row 1


Row 2
11. (d);
12. (a);
13. (b);
14. (a);
15. (c);

Solutions (16-20):
Either three persons sit to the left of $\mathbf{N}$ or no one sits to the right of $\mathbf{N} . \mathbf{N}$ sits opposite to the one who sits immediate left of L . O sits opposite to the one who sits third to the left of N . From this there will be two possible cases-


Only one person sits between $P$ and $S . S$ is not an immediate neighbour of $N$ and $L$. $K$ is an immediate neighbour of $P$. $P$ does not face north direction. From the given conditions there will be further three possibilities in case2 for the position of $P$.


$Q$ sits to the immediate right of $M$. From this case-2(c) will be eliminated. $R$ is sitting second to the right of $T$. Neither R nor T sits opposite to P .


Neither $\mathbf{N}$ nor $\mathbf{T}$ is an immediate neighbour of $\mathbf{Q}$. So, from this case-1 and case-2(a) will be eliminated. So, the final arrangement is-

16. (d);
17. (a);
18. (a);
19. (b)
20. (a);


Solutions (21-25):
First we start with vertical arrangement of boxes- More than three boxes are placed between V and R. Only one box is placed between G and O . Box O is placed above G . Three boxes are placed between Y and I . Box V is above box I

## Case-1:

| Boxes |
| :--- |
| Y |
| V |
| B |
| O |
| I |
| G |
| R |

Case-2:

| Boxes |
| :--- |
| V |
| O |
| $\mathrm{Y} / \mathrm{I}$ |
| G |
| B |
| R |
| $\mathrm{Y} / \mathrm{I}$ |

Case-3:

| Boxes |
| :--- |
| V |
| $\mathrm{Y} / \mathrm{I}$ |
| O |
| B |
| G |
| $\mathrm{Y} / \mathrm{I}$ |
| R |

Box $O$ is not placed above $B$ and $Y$. So, from this Case- 2 and Case- 3 will be eliminated. So, the final vertical arrangement before unloading is----

| Boxes |
| :---: |
| Y |
| V |
| B |
| O |
| I |
| G |
| R |

Now, after unloading the linear arrangement of the boxes will be as follows--- Now Only two boxes are placed between the boxes which was third from the bottom vertically and the box which was at top. That means two boxes are placed between box $Y$ and $I$. Only one box is placed between the boxes which was at top and the box which was at bottom. That means one box is placed between box $Y$ and $R$. Box $I$ is not placed next to box $R$. The number assigned to the box which was at top is 44 . So, there will be two possible cases---


The box which was exactly in the middle is placed adjacent to box $R$. That means Box $\mathbf{O}$ is placed adjacent to box R. More than three boxes are placed between the box which was second from the top and box $O$ i.e. more than three boxes placed between V and O . Box V is not in the east of box $O$. So, from this it is clear that box $V$ is placed at west end, box $R$ is at the east end and rest box $O$ is adjacent to box $R$. Further Box $G$ is placed immediate next to box $B$. Box $G$ is not placed immediate next to the box which was third from the bottom which means $\mathbf{G}$ is not placed next to $I$. So, the linear arrangement will be----


The box which is third from the west end is assigned a number which is $300 / 6 \%$ of the number of the box which is two places towards east of it. So, clearly number of box $\mathbf{B}$ is $\mathbf{2 2}$. The number assigned to box $\mathbf{O}$ is $15 / 11$ of the number assigned to box $B$. Clearly number of box $O$ is 30. The number assigned to box which is at east end is average of the number assigned to boxes $\mathrm{B}, \mathrm{Y}$ and O . So, number of box R is 32 . The sum of the number assigned to the boxes placed at both the ends is 67 . So, number of box V is 35 . The number assigned to the box placed immediate next to V is $4 / 7$ of the number assigned to it. So, number of box $I$ is 20. The number assigned to box $G$ is twice of the difference of the numbers assigned to box $Y$ and I . So, number of box $\mathbf{G}$ is 48 . So, the final arrangement is-------

21. (c);
22. (c);
23. (c);
24. (d);
25. (c);

Solutions (26-30):

26. (c);
27. (e);
28. (a);
29. (b);
30. (c);

Solutions (31-35):
Step 1: Let us start with the detail solution. As given in the diagram that there is a line-1 PA and Six people Dev, Ram, Ravi, Raju, Sonu and Monu are standing in line 1-PA. All of them are facing north. With distance between them increasing in multiples of 9 from the left end (i.e. suppose Dev is left end of the line at point $P$ then the remaining people will stand at a distance as follows $-9 \mathrm{~m}, 18 \mathrm{~m}, 27 \mathrm{~m}$.... from the end). So, the arrangement will be----


In this arrangement the distance between two persons standing next to each other is nine whereas from first person standing at left end the distance will be in multiple of 9 . And as the total length of the line is 50 m and all persons are standing in the line at a distance of multiple of 9 so it will be 45 m , remaining distance will be $50-45=5 \mathrm{~m}$ from the right end.

Step II: Now, let us start with the sitting arrangement of line 1-PA. Two persons are standing between Dev and Ram. Dev stands to the left of Ram. Ravi stands second to the left of Ram. Monu is an immediate neighbor of Ravi. Only one person stands between Monu and Raju. Dev is not an immediate neighbour of Monu. Raju is neither an immediate neighbour of Dev nor stand at an extreme end. So, the final arrangement of line1-PA is---- ----


Step IV: Similarly, six people Diya, Riya, Piya, Jiya, Tia and Kiya are standing in line-4 SD. All of them are facing south. with distance between them increasing in multiples of $\mathbf{1 1}$ from the end (i.e. if first person is at right end of the line at point $S$ and the remaining will be stand at the distance as follows-11m, 22m,33 m....from point S)


62 m

In this arrangement the distance between two persons standing next to each other is eleven whereas from first person standing at right end the distance will be in multiple of 11. And as the total length of the line is 62 m and all persons are standing in the line at a distance of multiple of 11 so it will be 55 m , remaining distance will be 62-55=7m from the left end.

Step V: Piya is standing is at 3rd position from the right end. Tia is an immediate neighbor Of Piya. Two people are standing between Tia and Kiya. More than three persons stand between Kiya and Diya. Jiya stands to the immediate left of Kiya. Riya and Tia are immediate neighbours.


62 m

Now, final solution is-----------

31. (a);
32. (b); As only five people can stand in both lines PA and SD at a distance in multiples of 11m and 13 respectively, So one person from each line will move to line 2-QB and line 3-RC respectively.


2 Q

$35 m$
$3 \mathrm{R} \stackrel{\text { Diya }}{ }$ C 24 m
 62 m
33. (c); As only four people can stand in line 4- SD at a distance in multiples of 14 m , So one person from line 4-SD will move to line 3-RC respectively.

$2 \mathrm{Q} \longrightarrow$ B 35 m

34. (d);

$3 \mathrm{R} \longrightarrow$ C 27m

35. (e);

$2 \mathrm{Q} \stackrel{\text { Sonu }}{\longrightarrow}$ 35m
$3 \mathrm{R} \longrightarrow \mathrm{C} 24 \mathrm{~m}$


Solutions (36-40):

From the given condition first we make the sitting arrangement of the persons-
Step I: Shyam sits second to the left of Ravi. Only two persons sit between Shyam and Raj. Raj is not an immediate neighbour of Ravi. Both Raj and Ram are facing outside the center. Ayush sits on the immediate right to Raj. Sahil sits third to the right of Arjun. Only Rahul sits between Shyam and Sahil. Both Arjun and Shyam are facing towards the center. Both Ayush and Rahul are facing the same direction as Shyam. Sahil is facing opposite direction of Ravi. So, the sitting arrangement is-----


Step II: Now, according to the given conditions - 1. Ravi draws queen of Club, 2. Ram draws Jack of Club and if card drawn is club, person remains on the same position facing opposite direction of current direction. So, Ravi and Ram remains on the same position facing opposite direction of current direction.


Step III: 3.Shyam draws 3 of Spade, If the card drawn is spade, the person who draws first moves to the outer square at position 5 facing opposite direction of current direction, then the second person who also draw spade moves to position 6 , similarly 7 and 8 . So, it is clear that Shyam will move to position-5 and will now face outside the center. Further 4. Rahul draws a King of Diamond, If the card drawn is diamond, the person who draws first moves to the inner square at corner 1 facing same direction, then the second person who also draw diamond moves to corner 2, similarly 3 and 4 . So, it is clear that Rahul will move to corner- 1 facing same direction.


Step IV: 5. Sahil draws Ace of Heart, 6. Raj draws 9 of Heart and if card drawn is heart, person who draws it moves to the immediate left of his current position facing same direction. So, both Sahil and Raj moves to the immediate left of their current position facing same direction.


Step V: Further, Ayush draws 7 of Diamond and If the card drawn is diamond, the person who draws first moves to inner square at corner 1 facing same direction, then the second person who also draw diamond moves to corner 2, similarly 3 and 4 . So, Ayush move to corner 2 of the inner square. Now, 8 . Arjun draws 4 of Spade and If the card drawn is spade, the person who draws it first moves to the outer square at position 5 facing opposite direction of current direction, then the second person who also draw spade moves to position 6 , similarly 7 and 8. So, Arjun moves to the position-6 of the outer square.

So, the final arrangement is $\qquad$

36. (d);
37. (b);
38. (a);
39. (c);
40. (c);

Solutions (41-45):

41. (d);
42. (a);
43. (d);
44. (b);
45. (d);

Directions (46-50):

46. (b);
47. (d);
48. (d);
49. (e);
50. (d);

Solutions (51-55):
The distance between ' $N$ ' and ' $K$ ' is 105 m and car ' $N$ ' is second to the left of car ' $K$ '. Only one Car is parked between $L$ and $P . P$ is to the immediate left of $K$ and distance between them is 36 m . The car ' $P$ ' is 84 m away from car ' $O$ '. Car ' $P$ ' is at one of the position to the left of car ' $O$ '. Car L is not in the right of car $\mathbf{N}$ and more than two cars are parked between car $\mathbf{N}$ and car $\mathbf{O}$. The distance between the cars ' $N$ ' and ' $M$ ' is $\mathbf{1 3 2} \mathbf{~ m}$. The total distance between all the parked cars is 198m.


Car ' $L$ ' starts moving towards south and after going 10 m , it turns left, then it moves $\mathbf{1 1 4} \mathbf{~ m}$ and then it goes another 5 m to its left and stops at point ' X '. An another Car ' C ' moves 15 m in a certain direction, and then takes a left turn and goes 27 m straight. Then it turns to its right and moves another 5 m and halts at point ' $Y$ '. Point $Y$ is in the east of point $X$ and is 36 m
apart from each other. Now car ' N ' starts moving in north direction. After moving 15m it turns to its right move 105 m and stopped at point $Z$.

51. (e);
52. (d);
53. (c);
54. (d);
55. (b);

Solutions (56-60):
Given, "E sits 2nd left to D, none of them is sitting at the corner. G faces one of the immediate neighbor of D.H and $J$ sit together and only one of them is neighbor of G.", J faces E. So, only place left for H and J is 2 nd right and immediate right to $G$ respectively. B owns pug. Two people sit between $B$ and the one who owns golden retriever. Either $B$ can sit at extreme left or extreme right end but since $E$ does not own golden retriever, $B$ sits at left end and D owns golden retriever. A does not face G. So, A will sit at the extreme right end of the row. Further the one who owns German sphered sits opposite to F, who owns Labrador." Therefore, F faces A, who owns German sphered, we get the following arrangement:


Given, "The one who owns Pitbull sits at one of the corner." which means H owns Pitbull. From, "Neither D nor its neighbor faces Dobermann." Means Neither I nor G owns Doberman. The one who owns Dobermann faces south. So, J owns Dobermann. Given, "F, who owns Labrador and does not sit next to the one who owns Great Dane. The one who owns Great Dane does not face north." we get, that G owns Great Dane. Given, "Neither I nor its neighbor faces the one who owns doodle." I does not own Doodle. E owns doodle. Rest Either C or I owns Bulldog and beagle. So, the final arrangement is:

56. (a);
57. (b);
58. (c);
59. (e);
60. (d);

Solutions (61-65):
Given, " S and P sit on same side of the table. The one who likes Jim Mari son sits 2 nd right to S. Three people sit between the one who likes Jim Mari son and W. R who likes evergreen faces S, who likes Cafe 1947. T sits opposite to Q.V sits 3rd right to U", we get the following arrangement:


Given, "Neither P nor its neighbors likes Shiva or Moon dance. More than here persons sit between the one who likes john son and the one who like Moon dance, when counted in clockwise direction from of the one who likes Johnson. Neither W nor his neighbors like john son. T R does not sit next to the one who like Johnson he one who likes Jim Mari son does not face the ones who like moon peak espresso and john son."

From these conditions only place left for the ones who like Johnson that U likes Johnson, V likes Moon dance, also, since, and neither P nor its neighbor likes Shiva café so T likes Shiva café.

Also, No one sits between the one who likes freedom cafe and $T$. Only position left, $T$ is immediate left to W , who likes freedom cafe and P likes Moon peak espresso.

61. (d);
62. (e);
63. (a);


A sit at one of the ends of the row. More than four persons sit between A and D.H sits 3rd left to $B$. $A$ is not neighbor of $H$. Odd numbers of persons sit between $H$ and $D$. we get four possibilities:

case4

C who is one of the immediate neighbors of H , sits 3 rd left to the one who distributes meal on Mahavir Jayanti. The one who distributes meal on Mahavir Jayanti sits immediate left of B, So, case4 gets eliminated as $C$ cannot be placed next to $D$. The one who distributes meal on Budh Purnima sits at extreme left end, therefore in all the remaining cases A distributes meal on Budh Purnima.


There is one person less sit between $A$ and $G$ as compared to the number of persons who are sitting between $G$ and $F$, as there is no place left for $G$ and $F$ in case 1 according to this condition, therefore case1 gets eliminated.

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The ones who distribute meal on Diwali and Lohri sit together. Neither A nor C distributes on Lohri and Diwali. The one who distributes meal on republic day sits 3rd right to the one who distributes on Lohri, who sits immediate left to the one who distributes on Diwali, but given that B does not distribute meal on republic day so case2 gets eliminated.

Continuing with case 3, one person sit between $A$ and $G$ and two persons are there in between $G$ and $F$. So, only place left for $E$ is immediate right to $A$. $E$ distributes on Lohri, $G$ on Diwali and H on republic day.

Only one person sits between the ones who distribute meal on Christmas and Eid-ul-fitr and none of them sit at the corner. So, B distributes meal on Independence Day. More Than one person sits between the one who distribute meal on Independence Day and Eid-ul-fitr. So, C distributes on Eid-ul-fitr.

The final arrangement is:

66. (d);
67. (e);
68. (b);
69. (c);
70. (a);


