ARRANGEMENT

SEQUENCE AND ARRANGEMENT

Sequencing is the act of putting things in a specific sequence, order, or list. In our day-to-day life too, we go through many examples of sequencing or arranging things and events such as: While writing appointments on a calendar or a mobile, while taking a test and deciding which section is to be attempted first, second, and so on.

Context	Statement reads as
Which variables are exactly placed in the sequence?	M is fourth.
Which variables are forbidden from a specific position in the sequence?	M is not fifth.
Which variables are next to, before or immediately preceding or following one another?	M and N are consecutive. A is next to B. No variable comes between A and B. A and B are consecutively in the sequence.
Which variables cannot be next to, before or im- mediately preceding or following one another?	A does not immediately precede or follow B. A is not immediately before or after B. M and N are not consecutive in the sequence.
How far apart in the se- quence are two particular variables?	Exactly two people come between A and B.
What is the relative posi- tion of A and B in the sequence?	A comes before B in the queue. M comes after N in the queue.

Linear Arrangement

Linear Arrangement is a special type of Sitting Arrangement, **where persons or objects are required to be placed in proper order in a straight line**. candidates are required to arrange people in a row or multiple rows according to the given conditions.

Directions (Ex. Nos. 2-4) *Consider the following information and answer questions based on it.*

Seven students J, K, L, M, N, O, and P are standing in a row, in random order, from left to right, such that

1.P, O, K and N do not stand on any of the extreme ends.

2. J is to the immediate left of P and immediate right of O.

3.M is not at the center.

4.K is to the immediate right of N and the immediate left of L.

Q1. The student standing to the immediate left of O is
(a) L (b) J (c) M (d) P

Q2. Who is at the center of the row?
(a) N (b) J (c) P (d) K

Q3. Who stands fifth from the left of the row?
(a) K (b) P (c) N (d) J

Solution. Left M O J P N K L Right

2.(c) M is standing to the immediate left of O.

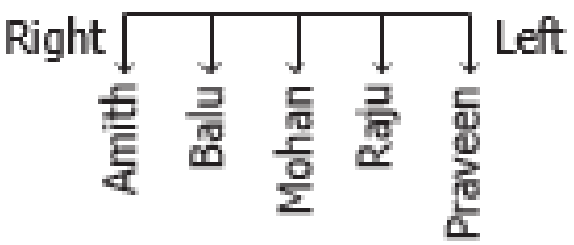
3.(c) P is at the center of the row.

4.(c) N is standing fifth from the left end of the row.

Q. Five friends are sitting in a row facing south. Here, Mohan is between Balu and Raju and Raju is to the immediate right of Praveen and Amith is to the right of Balu. Who is in the extreme right end?

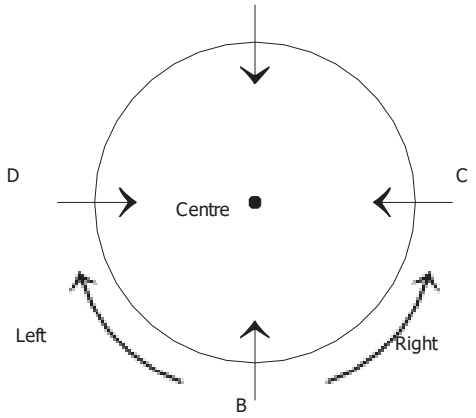
(a) Amith
(c) Praveen
(b) Balu
(d) Mohan

Sol. (a) According to the question, the sitting arrangement will be



Circular Arrangement

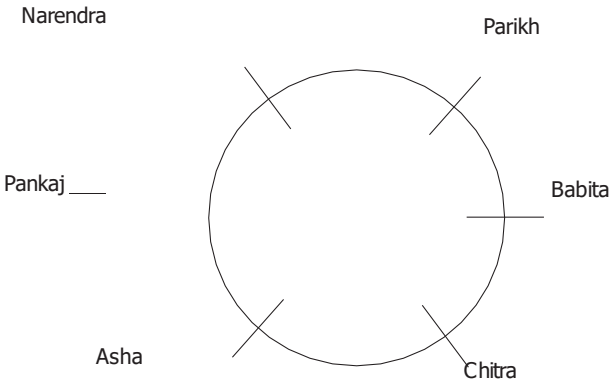
In this type of arrangement, objects/persons are placed around a circle facing the center.



Q. Six persons are sitting in a circle facing the center of the circle. Parikh is between Babita and Narendra. Asha is between Chitra and Pankaj. Chitra is to the immediate left of Babita. Who is to the immediate right of Babita?

(a) Parikh (b) Pankaj
(c) Narendra (d) Chitra

Sol. According to the question, the arrangement is as follows:



Hence, Parikh is to the right of Babita.

Directions for questions 1 to 4: ***Read the following passage and solve the questions based on it.***

(i) A resort has 6 rooms—A, B, C, D, E and F. Rooms 'A' and 'C' can accommodate two persons each; the rest can accommodate only one person each.

(ii) Eight persons P, Q, R, S, T, U, W and X are to live in these rooms. Q, T, and X are females while the rest are males. Persons of different genders can't be put together in the same room.

(iii) No man is willing to live in room C or F.

P wants to live alone but doesn't want to live in room B or D.

(vi) S needs a partner but is not ready to live with either U or W.

(v) X does not want to share her room.

1. Who among the following will live in room E?

(a) U
(b) W
(c) P
(d) Cannot be determined

2. Which of the given statements is not needed to complete the living arrangement so far?

(a) ii
(b) iv
(c) v
(d) All are necessary

3. In which of the following rooms will U live?

(a) B
(b) D
(c) A
(d) B or D

4. X will live in which of the following rooms?

(a) C
(b) F
(c) B
(d) Cannot be determined

Solution.

1 to 4

Room	Person
A	-
B	-
C	-
D	-
E	-
F	-

From (iii) and the other given facts, two women will live in room C.
From (iii) and (iv), P will live in room E.
From (v) and (iii), S will live in room A with R (because P will live alone)
From (vi) and (iii), X will live in room F.
Hence Q and T will live in room C. Now the whole scene looks like this:

Room	Person
A	S, R
B	U/W
C	Q, T
D	W/U
E	P X
F	

Directions for questions 6 to 7: ***Read the following passage and solve the questions based on it.***

Five leaders from undivided India—Pt Nehru (P), M.K. Gandhi (M), Rajendra Prasad (R), Subhash Chandra Bose (S) and Tyagi (T) participated during the 2nd Round Table Conference at London in 1930.

It was noted that Pt Nehru sat two seats to the left of Rajendra Prasad and M.K. Gandhi sat two seats to the right of Rajendra Prasad.

6. If Subhash Chandra Bose sat between M. K. Gandhi and Rajendra Prasad, then who sat to the immediate right of Pt Nehru?

(a) Tyagi (b) Subhash Chandra Bose
(c) M.K. Gandhi (d) Rajendra Prasad

7. If Subhash Chandra Bose did not sit next to M. K. Gandhi, then who sat between M K Gandhi and Subhash Chandra Bose?

(a) Rajendra Prasad
(b) Pt Nehru
(c) Tyagi
(d) Cannot be determined

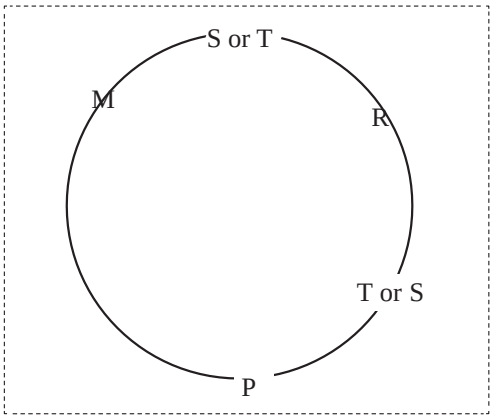
Solutions

Scenario

There are five leaders and five sitting positions.

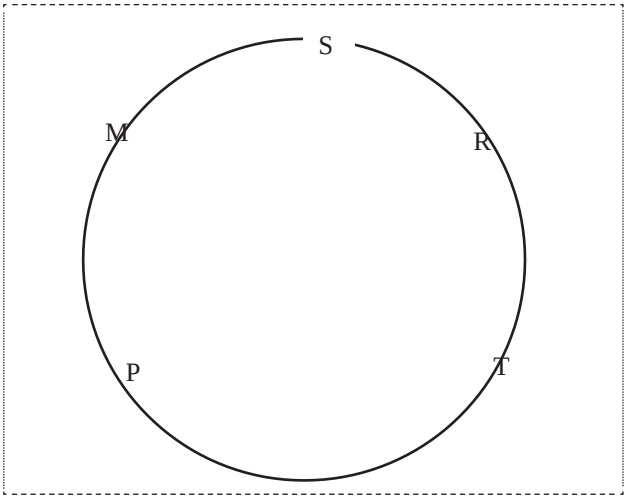
Rules

Pt Nehru sat two seats to the left of Rajendra Prasad and M.K. Gandhi sat two seats to the right of Rajendra Prasad. Let us see this with the help of a diagram:



6. (a)

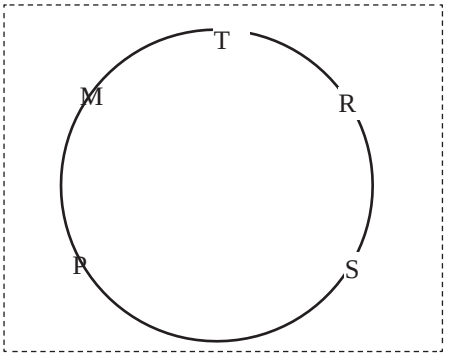
If Subhash Chandra Bose sat between M. K. Gandhi and Rajendra Prasad, then the arrangement would be as follows:



It is obvious from the above given diagram that Tyagi sat to the immediate right of Pt Nehru.
Hence option (a) is the answer.

7. (b)

If Subhash Chandra Bose did not sat next to M K Gandhi, then the seating arrangement would be as follows:



Hence, option (b) is the answer.

PRACTICE EXERCISE 1

Directions for questions 1 to 4: ***Read the following passage and solve the questions based on it.***

(i) A resort has 6 rooms—A, B, C, D, E and F. Rooms 'A' and 'C' can accommodate two persons each; the rest can accommodate only one person each.
(ii) Eight persons P, Q, R, S, T, U, W and X are to live in these rooms. Q, T, and X are females while the rest are males. Persons of different genders can't be put together in the same room.
(iii) No man is willing to live in room C or F.
(iv) P wants to live alone but doesn't want to live in room B or D.
(v) S needs a partner but is not ready to live with either U or W.
(vi) X does not want to share her room.

1. Who among the following will live in room E?
(a) U (b) W
(c) P (d) Cannot be determined

2. Which of the given statements is not needed to complete the living arrangement so far?
(a) ii (b) iv
(c) v (d) All are necessary

3. In which of the following rooms will U live?
(a) B (b) D
(c) A (d) B or D

4. X will live in which of the following rooms?
(a) C (b) F
(c) B (d) Cannot be determined

Directions for questions 5 to 8: ***Read the passage and solve the questions based on it.***

(i) There are six different DVDs of different movies P, Q, R, S, T and U. These DVDs are kept one above the other on a shelf and belong to six different people—A, B, C, D, E and F. It is not necessary that the orders of these DVDs and persons are the same.
(ii) The DVD of movie Q is kept between the DVD of movie P and T and the DVD of movie S is kept between the DVD of movie P and U. The DVD of movie R is immediately above the DVD of movie T.
(iii) C's DVD is kept on the top. A does not have the DVDs of movies T and S. The DVD of movie P belongs to F. The DVD of movie U belongs neither to B nor to A. D's DVD is kept at the bottom.

5. Which movie DVD belongs to A?
(a) Q (b) S
(c) P (d) T

6. Who owns the DVD of movie T?
(a) B (b) E
(c) C or E (d) B or E

7. Who owns the DVD of movie U?
(a) B (b) E
(c) D (d) C

8. The DVD of which of the following movies is kept on the top?
(a) T (b) R
(c) U (d) Cannot be determined

Directions for questions 9 to 13: ***Read the following passage and solve the questions based on it.***

A, B, C, D, E, F and G are seven persons who travel to office everyday by a particular train which stops at five stations 1, 2, 3, 4 and 5 respectively after leaving its base station.

(1) Three among them get on the train at the base station.
(2) D gets down at the next station at which F gets down.
(3) B does not get down either with A or F.
(4) G alone gets on at station 3 and gets down with C after having passed one station.
(5) A travels between only two stations and gets down at station 5.
(6) None of them gets on at station 2.
(7) C gets on with F but does not get on with either B or D.
(8) E gets on with two others and gets down alone after D.
(9) B and D work in the same office and they get down together at station 3.
(10) None of them got down at station 1.

9. At which station does E get down?
(a) 2 (b) 3
(c) 4 (d) Cannot be determined

10. At which station do both C and F get on?
(a) 1 (b) 2
(c) 4 (d) None of these

11. At which of the following stations do B and D get on?
(a) 1 (b) 2
(c) 3 (d) Cannot be determined

12. After how many stations does E get down?
(a) One (b) Two
(c) Three (d) Four

13. At which station, maximum people get down?
(a) 2 (b) 5
(c) 3 (d) 4

Directions for questions 14 to 17: ***Read the following passage and solve the questions based on it.***

Three men (Tom, Peter and Jack) and three women (Eliza, Anne and Karen) are spending a few months at a hillside. They are to stay in a row of nine houses, which are facing north, each one living in his or her own house. There are no others staying in the same row of houses. Following are the details given regarding each of their houses:

(i) Anne, Tom and Jack do not want to stay in any house, which is at the end of the row.
(ii) Eliza and Anne are unwilling to stay beside any occupied house.
(iii) When Karen, Peter and Jack stand facing north, Karen finds that houses of both Peter and Jack are on her left-hand side.
(iv) Between Anne and Jack's house there is just one vacant house.
(v) None of the girls occupy adjacent houses.
(vi) The house occupied by Tom is next to the house at the end.
(vii) House of P is at one of the ends.
(viii) Tom is beside Peter.

14. Which of the above statements can be said to be redundant?
(a) Point (i) (b) Point (ii)
(c) Point (iii) (d) Point (v)

15. How many of them occupy houses beside to a vacant house?
(a) 2 (b) 3
(c) 4 (d) 5

16. Which among these statement(s) is/are definitely true?
I. Anne is between Eliza and Jack.
II. At the most four persons can have occupy houses on either side of them.
III. Tom stays beside Peter.
(a) I
(b) II
(c) I and III
(d) II and III

17. If we number all the houses from 1 through 9 and assign the house of P as number 1, then house number/s of how many people can NOT be definitely ascertained?
(a) 0 (b) 1
(c) 2 (d) 3

Directions for questions 18 to 20: ***Read the following passage and solve the questions based on it.***

Mr Sinha has six children—Pankaj, Ravi, Santosh, Tipu, Vikash and Prakash. They all were born on 13th November, but each was born in a different year, during six consecutive years. It is also known that

(i) Pankaj is elder to Santosh.
(ii) Ravi is elder to both Tipu and Vikash.
(iii) Prakash is two years older than Tipu.
(iv) Pankaj was born either in the year 2002 or 2003.
(v) The oldest member of the group was born in the year 2000.

18. Which of the following could be a correct list of the group, from the youngest to the oldest?
(a) Santosh, Pankaj, Ravi, Tipu, Vikash, Prakas
(b) Santosh, Vikash, Pankaj, Tipu, Prakash, Ravi
(c) Santosh, Vikash, Tipu, Prakash, Pankaj, Ravi
(d) Santosh, Vikash, Tipu, Pankaj, Prakash, Ravi

19. If Pankaj was born in 2002, then which of the following is definitely true?
(a) Ravi was born in 2000.
(b) Prakash was born in 2001
(c) Santosh was born in 2003
(d) Vikash was born in 2003

20. If Prakash is the eldest child, then which of the following is definitely true?
(a) Ravi was born in 2001
(b) Tipu was born in 2001
(c) Santosh was born in 2004
(d) Pankaj was born in 2004

ANSWER KEYS

1. (c)	**2.** (d)	**3.** (d)	**4.** (b)	**5.** (a)	**6.** (d)	**7.** (c)	**8.** (b)	**9.** (c)	**10.** (d)
11. (d)	**12.** (d)	**13.** (b)	**14.** (d)	**15.** (c)	**16.** (c)	**17.** (a)	**18.** (d)	**19.** (a)	**20.** (a)

HINTS AND EXPLANATIONS

1 to 4

Room	Person
A	-
B	-
C	-
D	-
E	-
F	-

From (iii) and the other given facts, two women will live in room C.

From (iii) and (iv), P will live in room E.

From (v) and (iii), S will live in room A with R (because P will live alone). From (vi) and (iii), X will live in room F.

Hence Q and T will live in room C.

Now the whole scene looks like this:

Room	Person
A	S, R
B	U/W
C	Q, T
D	W/U
E	P
F	X

5 to 8

From (ii)

P	T
Q	Q
T	P
P	U
S	S
U	P

From the last sentence of (ii), only one possibility remains

R
T
Q
P
S
U

Now, using (iii) and the above derived result:

R	C
T	E/B
Q	A
P	F
S	B/E
U	D

9 to 13

Persons traveling are: A, B, C, D, E, F and G.

Stations are base station, station 1, station 2, station 3, station 4, and station 5.

Using information (i), (iv), (v), (vi), (vii), (viii) and (x)

Station	Get on	Get down
Base station	- - -	× × ×
1		× × ×
2	× × ×	
3	Only G	B, D
4	A	Only E
5	× × ×	A, G, C

Using (ii) F gets down at station 2 and he got on either at the base station or at station 1.

Now, since F got down at station 2 and he had got on with C, it means that both C and F got on either at the base station or at station 1.

Again, since B and D get down at station 3, this means they too got on either at the base station or at station 1.

It is given that E got on with two other persons i.e., in a group of three persons. Obviously, E got on at the base station.

Summarizing the whole information:

Station	Get on	Get down
Base Station	E and (C, F) or (B, D)	× × ×
1	(C, F) or (B, D)	× × ×
2	× × ×	Only F
3	Only G	B, D
4	A	Only E
5	× × ×	A G C

14 to 17

The first thing that we should do is make nine houses (symbols) in a row:

- - - - - - - - -

Now try to find out the information that we are sure about:

1. T is in either house 2 or house 8.
2. A/T/J cannot be in house 1 or 9.
3. Houses beside E and A have to be unoccupied.
4. House numbers of P and J have to be less than the house number of K, i.e., the order should be PJK or JPK, not necessarily together.
5. There are six people and 9 houses to be occupied by them.

Using point 5, 3 houses have to be vacant. It is possible only if neither E nor A are at the ends or else E is at one of the ends and the difference in the houses of E and A is more than 1.

Understand this–

If both of them are at the ends–

E Vacant 3 4 5 6 7 Vacant A
- - - - - - - - -

Well, this is otherwise also not possible because it violates condition (i) given in the question. In this case, only two houses are vacant.

If one of them is at the ends–

E Vacant 3 4 5 6 7 8 9
- - - - - - - - -

If E is at 1 and A is anywhere from 4 to 8, then the total number of vacant houses = 3, but if E is at 1 and A is at 3, then only two houses will be vacant.

Now start taking the positions:

P T Vacant E Vacant A Vacant J K
- - - - - - - - -

14. We have not referred to statement (v) till now, therefore it is the redundant statement.
15. Obviously, four people are living beside a vacant house.

18 to 20

18. This question is a typical example of the kind of questions which can be solved without actually making the whole diagram. Let us see:

    Using the second statement (Ravi is elder to both Tipu and Vikash), we can eliminate option (a)Using the third statement (Prakash is two years older than Tipu), we eliminate (b) and (c). We are left with (d), which must be correct.

19. This question can also be solved without using a diagram, however for the sake of discussing the solution, let us consult a diagram.

2000	2001	2002	2003	2004	2005
	Prakash	Pankaj	Tipu		
		Pankaj	Prakash	Tipu	

Using statement (iii), Prakash is two years older than Tipu. Using the diagram, the only possible places which Prakash and Tipu can have are either 2003 and 2005 or 2001 and 2003.

Using statement (i), Pankaj is elder to Santosh, so the only possible place left for Santosh is 2004.

Using Statement (ii), Ravi is elder to Tipu and Vikash. Hence, the only place left for Ravi is 2000.

20. Using the diagram once again

2000	2001	2002	2003	2004	2005
Prakash		Tipu	Pankaj		

Assuming Prakash to be the eldest in the group, he must have been born in 2000, that means Tipu was born in the year 2002.

Hence, we can conclude that Pankaj was born in 2003. Now using statement (ii), Ravi was elder to both Tipu and Vikash. Hence Ravi must have been born in 2001 and Vikash in either 2004 or 2005.

PRACTICE EXERCISE 2

Directions for questions 1 to 3: ***Read the following passage and solve the questions based on it.***

In an obsession with the letter P, a person named all his sons starting with P.

(i) These are the six names—Pailashanand, Pamleshanand, Punalanand, Pedaranand, Parananand, Pamalanand.
(ii) Pailashanand is not the heaviest while Pedaranand is not the most handsome.
(iii) The lightest of the group is the most handsome of the group.
(iv) Pamleshanand is more handsome then Pamalanand, who is more handsome than Parananand.
(v) Pailashanand is less handsome than Pamalanand but is heavier than Pamalanand.
(vi) Pamleshanand is lighter than Parananand but heavier than Punalanand.
(vii) Parananand is more handsome than Pailashanand while Pamalanand is heavier than Parananand.

1. Who is the heaviest of the group?
(a) Pailashanand (b) Pedaranand
(c) Pamleshanand (d) Pamalanand

2. What is the rank of Pamalanand in the decreasing order of weight?
(a) Third (b) Fourth
(c) Fifth (d) Second

3. Who is most handsome?
(a) Pamleshanand (b) Pedaranand
(c) Pamalanand (d) Punalanand

Directions for questions 4 to 7: ***Read the following passage and solve the questions based on it.***

In the recent fashion show LFW, seven fashion designers presented their clothes to the viewers. Names of the fashion designers have been withheld due to security reasons, however to identify their clothes it has been decided that the first letter of their names will be used for their outfits. The names of the different fashion designers:

C, L, W, G, D, J, and S. Outfits made by these designers have been placed in a row in the following order:

(i) S is placed on the immediately left of C.
(ii) C is fourth to the left of D.
(iii) L is between G and W.
(iv) D, which is the third to the right of G, is at one of the ends.

4. How many outfits have been placed between J and G?
(a) 4 (b) 3
(c) 2 (d) 1

5. What is the position of C?
(a) Second to the left of L
(b) Second to the left of W
(c) Third to the left of G
(d) Between S and J

6. Which two outfits are at the two ends?
(a) S and D (b) S and W
(c) J and W (d) J and D

7. Which of the following is not true?
(a) S and C are consecutively placed.
(b) J is at one of the ends.
(c) There are two outfits between C and W.
(d) Positions of J and W are interchangeable.

Directions for questions 8 to 11: ***Read the following passage and solve the questions based on it.***

(i) A, B, C, D, E, F and G are seven members of a family standing in a row (not necessarily in the same order) facing a particular direction.
(ii) C and B have as many members between them as G and C have between them.
(iii) D, who is 3rd from the extreme left, is 3rd to the left of E.
(iv) A and D are neighbours and F and C are neighbours.

8. Which of the following statements may be false?
(a) A is 3rd to the left of F
(c) D is 3rd to the left of E
(b) F is 3rd to the right of A
(d) B is 3rd to the left of C

9. Which of the following statements is true?
(a) C and E are neighbours
(b) E is to the immediate left of F
(c) C is to the immediate left of D
(d) A is to the immediate left of D

10. Who is at the extreme right?
(a) G
(b) B
(c) E
(d) Data inadequate

11. Which of the following gives two pairs of neighbours?
    (a) A, C and D, C
    (b) A, B and E, G
    (c) D, C and E, F
    (d) C, F and C, E

Directions for questions 12 to 16: ***Read the following passage and solve the questions based on it.***

Five students—Pankaj, Jatin, Robin, Dinkar and Rahul went for the Group Discussion (GD) and the (Personal Interview) (PI). The panel judged these five students and gave them rankings for the GD and the PI in a descending order. Rahul, who was ranked first in the GD, was last in the PI. Robin had the same ranking in both and was just above Rahul in the PI. In the GD, Pankaj was just above Dinkar but in the PI he was in the middle, after Jatin.

12. Who ranked first in the PI?
(a) Jatin (b) Rahul
(c) Robin (d) None of these

13. Who ranked fifth in the GD?
(a) Dinkar (b) Jatin
(c) Robin (d) Data inadequate

14. Who among the following has the same rank in both the GD and the PI?
    (a) Pankaj
    (b) Robin
    (c) Dinkar
    (d) None of the five students

15. To get the final selection list, the ranks of the students in the GD and the PI are added up. The lower the sum of the ranks, the better the performance. Who among the following has the maximum chances of getting selected. (The better the performance, the better are the chances of getting selected).
    (a) Pankaj (b) Jatin
    (c) Robin (d) Dinkar

16. In the last question, who among the following has the least chance of getting selected?
(a) Pankaj (b) Jatin
(c) Robin (d) Dinkar

Directions for questions 17 to 20: ***Read the following passage and solve the questions based on it.***

(i) A, B, C, D, E, F, G and H are standing in a row facing north.
(ii) B is not a neighbour of G.
(iii) F is at the immediate right of G and neighbour of E.
(iv) G is not at the extreme end.
(v) A is sixth to the left of E.
(vi) H is sixth to the right of C.

17. Who among the following are neighbours?
(a) AB (b) CG
(c) FH (d) CA

18. Which one among the following defines the position of D?
    (a) Fourth to the right of H
    (b) Third to the right of A
    (c) Neighbour of B and F
    (d) To the immediate left of B

19. Which of the following is true?
    (a) C is to the immediate left of A
    (b) D is a neighbour of B and F
    (c) G is to the immediate right of D
    (d) A and E are at the extreme ends

20. After making the linear arrangement, we join them to form a circular arrangement by joining A and H. Which of the following is the odd one out?
(a) B-H (b) E-D
(c) B-F (d) H-G

ANSWER KEYS

1. (b)	**2.** (a)	**3.** (d)	**4.** (c)	**5.** (a)	**6.** (d)	**7.** (d)	**8.** (d)	**9.** (d)	**10.** (d)
11. (c)	**12.** (d)	**13.** (b)	**14.** (b)	**15.** (d)	**16.** (c)	**17.** (d)	**18.** (b)	**19.** (c)	**20.** (c)

HINTS AND EXPLANATIONS

1 to 3

In this set, we will need to make two series-one for comparing beauty and the other for comparing weights. From (iv) and (vii), we can deduce the series for comparing beauty as

Pamleshanand > Pamalanand > Parananand > Pailashanand

From (v), (vi) and (vii), we deduce the series for comparing as

Pailashanand > Pamalanand > Parananand > Pamleshanand > Punalanand.

Further, since Pailashanand is not the heaviest in the group (ii), Pedaranand has to be heavier than Pailashanand. Thus, the series for comparing weights will be Pedaranand > Pailashanand > Pamalanand > Parananand > Pamaleshanand > Punalanand.

1 Punalanand is lightest in the group and hence, the most handsome (iii).

Therefore the series for comparing beauty will be

Punalanand > Pamaleshanand > Pamalanand > Parananand > Pailashanand.

From (ii), we can say that Pedaranand is less handsome than Punalanand.

4 to 7

Using the first condition—S is on the immediate left of C, i.e., S C

Using the second condition—There are three outfits between C and D. C _ _ _ D

Using the third condition—

G L W or W L G

Using the fourth condition—There are 2 outfits between G and D, these should be L and W and this arrangement satisfies the second condition too.

C G L W D

Using the result from the first condition:

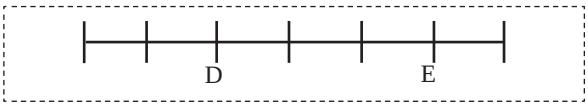
S C G L W D

As D is at one corner, J must be at the second corner as there is no empty space anywhere else. So the complete arrangement is:

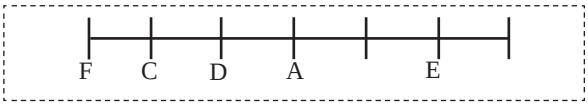
J S C G L W D

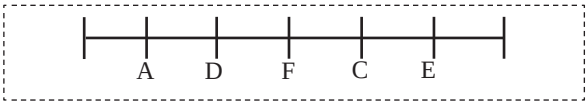
8 to 11

From (iii)

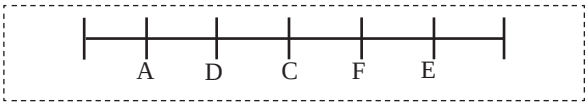


Combining (iii) and (iv), we get the following arrangements:

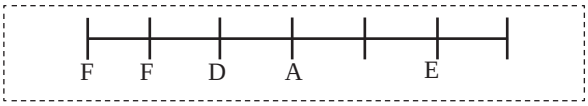




or



or



So, the possible arrangements are:

GADCFEB
or
BADCFEG.

8. Because position of B is not fixed.

11. As the position of B and G are not fixed, option b is not definitely true.

12 to 16

	GD	PI
Pankaj	2	3
Jatin	5	2
Robin	4	4
Dinkar	3	1
Rahul	1	5

17 to 20

Using the information given,

GFE …… (iii),

Now statements (v) and (vi) may be combined as:

AC - - - - EH …… (vii)

Or CA - - - - - HE …… (viii)

But (viii) is not possible because it violates statement (iv).

Combining (iii) and (vii), we get

AC - - GFEH …… (viii)

Now, from statement (ii) and deduction (viii), we get

ACB – GFEH …… (ix)

This blank can be filled by 'D', hence the arrangement is ACBDGFEH.

20. Two persons are sitting between all the four pairs, but in three of them it is clockwise and one of them is having it in anti-clockwise.