

LOGICAL ABILITY

SESSION - 1

DATA ARRANGEMENT - 1

Directions for Q1 to Q5: Study the following information carefully to answer the given questions.

Eleven students, A, B, C, D, E, F, G, H, I, J and K are sitting in the first row of the class facing the teacher.

- (i) D who is to the immediate left of F is second to the right of C.
 - (ii) A is the second to the right of E, who is at one of the ends.
 - (iii) J is the immediate neighbour of A and B and third to the left of G.
 - (iv) H is to the immediate left of D and third to the right of I.
1. Who is sitting in the middle of the row?
(a) B (b) C (c) I (d) G
 2. Which of the following statements is true in the context of the above seating arrangements?
(a) There are three students sitting between D and G.
(b) K is between A and J.
(c) B is sitting between J and I.
(d) G and C are neighbours sitting to the immediate right of H.
 3. Which of the following group is sitting to the right of G?
(a) CHDE (b) CHDF (c) IBJA (d) ICHDF
 4. In the above seating arrangement, which of the following statements is superfluous?
(a) (i) (b) (iv) (c) (ii) (d) None
 5. If E and D, C and B, A and H and K and F interchange their positions, which of the following pairs of students is sitting at the ends?
(a) D and E (b) D and K
(c) D and A (d) K and F

Directions for Q6 to Q10: Study the following information carefully to answer the given questions.

Eight people P, Q, R, S, T, U, V and W are sitting in a row of chairs facing South. Each of them is drinking a different beverage - Tea, Coffee, Juice, Mineral Water, Lemonade, Cola, Coconut Water and Milk, but not necessarily in the same order. Q is sitting second to the left of U. The person drinking milk is an immediate neighbour of U. Only one person sits between the person drinking mineral water and P. The person drinking coffee is on the immediate right of the person drinking mineral water. W is second to the right of U. S is drinking milk. R and T are immediate neighbours. Neither R nor T is drinking mineral water. The person drinking lemonade is on the immediate left of Q. The person drinking cola is at the extreme East. The person

drinking coffee is second at the extreme West. The person drinking coconut water is an immediate neighbour of the person drinking mineral water. R is in the sixth position to the left of the person drinking tea at the extreme West.

6. Who is second to the left of P?
(a) Q (b) V (c) S (d) T
7. What is the position of V with respect to the person drinking milk?
(a) Second to the right (b) Second to the left
(c) Third to the right (d) Third to the left
8. Who among the following is drinking coconut water?
(a) Q (b) U (c) V (d) W
9. Three of the following four are alike in a certain way based on the given arrangement and hence form a group. Which of the following does not belong to the group?
(a) Mineral water-T (b) Cola-U
(c) Lemonade-V (d) Tea-S
10. Which of the following person is drinking tea?
(a) P (b) R (c) V (d) T and S

Directions for Q11 to Q15: Study the following information carefully to answer the given questions.

Seven friends Kiran, Mahesh, Rajesh, Abhi, Ganesh, Prasad and Parveen are sitting in a circle. Kiran, Mahesh, Rajesh, Abhi, Prasad and Parveen are sitting at equal distances from one another. Rajesh is sitting after two places right of Prasad, who is sitting one place right of Abhi. Kiran forms an angle of 90 degrees from Ganesh and an angle of 120 degrees from Mahesh. Mahesh is just opposite Parveen and is sitting on the left of Ganesh.

11. Who is the only person sitting between Rajesh and Mahesh?
(a) Prasad (b) Abhi (c) Ganesh (d) Kiran
12. Ganesh is not sitting at equal distance from
(a) Mahesh & Prasad (b) Abhi & Kiran
(c) Rajesh & Prasad (d) All of the above
13. Ganesh is sitting of Parveen.
(a) to the left (b) two places right
(c) to the right (d) three places left
14. The angle between Ganesh and Mahesh in the clockwise direction is
(a) 30 degree (b) 210 degree
(c) 180 degree (d) 90 degree
15. Which of the following statements is not correct?
(a) Prasad is between Mahesh and Kiran.
(b) Mahesh is two places away from Parveen.
(c) Ganesh is sitting opposite to Prasad.
(d) All the above

Directions for Q16 to Q20: Study the following information carefully to answer the given questions.

Eight friends M, N, O, P, U, V, W and X are sitting in two circles in such a manner that each member of the inner circle sits exactly opposite to the member of the outer circle. The members sitting in the outer circle are U, V, W and X and all of them are facing towards the centre while the members of the inner circle are M, N, O and P and they are facing away from the centre. Each of them likes a different colour, viz Red, Yellow, Blue, Green, White, Black, Orange and Purple, but-not necessarily in the same order.

P likes neither Yellow nor White and faces W, who likes neither Black nor Purple. The person who likes Orange faces the person who likes Red. M, who likes Green, faces the immediate neighbor of the person who likes Blue.

W sits second to the left of X. The persons who like White and Red are in separate circles. The person who likes Black sits on the immediate left of X. V, who does not like Blue, does not face M.

The persons who like Black and Purple are immediate neighbors, and one of them faces N, who likes Yellow. The persons who like Orange and Green sit in the same circle but they are not immediate neighbors.

16. Which of the following colours does U like?
(a) Red (b) Purple (c) Blue (d) Green
17. Who among the following likes White?
(a) M (b) O (c) V (d) W
18. Who among the following does V face?
(a) The one who likes Yellow
(b) The one who likes Blue
(c) The one who likes Green
(d) The one who likes Orange
19. In a certain way if 'M' is related to 'Green' and 'P' is related to 'Orange', then which of the following is 'N' related to?
(a) Yellow (b) Purple
(c) Blue (d) Cannot be determined
20. Three of the following four are alike in a certain way and hence form a group. Which is the one that does not belong to that group?
(a) Blue (b) White (c) Purple (d) Black

SESSION - 2

DATA ARRANGEMENT - 2

Directions for Q21 to Q25: Study the following information carefully to answer the given questions.

Eight friends Akil, Bima, Ezhil, Kaviya, Manoj, Jai, Kamal and Lalitha are sitting around a circular table facing the centre. All of them have a different profession Teacher, Engineer, Doctor, Advocate, Journalist, Judge, HR and Manager but not necessarily in the same order. Jai is third to the right of Kaviya, who is not

HR and Manager. The one who is Judge is an immediate neighbour of Kamal and Ezhil. The one who is HR is second to the left of Jai, who is Advocate. The one who is Manager is opposite to Jai. Lalitha is not an immediate neighbour of either Ezhil or Jai but is third to the right of Bima. The persons who are Judge and Doctor sit opposite to each other. Lalitha is an Engineer. The one who is HR sits third to the left of the Doctor. The one who is Teacher and the one who is Manager are immediate neighbours. Akil is not a Teacher. Manoj is second to the right of Akil, who is an immediate neighbour of Jai and Lalitha.

21. Which of the following is the profession of Bima?
(a) Engineer (b) Journalist
(c) HR (d) Doctor
22. Who among the following is HR?
(a) Ezhil (b) Kamal
(c) Lalitha (d) Either Ezhil or Kamal
23. If Kamal is third to the right of Manoj, then who among the following is immediate left of Bima?
(a) Jai (b) Manoj (c) Ezhil (d) Kamal
24. Which of the following combinations is true?
(a) Bima-Judge (b) Manoj-Advocate
(c) Akil-Engineer (d) Kaviya-Judge
25. Who sits between the Journalist and the Doctor?
(a) Advocate (b) Engineer
(c) Judge (d) Manager

Directions for Q26 to Q30: Study the following information carefully to answer the given questions.

12 People are sitting in 2 parallel rows containing 6 people each in such a way that there is an equal distance between adjacent persons. In row 1 - P, Q, R, S, T and V are seated and all of them are facing South. In row 2 - A, B, C, D, E and F are seated and all of them are facing North. A sits 3rd to right of D. Neither A nor D sits at extreme ends. T faces D. V does not face A and V does not sit at any of the extreme ends. V is not an immediate neighbor of T. B sits at one of the extreme ends. Only 2 people sit between B and E. E does not face V. 2 persons sit between R and Q. R is not an immediate neighbor of T. C does not face V. P is not an immediate neighbor of R.

26. Who among the following sits at extreme ends of the rows?
(a) C, A (b) P, R (c) C, B (d) Both B and C
27. How many persons are seated between T and S?
(a) 1 (b) 2 (c) 3 (d) More than 3
28. Who among the following faces D?
(a) P (b) Q (c) T (d) S
29. Who among the following sits between Q and S?
(a) V (b) R (c) P (d) T

30. Which of the following statements is not true?

- (a) Q sits between T and V.
- (b) E is an immediate neighbour of D and F.
- (c) F is immediate left of A.
- (d) 2 people sit between T and R.

Directions for Q31 to Q33: Study the following information carefully to answer the given questions.

A group of 6 coffee house owners in the city decide to arrange weekly meets in order to devise a strategy to grow together. They decide to meet for six days a particular week, Monday to Saturday. Every day, they meet at one of the 6 coffee houses in the city. Each day, they select a coffee house of one particular owner. There are three male owners, A, B and C and three female owners, D, E and F. They decide to meet keeping in mind the following.

1. Men and women will alternately get to select a coffee house.
2. They will meet at the E's coffee house before they meet at C's coffee house.
3. They meet at A's coffee house before they meet at F's coffee house.
4. They meet at D's coffee house on Monday, and B's coffee house on Tuesday.

31. Each of the following be true except,

- (a) the owners meet at E's coffee house on Wednesday
- (b) the owners meet at F's coffee house on Friday
- (c) the owner's meet at A's coffee house on Thursday
- (d) the owner's meet at A's coffee house later than they meet at C's coffee house

32. On Thursday, the owners meet at the coffee house of

- (a) A (b) E (c) F (d) C

33. F's coffee house is used on

- (a) Thursday (b) Friday
- (c) Wednesday (d) Saturday

Directions for Q34 to Q37: Study the following information carefully to answer the given questions.

In a Public Sector Undertaking Township, there are five executives – Ambrish, Amit, Rohit, Manu and Tarun and they stay in flats, numbered 1 to 5.

1. Two of them play Cricket while the other three play different games viz. Football, Tennis and Chess.
2. One Cricket player and a Chess player stay in the third flat, whereas the other three stay in different flats, i.e. 2nd, 4th and 5th.
3. Two of these five players are mechanical engineers while the other three are quality inspector, design engineer, and power engineer respectively.
4. The chess player is the oldest in age while one of the cricket players, who plays at the national level, is the youngest in age.

5. The age of the other cricket player, who plays at the regional level, lies between the football player and the chess player.
6. Manu is a regional level player and stays in the 3rd flat while Tarun is a quality inspector and stays in the 5th flat.
7. The football player is a design engineer and stays in the 2nd flat.
8. Amit is a power engineer and plays Chess while Ambrish is the mechanical engineer and plays Cricket at the national level.

34. Who stays in the 4th flat?

- (a) Ambrish (b) Amit (c) Rohit (d) Manu

35. Which sport does Tarun play?

- (a) Chess (b) Foot ball (c) Cricket (d) Tennis

36. Who plays football?

- (a) Ambrish (b) Amit (c) Rohit (d) Manu

37. Who stay in the same flat?

- (a) Ambrish and Amit (b) Manu and Tarun
- (c) Amit and Manu (d) Rohit and Tarun

Directions for Q38 to Q40: Study the following information carefully to answer the given questions.

There are 7 family members A, B, C, D, E, F and G are sitting in a row facing North. There are 3 couples in the family. A is on the immediate right of his mother-in-law. C has 2 children. F sits second to the left of his father E who is third to the right of D, who is second to the right of B.

The one who is wife of C does not sit on the extreme ends of the row. D is daughter of B, who is wife of C. The one who is wife of E sits at an extreme end of the row. E is brother-in-law of D. F is the nephew of A.

38. Who among the following sits third to the left of C?

- (a) A (b) B (c) C (d) D

39. Who among the following sits second to the right of B?

- (a) A (b) B (c) C (d) D

40. How is D related to F?

- (a) Mother (b) Sister
- (c) Sister in law (d) Daughter

SESSION – 3

☯ BLOOD RELATIONS

1. If A + B means A is the mother of B; A x B means A is the father of B; A \$ B means A is the brother of B and A @ B means A is the sister of B then which of the following means P is the son of Q?

- (a) Q + R @ P @ N (b) Q + R * P @ N
- (c) Q x R \$ P @ N (d) Q x R \$ P \$ N

2. A has 3 children. B is the brother of C and C is the sister of D, E who is the wife of A is the mother of D. There is only one daughter to the husband of E. what is the relation between D and B?
(a) Brother (b) Cousin (c) Uncle (d) Father
3. Pointing to a photograph, Rekha says to Lalli, "The girl in the photo is the second daughter of the wife of only son of the grandmother of my younger sister." How this girl of photograph is related to Rekha?
(a) Cousin (b) Sister (c) Niece (d) Mother
4. Pointing to a photograph Arun said, 'She is the mother of my brother's son's wife's daughter.' How is Arun related to the lady?
(a) Uncle (b) Daughter-in-law
(c) Cousin (d) None of these
5. Pointing to a photograph of a boy Suresh said, "He is the son of the only son of my mother." How is Suresh related to that boy?
(a) Brother (b) Uncle
(c) Cousin (d) Father
6. Pointing to a photograph Lata says, "He is the son of the only son of my grandfather." How is the man in the photograph related to Lata?
(a) Brother (b) Uncle
(c) Cousin (d) Data inadequate
7. Pointing to a photograph Bajpai said, "He is the son of the only daughter of the father of my brother." How Bajpai is related to the man in the photograph?
(a) Nephew (b) Brother
(c) Father (d) Maternal Uncle
8. Pointing to a photograph X said to his friend Y, "She is the only daughter of the father of my mother." How X is related to the person in the photograph?
(a) Daughter (b) Son
(c) Nephew (d) Cannot be determined
9. If $A + B$ means A is the mother of B; $A - B$ means A is the brother of B; $A \% B$ means A is the father of B and $A \times B$ means A is the sister of B, which of the following shows that P is the maternal uncle of Q?
(a) $Q - N + M \times P$ (b) $P + S \times N - Q$
(c) $P - M + N \times Q$ (d) $Q - S \% P$
10. If A is the brother of B; B is the sister of C; and C is the father of D, how is D related to A?
(a) Brother (b) Sister
(c) Nephew (d) Cannot be determined
11. If $A + B$ means A is the brother of B; $A - B$ means A is the sister of B and $A \times B$ means A is the father of B. Which of the following means that C is the son of M?
(a) $M - N \times C + F$ (b) $F - C + N \times M$
(c) $N + M - F \times C$ (d) $M \times N - C + F$
12. Introducing a boy, a girl said, "He is the son of the daughter of the father of my uncle." How is the boy related to the girl?
(a) Brother (b) Nephew
(c) Uncle (d) Son in law
13. If D is the brother of B, how is B related to C?
To answer this question which of the statements is/are necessary?
1. The son of D is the grandson of C.
2. B is the sister of D.
(a) Only 1 (b) Only 2
(c) Either 1 or 2 (d) Both 1 and 2 are required
14. I am only son for my parents. The man in the picture is my father's son. Who is he?
(a) He Himself (b) Father
(c) Brother (d) None of these
15. If $A + B$ means A is the sister of B; $A \times B$ means A is the wife of B, $A \% B$ means A is the father of B and $A - B$ means A is the brother of B. Which of the following means T is the daughter of P?
(a) $P \times Q \% R + S - T$ (b) $P \times Q \% R - T + S$
(c) $P \times Q \% R + T - S$ (d) $P \times Q \% R + S + T$
16. Pointing to a woman, Abhijit said, "Her granddaughter is the only daughter of my brother." How is the woman related to Abhijit?
(a) Sister (b) Grandmother
(c) Mother-in-law (d) Mother
17. Amit said - "This girl is the wife of the grandson of my mother". How is Amit related to the girl?
(a) Father (b) Grandfather
(c) Husband (d) Father-in-law
18. A and B are children of D. Who is the father of A?
To answer this question which of the statements from (1) and (2) is necessary?
1. C is the brother of A and the son of E.
2. F is the mother B.
(a) Only 1 (b) Only 2
(c) Either 1 or 2 (d) Both 1 and 2 are required
19. Pointing towards a man, a woman said, "His mother is the only daughter of my mother." How is the woman related to the man?
(a) Mother (b) Grandmother
(c) Sister (d) Daughter
20. If $P \$ Q$ means P is the brother of Q;
 $P \# Q$ means P is the mother of Q;
 $P * Q$ means P is the daughter of Q;
in $A \# B \$ C * D$, who is the father?
(a) D (b) B
(c) C (d) Data inadequate

SESSION - 4

ORDERING/RANKING/GROUPING

There are mainly three/four types of questions -

1. Total persons and position of one person (either from left or right) are given.
2. Position of more than one person is given.
3. Overlapping conditions:
 - a. Overlapping case: **When (left + right) positions > Total number of students**
 - b. Not overlapping case: **When Total number of students > (left +right) positions**
4. Ascending/Descending Order according age, height, marks etc.

We have to find out:

1. Position from other side.
2. Total number of persons.
3. Number of persons in between
4. Minimum/maximum number of persons in the row.
5. Number of persons on either side of a particular person.

Formulas for Order and Ranking

- Finding ranks either from left or from right:
Total - (given rank - 1) = required rank
- Finding total numbers:
When ranks of one person is given from both sides of the row.
Ranks of common person from both sides $(R1 + R2) - 1$
- Finding total number of the person: (Misc. Case)
When ranks of two persons and number of the persons who are sitting between these two persons are given.
(a) $(R1+R2) + \text{number of middle persons}$
(b) $(R1+R2) - (\text{number of middle persons} + 2)$
NOTE: Apply condition (b) only for overlapping case.
- Finding the number of persons who are sitting between any two persons: (Simple case)
Total - (Rank from left + Rank from right)
- Finding the number of persons who are sitting between any two persons: (Overlapping Case)
 $(\text{Rank from left} + \text{Rank from right}) - (\text{Total} + 2)$
- Finding Rank of middle person: (Quick Trick)
Step 1-Convert both ranks from same side (side from which rank of exactly mid asked)
Step 2-Finds the average of both ranks (answer)
- Shortcut for calculating total number of maximum and minimum persons in a row:

If

Maximum total

Simple case: $(R1+R2) + \text{mid no}$

Smaller rank - mid no ≥ 2

Minimum total

Overlap case: $(R1+R2) - (\text{Mid}+2)$

Smaller rank - mid no ≤ 2

Maximum total

Only simple case

$(R1+R2) + \text{mid no}$

NOTE: Mid no. means number of the middle persons.

1. Meenam is fourteenth from the right end in a row of 40 girls. What is her position from the left end?
(a) 24th (b) 25th (c) 26th
(d) 27th (e) None of these
2. Raju is seventh from left and Rohan is ninth from right. If there are six students between them then how many students are there in a row?
(a) 8 (b) 10 (c) 22
(d) 21 (e) Cannot be determined
3. Rohan's rank 25 from the top and Sohan's rank 30 from the bottom. If there are three students in between Rohan and Sohan then find out the total number of student ?
(a) 50 (b) 62 (c) 58
(d) Can't be determined
(e) None of these
4. Ram is eighth from left end and is fourth to the left of Shyam who is eighth from right end. Then how many students are there in a row?
(a) 19 (b) 21 (c) 24
(d) 20 (e) None of these
5. In a row of boys facing towards North, A is sixteenth from the left end and C is sixteenth from the right end. B, who is fourth to the right of A, is fifth to the left of C then. How many boys are there in the row?
(a) 39 (b) 40 (c) 41
(d) 42 (e) None of these
6. Three persons A, B and C are standing in a queue. There are five persons between A and B and eight persons between B and C. If there are three persons ahead of C and 21 behind A, then what could be the minimum number of persons in the queue?
(a) 27 (b) 28 (c) 40
(d) 41 (e) None of these

7. In a row of 40 girls, when Komal was shifted to her left by 4 places her number from the left end of the row became 10. What was the place of Swati from the right end of the row if Swati was three places to the right of Komal's original position?
- (a) 22 (b) 23 (c) 25
(d) 26 (e) None of these

Directions for 8 and 9: Study the following information carefully and answer the questions given below.

In a class of boys and girls, Jadeja's rank is 20th and Sunanda's rank is 11th.

Jadeja's rank among the boys is 11th and Sunanda's rank among the girls is 6th.

In the class, Sunanda's rank is 64th from the other end.

From the other end, Jadeja's rank among the boy's is 34th.

8. How many total boys and girls in the class?
- (a) 65 (b) 77 (c) 71
(d) 74 (e) None of these
9. How many girls are there between Jadeja and last rank holder (assuming it is a boy) in the class?
- (a) 25 (b) 21 (c) 23
(d) 22 (e) None of these

Directions for 10 and 11: Study the following information carefully and answer the questions given below-

Among Nikhil, Moon, Kapil, Jagdish and Gulshan each securing different marks in a subject, Moon secured more marks than only Kapil. Gulshan and Jagdish secured less marks than only Nikhil.

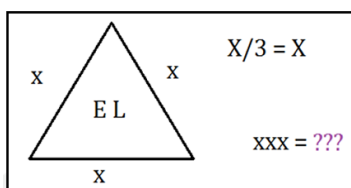
10. Who among them secured third least marks?
- (a) Nikhil (b) Jagdish (c) Moon
(d) Cannot be determined
(e) None of these
11. If Nikhil secured 80 marks and Jagdish secured 65 marks then what is the possibility of Gulshan's marks?
- (a) 78 (b) 63 (c) 60
(d) Cannot be determined
(5) None of these
12. Among Zojo, Yo, Xe, William and Vicky each scoring different marks in a test. Xe scored more than William but not as much as Vicky. Vicky scored more than Zojo, who scored less than Yo. Who did score second highest marks?
- (a) Yo (b) Zojo (c) Xe
(d) Data inadequate
(e) None of these

13. Zombo, correctly remembers that his father's birthday is before 29th July but after 24th July whereas his younger brother correctly remembers that their father's birthday is after 23rd July but before 28th July and his elder brother correctly remembers that their father's birthday is on an odd date. On which date of July is definitely their father's birthday?
- (a) 25 or 27 (b) 27 (c) 25
(d) 26 (e) None of these
14. In the row of 40 students, Mahesh is 28th from left end and Suresh is 25th from right end. If Danish is sitting exactly in between them, what will be Danish's position from left?
- (a) 14 (b) 22 (c) 28
(d) 18 (e) None of these
15. Jai is 25th from left and Vijay is 24th from right. When they interchange their positions respectively then Vijay becomes 31st from right end. What will be Jai's position from left after interchanging?
- (a) 25 (b) 26 (c) 27
(d) 28 (e) None of these
16. In a row of girls, Rita and Monika occupy the ninth place from the right end and tenth place from the left end, respectively. If they interchange their places, then Rita and Monika occupy seventeenth place from the right and eighteenth place from the left respectively. How many girls are there in the row?
- (a) 25 (b) 26 (c) 27
(d) Data inadequate (e) None of these
17. Ram is 27th place from left end in the row of 44 boys. Rohit is 15th from the right end in the same row. How many boys are there between them in the row?
- (a) Eleven (b) Ten (c) Six
(d) Two (e) None of these
18. Students line up in a queue in which Aman stands fifteenth from the left and Simran is seventh from the right. If they interchange their places, Simran would be fifteenth from the right. How many students are there in the queue?
- (a) 21 (b) 22 (c) 28
(d) 29 (e) None of these
19. In a queue of children, Ajay is fifth from the left and Sunil is sixth from the right. When they interchange their places among themselves, Ajay becomes thirteenth from the left. Then, what will be Sunil's position from the right?
- (a) 8th (b) 14th (c) 15th
(d) 16th (e) None of these
20. Kunal ranked sixteenth from the top and twenty ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class?
- (a) 35 (b) 45 (c) 50
(d) 55 (e) None of these

SESSION – 5

PUZZLES & BRAIN TEASERS

1. A man is the owner of a winery who recently passed away. In his will, he left 21 barrels (seven of which are filled with wine, seven of which are half full, and seven of which are empty) to his three sons. However, the wine and barrels must be split, so that each son has the same number of full barrels, the same number of half-full barrels, and the same number of empty barrels. Note that there are no measuring devices handy. How can the barrels and wine be evenly divided?
2. You are in a room that has three switches and a closed door. The switches control three light bulbs on the other side of the door. Once you open the door, you may never touch the switches again. How can you definitively tell which switch is connected to each of the light bulbs?
3. You have a 3-gallon jug and a 5-gallon jug. You need to measure out exactly 7 gallons of water. How can you do it?
4. There are twenty coins sitting on the table, ten are currently heads and ten are currently tails. You are sitting at the table with a blindfold and gloves on. You are able to feel where the coins are, but are unable to see or feel if they heads or tails. You must create two sets of coins. Each set must have the same number of heads and tails as the other group. You can only move or flip the coins, you are unable to determine their current state. How do you create two even groups of coins with the same number of heads and tails in each group?
5. In a contest, four fruits (an apple, a banana, an orange, and a pear) have been placed in four closed boxes (one fruit per box). People may guess which fruit is in which box. 123 people participate in the contest. When the boxes are opened, it turns out that 43 people have guessed none of the fruits correctly, 39 people have guessed one fruit correctly, and 31 people have guessed two fruits correctly.
How many people have guessed three fruits correctly, and how many people have guessed four fruits correctly?
6. By using the numbers 8, 5, 1 and 1 exactly once and with the help of basic operation (+, -, /, *), Can you form an expression with a value of 10?
7. Based on the picture below, what is the value of xxx =?



8. Jigsaw forced Mahrez and Vardy to play the game of deaths.

Jigsaw placed 11 marbles at the table and asked Mahrez and Vardy to pick marble(s) one by one with the following rules:

1. You need to pick at least one marble.
2. You can't pick more than five marbles.

The one that picks the last marble will die.

Mahrez to start the game. How many marbles must Mahrez pick in order to make sure that he came out from the game alive?

9. Three men in a cafe order a meal the total cost of which is \$15. They each contribute \$5. The waiter takes the money to the chef who recognizes the three as friends and asks the waiter to return \$5 to the men. The waiter is not only poor at mathematics but dishonest and instead of going to the trouble of splitting the \$5 between the three he simply gives them \$1 each and pockets the remaining \$2 for himself. Now, each of the men effectively paid \$4, the total paid is therefore \$12. Add the \$2 in the waiter's pocket and this comes to \$14.....where has the other \$1 gone from the original \$15?
10. I ask Alex to pick any 5 cards out of a deck with no Jokers.

He can inspect then shuffle the deck before picking any five cards. He picks out 5 cards then hands them to me (Peter can't see any of this). I look at the cards and I pick 1 card out and give it back to Alex. I then arrange the other four cards in a special way, and give those 4 cards all face down, and in a neat pile, to Peter.

Peter looks at the 4 cards I gave him, and says out loud which card Alex is holding (suit and number). How?

The solution uses pure logic, not sleight of hand. All Peter needs to know is the order of the cards and what is on their face, nothing more.

11. You are mixing cement and the recipe calls for five gallons of water. You have a garden hose giving you all the water you need. The problem is that you only have a four gallon bucket and a seven gallon bucket and neither has graduation marks. Find a method to measure five gallons.
12. A pot contains 75 white beans and 150 black ones. Next to the pot is a large pile of black beans.

A somewhat demented cook removes the beans from the pot, one at a time, according to the following strange rule: He removes two beans from the pot at random. If at least one of the beans is black, he places it on the bean-pile and drops the other bean, no matter what color, back in the pot. If both beans are white, on the other hand, he discards both of them and removes one black bean from the pile and drops it in the pot.

At each turn of this procedure, the pot has one less bean in it. Eventually, just one bean is left in the pot. What color is it?

SESSION - 6

SELECTION DECISION TABLE

Directions For Q1 to Q5: Study the following information carefully and answer the questions given below.

Following are the conditions for selecting Chief Manager-Marketing in an organization

The candidate must:

- (I) Be at least 35 years old as on 01.02.2010.
- (II) Have secured at least 55 percent marks in graduation.
- (III) Have secured at least 60 percent marks in post graduate degree/diploma in Marketing Management.
- (IV) Have post qualification work experience of at least ten years in the marketing division of an organization.
- (V) Have secured at least 50 percent marks in the selection process.

In the case of a candidate who satisfies all the above conditions

EXCEPT-

- (i) at (IV) above but has post qualification work experience of at least six years as Manager-Marketing, the case is to be referred to Head-Marketing Division.
- (ii) at (II) above but has secured at least 65 percent marks in post graduate degree/diploma in Marketing Management, the case is to be referred to GM-Marketing

In each question below are given the details of one candidate.

You have to take one of the following courses of action based on the information provided and the conditions and sub-conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01.02.2010.

Mark answer

- A. If the candidate is to be selected.
- B. If the case is to be referred to Head-Marketing Division.
- C. If the case is to be referred to GM-Marketing.
- D. If the candidate is not to be selected.
- E. If the data provided are inadequate to take a decision.

1. Arjun has secured 65 percent marks in P.G. degree in Marketing Management and 58 percent marks in graduation. He has been working in the marketing division of an organization for the past eleven years after completing his post graduate degree. He has secured 55 percent marks in the selection process. He was born on 8th July 1970.

- (a) A (b) B (c) C (d) D (e) E

13. Your friend pulls out a perfectly circular table and a sack of quarters, and proposes a game.

"We'll take turns putting a quarter on the table," he says. "Each quarter must lay flat on the table, and cannot sit on top of any other quarters. The last person to successfully put a quarter on the table wins."

He gives you the choice to go first or second. What should you do, and what should your strategy be to win?

14. You are standing in a pitch-dark room. A friend walks up and hands you a normal deck of 52 cards. He tells you that 13 of the 52 cards are face-up, the rest are face-down. These face-up cards are distributed randomly throughout the deck.

Your task is to split up the deck into two piles, using all the cards, such that each pile has the same number of face-up cards. The room is pitch-dark, so you can't see the deck as you do this.

How can you accomplish this seemingly impossible task?

15. You have two lengths of rope. Each rope has the property that if you light it on fire at one end, it will take exactly 60 minutes to burn to the other end. Note that the ropes will not burn at a consistent speed the entire time (for example, it's possible that the first 90% of a rope will burn in 1 minute, and the last 10% will take the additional 59 minutes to burn). Given these two ropes and a matchbook, can you find a way to measure out exactly 45 minutes?

16. What mathematical symbol can be put between 5 and 9, to get a number bigger than 5 and smaller than 9?

17. My daughter has as many sisters as she has brothers. Each of her brothers has twice as many sisters as brothers. How many sons and daughters do I have?

18. You need to pick any number from '1, 3, 5, 7, 9, 11, 13 and 15' to make below equation true.

$$() + () + () = 30$$

Can you solve it?

19. If in a cricket one day match, there were no wide balls, no wide, no extras and no overthrows.

What is the maximum number of runs that a batsman can score in an ideal case scenario?

20. One girl had a habit of spending the money as per the day of the month, for example he will spend \$28 on 28th of the month. Once he spent, \$63 in continuous 5 days. What could be the dates?

What was the second day?

- (a) 29 (b) 17 (c) 14 (d) 28

2. Neeta Ghosal was born on 4th May 1974. She has been working in the Marketing division of an organization after completing her post graduate diploma in Marketing Management with 70 percent marks. She has obtained 60 percent marks in graduation and 50 percent marks in the selection process.

(a) A (b) B (c) C (d) D (e) E

3. Sudesh Sarkar was born on 15th June 1974. He has secured 55 percent marks in the selection process and 50 percent marks in graduation. He has been working in the Marketing Division of an organization for the past twelve years after completing his post graduate degree in Marketing Management with 75 percent marks.

(a) A (b) B (c) C (d) D (e) E

4. Sudha Naik was born on 14th April 1973. She has been working in the Marketing Division of an organization as Marketing Manager for the past nine years after completing her post graduate diploma in Marketing Management with 70 percent marks. She has secured 50 percent marks in the selection process and 57 percent marks in graduation.

(a) A (b) B (c) C (d) D (e) E

5. Sunita Jaiswal was born on 5th July 1976. She has secured 55 percent marks in graduation and 58 percent marks in the selection process. She has been working in the Marketing Division of an organization for the past ten years after completing post graduate degree in Marketing Management with 57 percent marks.

(a) A (b) B (c) C (d) D (e) E

Directions for Q6 to Q10: Study the following information carefully and answer the questions given below it.

Given here are the conditions to become the members of a Lake Club. A person must:

- (I) Be in the age group of 21-50 as on August 13, 2006.
- (II) Be drawing a minimum salary of Rs.1 lakh per annum.
- (III) Own a house.
- (IV) Not have a family of more than five members including him.
- (V) Have excellence in any field of arts and sports.

However, if a person:

- (i) Satisfies all except (IV) above, but draws a salary of more than 2 lakh per annum, the case may be referred to the Club president.
- (ii) Satisfies all except (III) above, the case may be referred to the Club secretary.

On the basis of above conditions and information, decide which of the following courses of action should be taken regarding each condition.

Mark answer:

- A. If the person is eligible to be a member
- B. If the person can't be allowed the membership
- C. If the data provided is inadequate.
- D. If the case is to be referred to the Club secretary
- E. If the case is to be referred to the Club president

6. Mr.Rahul Tiwari, living with his mother and father, is a college professor earning Rs.8600 monthly. He has his own house and is having a good record in the field of fine arts.

(a) A (b) B (c) C (d) D (e) E

7. Ravi Tripathi, an IAS officer, draws a salary of Rs.15000 p.m. His date of birth is March 17, 1985. He lives with his mother, father and a brother. He is having his own house and holds a certificate of being the best volleyball player in his college.

(a) A (b) B (c) C (d) D (e) E

8. Mr.Pankaj Pandey works as a manager in horticulture. He is 35 years old and lives as a tenant with his wife and two daughters. He draws a monthly salary of Rs.8700 p.m. for the last 7 years. He holds a good record in sports.

(a) A (b) B (c) C (d) D (e) E

9. Mr.Dev Taneja, a bachelor, lives in a private house owned by him with his parents and grandparents. He is senior manager in American Express, drawing a salary of Rs.17000 p.m. He has won the Trophy in Badminton and his D.O.B. is August 13, 1992.

(a) A (b) B (c) C (d) D (e) E

10. Mrs.Radha Kapoor, living with her husband, receives a salary of Rs 10,000 p.m. She has completed 12 years of service in the company on January 10, 2004.

(a) A (b) B (c) C (d) D (e) E

Directions for Q11 to Q15: In a certain company, the promotions and posting of representations would depend upon the following standards:

- (A) Those who have good conduct and achieved more than 100% target would be promoted
- (B) Those who have achieved more than 100% target and have taken less than 15 day's leave would get one increment extra
- (C) Those who have good conduct, have achieved more than 100% and have taken less than 15 day's leave would be promoted and get one increment extra too
- (D) Those who have good conduct, have taken less than 15 day's leave but have recorded the sale of 60 to 90 percent would be transferred to less important branch in the same state

- (E) Those who have taken less than 15 days' leave and their sale has been 60 to 90 percent of the target would remain as they are

Given below is the document prepared on the basis of the record submitted by five representative P, Q, R, S and T on the basis of the statements given above, give answers in term of above (A), (B), (C), (D) and (E)

11. P has got good conduct, has taken leave for 12 days and his sale recorded 88% of the target
(a) A (b) B (c) C (d) D
12. Q has only the word satisfactory for conduct, has taken 3 days leave and the sale is 79%
(a) A (b) B (c) E (d) D
13. R has good conduct, his sale has been 105% and he has taken 12 days leave.
(a) A (b) B (c) C (d) D
14. S has taken 16 days leave, has achieved 102% sale and has good conduct.
(a) A (b) B (c) C (d) D
15. T's sale has been 102% he has taken 13 days leave and has good conduct.
(a) A (b) B (c) C (d) D

Directions for Q16 to Q20: Study the following information to answer the given questions.

Given here are the conditions to become the members of Munget Club. A person must

- (1) be in the age group of 18 to 50 years as on August 3, 1993
- (2) be drawing a minimum salary of Rs.75, 000 per annum
- (3) own a house
- (4) not have a family of more than four members including himself
- (5) have exhibited excellence in any field of arts and sports
- (6) satisfies all the conditions except (3), the case may be referred to the Club Secretary
- (7) satisfies all the conditions except (4) but draws a salary of 2 lakhs per annum, the case may be referred to the Club President

On the basis of the above condition and the information provided against each person in the questions given below, decide which of the following courses of action should be taken in case of each person.

Mark answer (A) if the person is eligible for membership, (B) if not eligible (C) if data is inadequate, (D) if the case is to be referred to the Club Secretary, and (E) if the case is to be referred to the Club President.

16. Mr.Sujeet Anand a bachelor, with his parents and grandparents lives in a private house owned by him. He is a Senior Manager in a private firm. He is drawing a salary above Rs.2 Lakhs per annum. He has won the States Singles Trophy in badminton. He is 25 years of age.
(a) A (b) E (c) C (d) D
17. Mrs.Sumita living with her husband is a senior official in a company receiving Rs.7,000 per month. She has completed 10 years of service in the company on 9th January, 1996.
(a) A (b) B (c) C (d) D
18. Aparna Banerjee is Branch Manager in a Bank and drawn a salary of Rs.2,12,000 per annum. She lives in a flat, owned by her, along with her parents, her husband and a daughter. She holds a certificate of excellence in modern arts. Her data of birth is 17 August, 1970.
(a) E (b) B (c) C (d) D
19. Vivek Chandra is 43 years old. He lives alone in his own house. He works as a Supervisor in a textile mill and earns Rs.10, 000 every month.
(a) A (b) B (c) C (d) D
20. Mr. Pintu Bhagat lives in his own house with his wife and a daughter. He gets a monthly salary of Rs.6,000. He is a good painter and owns a gallery. He is 40 years old.
(a) A (b) B (c) C (d) D

SESSION - 7

SELECTION DECISION TABLE

Directions for Q21: Read the following information and answer the questions based on it.

Following are the criteria for appointing person for the post of Manger in an organization.

The candidate must

- (i) be graduate with at least 70 percent marks
- (ii) have passed XII std. examination with at least aggregate percentage of 70 in Physics, Chemistry and Mathematics
- (iii) have passed the written examination
- (iv) have passed group discussion and interview with at least 60% marks
- (v) not to be more than 24 years as on August 15, 1996

In the case of a candidate who satisfies all other criteria except at

- (ii) above, in terms of percentage of marks but has secured 80% marks in graduation, may be appointed
- (v) above, but is a post graduate, is to be referred to Director Personnel
- (i) above, but has appeared in the final degree examination, may be provisionally appointed

Based on these criteria and information provided below, decide the course of action in each case. You are not to assume anything at your own. If the data provided are not adequate to decide the given course of action, your answer will be "data inadequate".

These cases are given to you as on 1.10.1996.

21. Vinod Kambli has appeared in final degree examination. He has secured 80% aggregate marks in Physics, Chemistry and Mathematics in XII std. He has passed the written examination and has secured 70% marks in both group discussion and interview. He was born on May 15, 1974.

- (a) Do not appoint
- (b) Refer to Director-Personnel
- (c) Appoint provisionally
- (d) Appoint

Directions for Q22 to Q24: The eligibility criteria for recruitment of a clerk in a bank are as follows.

- (I) He must have a minimum percentage of 60 in class 10 and 12 exams.
- (II) He must have had Economics as a compulsory subject in class 12.
- (III) He must be less than 25 years of age as on 25/07/2003.
- (IV) He should pass the physical fitness test as prescribed in the norms.
 - In case he satisfies all other criteria except the 1st, he will be required to pass an aptitude test.
 - In case he satisfies all other criteria except the 3rd, he will be interviewed by the HR.

22. Niranjana celebrated his 24th birthday on November 21st 2002. He has been a consistent performer with 75% and 85% marks in classes 10th and 12th respectively. Economics was the one subject in class 12th in which he was very weak, and managed to score only 47%. He passed the physical test prescribed by the bank without any problems. He will be

- (a) recruited
- (b) first required to pass the aptitude test
- (c) interviewed by the HR
- (d) Data insufficient

23. Kamala has passed classes 10 and 12 in the first division. She passed the physical fitness test of the bank. She will be 26 this December (2003). Economics was one of her subjects in class 12. She will

- (a) have to give an aptitude
- (b) be interviewed by the HR
- (c) be denied admission
- (d) Both A and B

24. Aruna is 23 years old, and Economics was her favorite subject in class 12. She passed classes 10 and 12 in the second division. She passed the physical fitness test of the bank without any hassles. She will

- (a) be admitted directly
- (b) have to pass the aptitude test
- (c) be denied admission
- (d) Data insufficient

Directions for Q25 to Q28: Study the following information carefully and answer the questions given below. Following are the conditions for selecting Senior Manager - General Banking in a bank.

The candidate must

- (I) have secured at least 60 percent marks in Std. XII.
- (II) have secured at least 55 percent marks in Graduation in any discipline.
- (III) have secured at least 60 percent marks in Postgraduate degree/diploma in Management/Economics/Statistics.
- (IV) be at least 25 years and not be more than 35 years as on 1.3.2010.
- (V) have post qualification work experience of at least 2 years as General Banking Officer in a bank.
- (VI) have secured at least 50 percent marks in written examination.
- (VII) have secured at least 40 percent marks in Personal Interview.

In the case of a candidate who satisfies all the above conditions except,

- (a) at (III) above, but has secured at least 60 percent marks in CA or ICWA, the case is to be referred to VP-Recruitment.
- (b) at (VII) above, but have secured at least 65 percent marks in the written examination and at least 35 percent marks in the personal interview, the case is to be referred to President-Recruitment.

In each question below are given details of a candidate. You have to take one of the following courses of action based on the information provided and the conditions and sub-conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 1.3.2010.

Mark answer

- (A) if the data provided are inadequate to take a decision.
- (B) if the case is to be referred to VP-Recruitment.
- (C) if the case is to be referred to President-Recruitment.
- (D) if the candidate is to be selected.
- (E) if the candidate is not to be selected.

25. Kesav Vora was born on 8th November 1978. He has secured 65 percent marks in Std. XII and 60 percent marks in Graduation. He has secured 58 percent marks in M.A. Economics and 60 percent marks in ICWA. He has been working in a bank as generalist officer for the past two years after completing his education. He has also secured 50 percent marks in the written examination and 45 percent marks in personal interview.

- (a) A (b) B (c) D (d) E

26. Arindam Ghosh has been working in a bank as generalist officer for the past four years after completing his postgraduate diploma in management with 60 percent marks. He has secured 50 percent marks in the written examination and 40 percent marks in the personal interview. He has also secured 70 percent marks in Std. XII. He was born on 25th February 1975.

- (a) A (b) C (c) D (d) E

27. Sohan Majhi has secured 65 percent marks in B.Sc. and 70 percent marks in M.Sc. Statistics. He has been working in a bank as generalist officer for the past three years after completing his post-graduation. He has secured 55 percent marks in the written examination and 50 percent marks in the personal interview. He was born on 8th July 1982.

- (a) C (b) B (c) D (d) A

28. Neha Salve has been working in a bank as generalist officer for the past four years after completing her postgraduate degree in Economics with 60 percent marks. She has secured 60 percent marks in both graduation and Std. XII. She was born on 24th August 1979. She has secured 70 percent marks in the written examination and 38 percent marks in the personal interview.

- (a) A (b) B (c) C (d) D

Direction for Q29 to Q31: Study the following information carefully and answer the questions given below.

Following are the conditions for granting an advance of Rs.10 lakhs to the farmers for purchasing a tractor, by a bank.

The farmer must

- (A) have at least five acres of cultivable land.
- (B) be able to produce collateral of at least Rs.8 lakhs.
- (C) not be more than 50 years old as on 1.12.2005.
- (D) not have any outstanding unpaid loan from the bank.
- (E) be able to produce a recommendation letter from the Member of the Legislative Assembly.

In the case of a farmer who satisfies all other criteria except

- I. at (A) above, but is able to cultivate more than one crop in each piece of land, the case is to be referred to the chairman of the bank.

- II. at (D) above, but has fixed deposits of at least Rs.4 lakhs with the bank, the case is to be referred to the General Manager of the bank. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 1.12.2005.

Mark your answer as

- (A) if the advance not to be granted
- (B) if the candidate to be referred to the GM
- (C) if the given data is inadequate
- (D) if the advance to be granted
- (E) if the candidate to be referred to the Chairman

29. Raman has obtained a recommendation letter from the Member of the Legislative Assembly. He has seven acres of cultivable land and can produce collateral of Rs.8 lakhs. He was born on 4th July, 1955. He doesn't have any outstanding loan from the bank.

- (a) A (b) B (c) C (d) D (e) E

30. Hillary was born on 8th November, 1956. He has obtained a recommendation letter from the Member of the Legislative Assembly. He has four acres of cultivable land with two crops in each piece of land. He can pledge Rs.8 lakhs as collateral. He has no outstanding loan from the bank.

- (a) A (b) B (c) C (d) D (e) E

31. Athul was born on 3rd February, 1956. He has six acres of cultivable land. He has submitted a recommendation letter issued by the Member of the Legislative Assembly. He can pledge collateral more than Rs.8 lakhs. He doesn't have any unpaid loan from the bank.

- (a) A (b) B (c) C (d) D (e) E

Directions for Q32 to Q34: Study the following information carefully to answer the questions that follow.

Following are the criteria for selection of computer professionals in an organization.

The candidate must

- (I) be a Computer Engineer or a MCA graduate with first class having minimum 65% marks.
- (II) have secured at least 50% marks in the Selection Test.
- (III) have secured at least 40% marks in the Interview.
- (IV) not be less than 21 years and not be more than 30 years of age as on 1.10.2005.

In case of a candidate who satisfies all other criteria except

- (A) at (I) above but is an Electronics Engineer with 70% marks, the case may be referred to the GM, Recruitment.
- (B) at (II) above but is having at least 2 years of experience working as a System Analyst, the case may be referred to the Chairman, Recruitment Committee.

In each of the questions below, information of a candidate is given. You have to take one of the following five decisions based on the information provided and the criteria and conditions given above. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 1.10.2005.

Mark your answer as

- (A) If the candidate is to be selected;
 - (B) If the candidate is not to be selected;
 - (C) If the case is to be referred to the Chairman, Recruitment Committee;
 - (D) If the case is to be referred to the GM, Recruitment;
 - (E) If the data provided are inadequate to take decision.
32. Rohit Verma is a Mechanical Engineer with 75% marks. He was born on 6th July, 1976. He scored 66% marks in the Selection Test and 52% marks in the Interview.
(a) A (b) B (c) C (d) D (e) E
33. Neeti Thukral is a MCA graduate with 68 % marks and is working as a programmer for last three years. She secured 48% marks in the Selection Test and 58% marks in the Interview.
(a) A (b) B (c) C (d) D (e) E
34. Anu Dorgra is a Computer Engineer with 78% marks. She scored more than 60% marks in the Interview and the Selection Test.
(a) A (b) B (c) C (d) D (e) E

Directions for Q35: Study the following information carefully and answer the questions given below.

Following are the conditions for selecting Personnel Manager in an organization.

The candidate must

- I. be a graduate with at least 50 percent marks.
- II. have a postgraduate degree/diploma in Personnel Management/HR with at least 60 percent marks.
- III. not be more than 35 years as on 1.6.2009.
- IV. have post qualification work experience of at least five years in the personnel/HR division of an organisation.
- V. have secured at least 45 percent marks in the selection process.

In the case of a candidate who satisfies all other conditions

EXCEPT

- (A) Condition (III) above, but have a post qualification work experience of atleast ten years, the case is to be referred to Director-personnel.
- (B) Condition (IV) above, but has post qualification work experience as a deputy Personnel Manager of at least three years, the case is to be referred to President-Personnel.

In each question below are given details of a candidate. You have to take one of the following courses of action based on the information provided and the conditions and sub- conditions given above and mark the number of that course of action as your answer. You are not to assume anything other than the information provided in each question. All these cases are given to you as on 01.02.2009.

Mark your answer as

- (A) if the candidate is to be selected.
 - (B) if the candidate is not to be selected.
 - (C) if the information provided is inadequate to take a decision.
 - (D) if the case is to be referred to the President- Personnel.
 - (E) if the case is to be referred to the Director- Personnel.
35. Meena was born on March 1978. She has been working as a Deputy Personnel, managing an organisation for the past four years after completing her postgraduate diploma in HR with 68 percent marks. She has secured 50 percent marks in both graduation and selection process.
(a) A (b) B (c) C (d) D (e) E

Directions for Q35 to Q40: Study the following information carefully and answer the questions given below it.

Following are the criteria for allotment of residential accommodation by an organisation to its employees.

The employee must:

- (1) have completed at least 10 years in this unit of organisation out of which at least 4 years in the supervisory cadre.
- (2) not have more than five members in the family.
- (3) have at least 5 years of service remaining, the retirement age being 58 years.
- (4) not have his/her own house.
- (5) not be staying in a house owned by his/her spouse.

In the case of an employee who:

- (6) satisfies all other criteria except at (1) above and joined the organisation as a manager, should be referred to the Director, finance.
- (7) satisfies all other criteria except at (3) above at present working as a senior manager, is to be referred to the managing Director.
- (8) has been transferred from another city, the condition (1) may be waived.

Based on the above criteria and on the basis of the information provided in case of each employee in each of the following questions, you have to decide whether or not, accommodation is to be provided or the case is to be referred to higher authority. You are not to assume anything. All the cases are presented before you as on 31st July 1996.

Mark answer

- (A) - if the employee is to be provided with accommodation
(B) - if the employee is not to be provided with accommodation
(C) - if the complete information regards all the above criteria are not provided in the question
(D) - if the case is to be referred to the Director, Finance;
(E) - if the case is to be referred to the Managing Director.
36. Deepak Aggarwal has joined the organisation four years back as an Officer. He stays with his wife and two children. Neither he nor his wife owns a house.
(a) A (b) B (c) C (d) D (e) E
37. Vishal Kohli stays in a rented house with his wife and three children. His date of birth is 12th July, 1949. He has been working in the organisation for the last twelve years out of which five years as a Manager.
(a) A (b) B (c) C (d) D (e) E
38. Dev joined the organisation as manager in 1990 and was 30 years old as on 15th August, 1993. He has four members in his family. Neither he nor his wife owns a house.
(a) A (b) B (c) C (d) D (e) E
39. Sumit has recently been transferred from another office and was 53 years old as on 6th February 1996. He has been working in the organisation for the last twenty years out of which ten years as a manager. There are four members in his family. Neither he nor his wife owns a house.
(a) A (b) B (c) C (d) D (e) E
40. Sanjay has three members including himself in the family. Neither he nor his wife owns a house. He is a senior manager for the last four years and has been working in the organisation for the last twelve years. He will be retiring from the organisation in the year 2002.
(a) A (b) B (c) C (d) D (e) E

SESSION - 8

CONSOLIDATED LEARNING

Directions for Q1 to Q5: Study the following information to answer the given questions.

Ten people are sitting in two parallel rows having five persons each, in such a way that there is an equal distance between adjacent persons. In row 1 - F, G, H, I and J are seated (but not necessarily in the same order) and all of them are facing North. In row 2 - A, B, C, D and E are seated (but not necessarily in the same order) and all of them are facing South. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row.

- The one who faces I, sits third to the right of A.
- Only one person sits between I and F.
- B is not an immediate neighbor of A. B does not sit at any of the extreme ends of the line.

- The one who faces C sits on the immediate right of G.
 - C is not an immediate neighbor of B.
 - D faces J.
- Four of the following five are alike in a certain way based on the given seating arrangement and thus form a group. Which is the one that does not belong to that group?
(a) D (b) A (c) H (d) I (e) J
 - Who among the following sit exactly in the middle of the rows?
(a) E, G (b) A, J (c) C, J (d) B, F (e) A, F
 - Who among the following sits on the immediate right of the person who faces F?
(a) D (b) E (c) C (d) B (e) A
 - Which of the following is true regarding H?
(a) G sits on immediate left of H.
(b) F is an immediate neighbour of H.
(c) An immediate neighbor of H faces B.
(d) None of the given options is true.
(e) C faces H.
 - Who among the following faces E?
(a) H (b) J (c) G (d) F (e) I
 - Tom Sawyer was playing with his 90 cubical stones. He first placed some stones in a row and then he placed one stone on all those stones already placed in the row except the stones at the end. He repeated that to form a pattern till he placed two stones on the top row. How many such rows were formed?
(a) 8 (b) 9 (c) 10 (d) 11 (e) 12
 - There are four houses each painted with one of the colours, blue, red, green and pink. The doors are painted with blue, red, green and pink, but not necessarily in the same order. The house which is painted red is fixed with green colour door and the door which is painted red is fixed to a house painted with the colour of the door which is fixed to a house painted blue. What is the colour of the door which is fixed to the house painted blue?
(a) Red (b) Green (c) Pink
(d) Blue (e) None of these
 - The son of M is the father of N and grandfather (Mother's father) of R. S is the daughter of N and sister of B. On the basis of this information, how is M related to B?
(a) Grandfather (b) Grandmother
(c) Data inadequate (d) Grandmother's mother
 - A is the brother of B, C is the brother of A. To establish a relationship between B and C, which of the following information is required?
I. Gender of C
II. Gender of B
(a) Only I is required
(b) Only II is required
(c) Both I & II are required
(d) Neither I nor II is required

10. A is B's sister. C is B's mother. D is C's father. E is D's mother. Then, how is A related to D?
(a) Grandmother (b) Grandfather
(c) Daughter (d) Grand daughter
11. A man said to a lady, "Your mother's husband's sister is my aunt." How is the lady related to the man?
(a) Daughter (b) Sister
(c) Granddaughter (d) Mother
(e) Aunt
12. In a group of 40 girls, when Latha was shifted by 4 places towards her right, then she become 12th from the left end what was her earlier position from the right end of the row?
(a) 34 (b) 32 (c) 33
(d) 35 (e) None of these
13. In a group of 40 boys, Raju is 12th from the left end and Raghu is 17th from the right end. If Dilip is placed exactly between them what is his right hand rank?
(a) 22 (b) 23 (c) 24
(d) 25 (e) None of these
14. Murugan is sixth from the left end and Prasanna is tenth from the right end in a row of boys. If there are eight boys between Murugan and Prasanna, how many boys are there in the row?
(a) 21 (b) 23 (c) 24 (d) 25
15. In a queue, Arun is 10th from the front while Mukesh is 25th from behind and Maha is just in the middle of the two. If there be 50 persons in the queue. What position does Maha occupy from the front?
(a) 17th (b) 18th (c) 19th (d) 20th

Directions for Q16 to Q20: Study the following information carefully and answer the questions given below it.

Following are the criteria for allotment of residential accommodation by an organisation to its employees.

The employee must:

- (1) have completed at least 10 years in this unit of organisation out of which at least 4 years in the supervisory cadre.
- (2) not have more than five members in the family.
- (3) have at least 5 years of service remaining, the retirement age being 58 years.
- (4) not have his/her own house.
- (5) not be staying in a house owned by his/her spouse.

In the case of an employee who:

- (6) satisfies all other criteria except at (1) above and joined the organisation as a manager, should be referred to the Director, finance.

- (7) satisfies all other criteria except at (3) above at present working as a senior manager, is to be referred to the managing Director.

- (8) has been transferred from another city, the condition (1) may be waived.

Based on the above criteria and on the basis of the information provided in case of each employee in each of the following questions, you have to decide whether or not, accommodation is to be provided or the case is to be referred to higher authority. You are not to assume anything. All the cases are presented before you as on 31st July 1996.

Mark answer

- (A) - if the employee is to be provided with accommodation
- (B) - if the employee is not to be provided with accommodation
- (C) - if the complete information regards all the above criteria are not provided in the question
- (D) - if the case is to be referred to the Director, Finance;
- (E) - if the case is to be referred to the Managing Director.

16. Geeta joined the organisation in 1979 when she was twenty-eight years old as an officer. She is unmarried and stays with her mother in a rented house. She does not own a house.
(a) A (b) B (c) C (d) D (e) E
17. Rakesh has been working in the organisation for the last eight years out of which five years as an officer. He was 52 years old as on 5th may 1994. He stays with his wife and one son. Neither he nor his wife owns a house.
(a) A (b) B (c) C (d) D (e) E
18. Madhu was promoted as a supervisor five years back after joining the organisation in 1983 as a clerk. She stays with her husband and two children in a rented house and she does not own any house. She was 42 years old as on 23rd April 1995.
(a) A (b) B (c) C (d) D (e) E
19. Nikunj has been working in this unit for the last 15 years and has one son and two daughters along with his wife in the family. Neither he nor his wife owns a house. His date of birth is 12th January 1954.
(a) A (b) B (c) C (d) D (e) E
20. Prathibha has been working in the organisation for the last ten years out of which five years as an officer. Her date of birth is 18th June 1944. She stays with her husband and three children. Neither she nor her husband own a house.
(a) A (b) B (c) C (d) D (e) E