

Directions (1-5): Answer the questions based on the information given below.

Eight persons are seated in a square table where four of them sit at the corners and faces towards the centre and four of them sit at the middle of the sides and faces away from the centre. All the persons are shifted to the rooms X and Y based on a rolling die and then arranged in a parallel row as follows.

Arrangement 1:

Only two persons sit between M and C, who sits facing towards the centre. A sits to the immediate right of M. O sits third to the left of A. U sits second to the right of O. G sits adjacent to A and third to the right of E. R is one of the persons.

Arrangement 2:

All the persons (in alphabetical order) are allowed to roll the die. The persons getting even number are shifted to room X whereas the persons getting odd number are shifted to room Y. Thus four persons are there in each room. The following is the number shown in the die (in the same order) for each person (in alphabetical order): 4, 3, 5, 6, 2, 1, 5, 4.

Arrangement 3:

All the persons are made to sit in two parallel rows in alphabetical order from left to right facing towards north. The persons from room X sits in row 1 whereas the persons from room Y sits in row 2. The persons in row 2 sit exactly behind the persons in row 1.

1. Who among the following person sits third to the left of M in arrangement 1?

- a) C
- b) U
- c) E
- d) R
- e) None of these

2. Who among the following person is replaced by C, if C, G, M, U are shifted to the room X in arrangement 2?

- a) O
- b) A
- c) R
- d) E
- e) None of these

3. Who among the following person sits exactly in front of R in the arrangement 3?

- a) U
- b) M
- c) G
- d) O
- e) None of these

4. What is the position of R with respect to A in arrangement 1?

- a) Second to the left
- b) Immediate left
- c) Immediate right
- d) Second to the right
- e) None of these

5. Four of the following five are alike in a certain way based on the arrangement 1 and hence form a group. Find the one who doesn't belong to that group?

- a) C
- b) R
- c) E
- d) A
- e) G

Directions (6-10): Answer the questions based on the information given below.

Six persons viz. A, B, C, D, E and F from the same family are standing in a straight line facing towards north, but not necessarily in the same order. There are two married couples and two generations in the family. Also, equal number of males and females are there in the family.

B stands third from one of the extreme ends and is second to the left of his mother. B is the son of D and brother of A who stands to the immediate right of B. C stands second to the left of A and immediate right of the one who is the child of E. E is the father of A and stands to the left of his wife. F is neither the son nor the wife of E. C is the daughter-in-law of D whereas B is unmarried.

6. Who among the following is the spouse of C?

- a) B
- b) A
- c) F
- d) E
- e) Cannot be determined

7. Who among the following person stands to the immediate left of F?

- a) D

- b) A
- c) E
- d) C
- e) No one or none of these

8. How many persons stand between D and his spouse?

- a) One
- b) Three
- c) None
- d) Two
- e) More than three

9. If G is the daughter of C, then how is F related to G?

- a) Aunt
- b) Grandfather
- c) Uncle
- d) Grandmother
- e) Cannot be determined

10. What will be the position of F with respect to her mother?

- a) Third to the left
- b) Second to the left
- c) Immediate right
- d) Fourth to the left
- e) None of these

Directions (11-15): Answer the questions based on the information given below.

Twelve persons i.e. A, B, C, D, E, F, P, Q, R, S, T and V are seated in two parallel rows, seven seats in each row, but not necessarily in the same order. The persons in both the rows are facing towards each other and one of the seats in each row is vacant. The

persons in row 1 faces towards north while the persons in row 2 faces towards south.

B sits third from one of the extreme ends and sits to the immediate right of the vacant seat. More than two persons sit to the right of B. The one who sits exactly opposite to the vacant seat, sits second to the right of B. Both R and Q sit adjacent to the vacant seat of the same row where neither of them is adjacent to A. Only two persons sit between E and A, who doesn't sit at any of the ends. At least one person sits to the left of E. S sits second to the right of R. F faces north and sits second to the left of the one who faces V. A does not face Q. Neither R nor A is adjacent to V. More than three seats are between C and D who sits at the extreme end. Only one person sits between T and P who doesn't face D.

11. Who among the following person sits facing the vacant seat?

- a) T
- b) P
- c) V
- d) F
- e) None of these

12. How many persons sit between Q and the one who faces D?

- a) One
- b) Two
- c) Three
- d) More than three
- e) None

13. What is the position of P with respect to A?

- a) Immediate right

b) Second to the right

c) Immediate left

d) Faces each other

e) None of these

14. The number of persons to the right of V is the same as the number of persons to the left of ____.

a) E

b) D

c) S

d) C

e) None of these

15. Who among the following person sits second to the right of the one who faces R?

a) E

b) F

c) C

d) A

e) None of these

Directions (16-20): Answer the questions based on the information given below.

An alphanumeric machine when given an input rearranges them by following a particular rule in each step. The following is an illustration of the input and the steps rearrangement.

Input: Land 73 59 Tent 35 Shut Born 67 Find 91

Step 1: 37 Land 73 59 Tent Born 67 Find 91 Shot

Step 2: Born 37 Land 73 Tent 67 Find 91 Shot 61

Step 3: 69 Born 37 Land 73 Tent 91 Shot 61 Find

Step 4: Tent 69 Born 37 Land 91 Shot 61 Find 75

Step 5: 93 Tent 69 Born 37 Shot 61 Find 75 Land

Step 5 is the last and final step of the rearrangement.

With the same rules followed in the above arrangement, determine the steps for the following input.

Input: Thin 83 Bush 57 Jack

16. In which of the following step "83 Jack 75" occurs in the same order?

- a) Step 2
- b) Step 4
- c) Step 3
- d) Step 1
- e) Cannot be determined

17. How many elements are there between 43 and 59 in step 4?

- a) Three
- b) Four
- c) Seven
- d) Six
- e) None of these

18. Which of the following element is fourth to the right of 59 in step 3?

- a) 83
- b) Jack

c) 75

d) Rest

e) None of these

19. What will be the difference of the sum of the third and fifth element from the right end in step 1 and the sum of the third and fourth element from the left end in step 3?

- a) 10
- b) 6
- c) 9
- d) 8
- e) None of these

20. Which of the following option is correct with respect to step 5 of the given input?

- a) R♦st 59 Gr¥w 25 B◇sh 43
- b) R♦st 59 Gr¥w 25 Jøck 83
- c) 85 R♦st 59 Jøck 25 Gr¥w
- d) 85 Jøck 59 Th●n 25 B◇sh
- e) None of these

Directions (21-25): Answer the questions based on the information given below.

Ten persons viz. G, J, K, M, P, Q, R, S, T and W are visiting a place in different months viz. January, February, April, May, June, July, August, September, November and December of the same year, but not necessarily in the same order.

R visits the place in one of the months having 31 days after May. Only four persons visit between R and G who visits immediately before P. W visits three persons after the one who visits second after P. Only one person visits between W and M who doesn't visit

before R. Q visits after W. J visits in the month having 30 days and immediately after T. K visits before S who neither visits after W nor M.

21. Who among the following visits the places three persons after S?

- a) M
- b) Q
- c) P
- d) No such person
- e) None of these

22. In which of the following month does K visits the place?

- a) February
- b) April
- c) May
- d) January
- e) None of these

23. If W and T interchange their visiting month, then who among the following person visits two persons after T?

- a) M
- b) S
- c) R
- d) Q
- e) None of these

24. Four of the following five are alike in a certain way and hence form a group. Find the one who doesn't belong to that group.

- a) M
- b) T
- c) P
- d) S

e) K

25. How many persons visit between W and P?

- a) One
- b) Two
- c) Three
- d) None
- e) More than three

Directions (26-30): Answer the questions based on the information given below.

Seven persons viz. A, B, C, D, E, F and G were born in different years viz. 1960, 1965, 1977, 1989, 1995, 2007 and 2010, but not necessarily in the same order. Each person likes different colours viz. Blue, Green, Indigo, Orange, Red, Violet and Yellow. Ages of all the persons were calculated on the base year 2020.

F's age was an even number and likes Indigo. The difference between the ages of C and F is less than 6. The number of persons born before and after the one who likes Yellow is the same. Only one person was born between the one who likes Yellow and B, who likes Violet. The one who likes Green was born immediately before B. The age of E is a prime number but doesn't like Yellow. A likes Red colour whereas C doesn't like Blue. The age difference between G and E is double the value of the age difference between G and A.

26. Who among the following was the eldest person among them?

- a) F
- b) C

- c) D
- d) G
- e) None of these

27. What is the age of A?

- a) 10
- b) 25
- c) 13
- d) 31
- e) None of these

28. Which of the following colour was liked by C?

- a) Violet
- b) Blue
- c) Indigo
- d) Orange
- e) None of these

29. How many persons were born between B and the one who likes Blue?

- a) Two
- b) Three
- c) One
- d) More than three
- e) None

30. What is the age difference between the one who was born in 1977 and the one who likes Indigo?

- a) 33
- b) 30
- c) 17
- d) 18
- e) None of these

Directions (31-35): Read the following information carefully and answer the questions given below.

Letters	F	I	D	G	K	P	O	T	M	A	Y	N	R	E
Codes	5	#	4	3	1	%	7	2	&	8	*	\$	+	!

Conditions:

I. If the first letter of the first word in the sentence is a vowel and is followed by a word which also starts with a vowel then the code of the first letter of both the words is code of the vowel of the first word.

II. If in a sentence, a word has repeated letters then the repeated letters are coded as @.

III. If the last letter of the last word is a vowel and the first letter of the first word is a consonant, then both the letters of the words are coded as the code of the first letter of the first word.

Note: If more than one condition is applied, then it is applied in the same order from I to III. The letter is decoded by one condition then it does not consider for the other conditions.

31. What will be the code for the phrase "FINE GOOD DAY"?

- a) 5\$!# 3@@@3 48*
- b) 5#\$! 3@@@4 48*
- c) #\$!5 3@@@4 84*
- d) 5#\$! 4@@@3 48*
- e) None of these

32. What will be the code for the phrase "INTO DARK"?

- a) #\$27 48+1
- b) 27#\$ 48+1

- c) 7#\$2 481+
- d) 2#\$7 84+1
- e) None of these

33. What will be the code for the phrase "ROOM RATE"?

- a) +@@+ +82+
- b) @++@ 82++
- c) @+@+ +82+
- d) +@@& +82+
- e) None of these

34. What will be the code for the phrase "MY PINE TREE"?

- a) @* %#\$! 2+@@
- b) @* %#\$! 2+@&
- c) &* %#\$! 2+@&
- d) &* %#\$! 2+@@
- e) None of these

35. Find the code for the phrase "ENTERANY FORMATE".

- a) !\$2!+ 8\$* 57+&82!
- b) !\$2!+ !\$* 57+&82!
- c) 8\$2!+ 8\$* 57+&82!
- d) 8\$2!+ !\$* 57+&82!
- e) None of these

Directions (36-40): Answer the questions based on the information given below.

E 6 D # B 8 7 J 4 % G 0 F 9 C S & V * P W 1 @ 3 N
\$ R 2 ! Y M 5 ^

Step 1: The letter immediately preceded by a symbol and immediately followed by a number is changed to the second succeeding letter in the English alphabets.

Step 2: The numbers immediately following letter and immediately preceding symbol is added with three.

Step 3: If any letter is repeated, then replace the repeated letter with the third succeeding letter in English alphabets (if A comes twice then first "A" will remain same and the second repeated "A" will be replaced by third succeeding letter). Also, if any number is repeated, then remove the number from the series. (if 9 comes twice then first "9" will remain same and the second repeated "9" will be removed)

Note: Step 1 is followed by step 2, step 2 is followed by step 3.

36. How many letters are immediately preceded by a number and immediately followed by a symbol in the final series (i.e. step 3)?

- a) One
- b) Two
- c) None
- d) Three
- e) More than three

37. Which of the following element is seventh to the right of the sixteenth from the left end in the final series?

- a) @
- b) N
- c) 3
- d) 1
- e) None of these

38. How many numbers are there between the fourth element from the left end and eleventh element from the right end in the final series?

- a) None

- b) One
- c) Two
- d) Three
- e) More than three

39. If all the symbols are dropped from the final series, then which of the following element is thirteenth from the right end?

- a) 9
- b) C
- c) F
- d) 0
- e) None of these

40. What is the position of the first symbol towards the left of 4 in the final series?

- a) Immediate next
- b) Second from 4
- c) Third from 4
- d) Fourth from 4
- e) None of these

41) If the third letter from the left end of all the words is taken after arranging the letters of each word in alphabetical order within the word, which of the following options has the maximum number of consonants?

- a) Abroad, Accept, Active
- b) Battle, Beauty, Become
- c) Center, caught, Cancer
- d) Danger, Defeat, Degree
- e) Engine, Ending, Employ

42) If the middle letters of all the words are taken, which of the following will form a meaningful word and each letter used only once?

- a) Actor, Drawn, Event, Women
- b) Brain, Bring, Badly, Later
- c) Click, Clear, Cover, Gross
- d) Broad, Event, Alive, Anger
- e) Field, Above, Hotel, fixed

43) If the second letters from the right end of all the words are taken after arranging the letters of each word in reverse alphabetical order within the word, which of the following options has the none vowel?

- a) Bath, Area, Back, Coal
- b) Date, Came, Good, Ford
- c) Hang, Held, Item, King
- d) Made, Meal, Pain, Rock
- e) None of these

44) If the letters of all the words are changed to the next successive letter in alphabetical order, then which of the following options has the maximum number of vowels obtained?

- a) Art, Ask, Bet, Big
- b) Box, Bug, Cow, Dip
- c) Eye, Guy, Hit, Hot
- d) Map, Met, Mug, Oil
- e) Pin, Red, Row, Say

45) If the vowels are changed to the next successive letter and the consonants are changed to the previous letter of all the words in alphabetical order, then which of the following options has the last letter of the word is a vowel?

- a) Ability, Billion, Capture
- b) Circuit, Cloths, college
- c) Culture, Excited, Factory
- d) Forever, Gateway, Justify

e) None of the above

Direction (46-50): Answer the questions based on the information given below.

Seven persons P, Q, R, S, T, U and V live on seven floored building. The first floor is numbered as 1 the floor just above it is numbered as 2 and so on till the topmost floor is numbered as 7. All of them like different colours.

Note: No two persons live on adjacent floors according to the English alphabetical order. For example-P does not live adjacent to Q, Q does not live adjacent to R and P and so on.

The number of persons who live below as well as above U is the same. Only two persons live between U and the one who likes blue. Only one person lives between the one who likes blue and S. More than two persons live between the one who likes red and S. T lives immediately above the one who likes red. The one who likes black lives immediately above the one who likes golden. The one who likes white lives on an even numbered floor immediately above V. Three persons live between P and T. S does not like black. P likes green. R lives above the one who likes yellow.

46. How many persons live between T and R?

- a) One
- b) Two
- c) Three
- d) Four
- e) None of these

47. Who among the following person likes yellow?

a) Q

b) S

c) R

d) T

e) None of these

48. Four of the following five are alike in a certain way and hence form a group, which of the following does not belong to that group?

a) R-black

b) T-Red

c) U-golden

d) P-yellow

e) S- black

49. Who among the following person lives at the topmost floor?

a) The one who likes white

b) T

c) R

d) The one who likes red

e) None of these

50. What is the position of U from the bottom most?

a) Third

b) Second

c) Fourth

d) Fifth

e) None of these

Directions (51-55): Answer the questions based on the information given below.

Certain number of persons is living in a building containing two flats viz. Flat A and Flat B with a certain number of floors. Flat A is to the west of Flat

B. The lowermost floor is numbered 1 and the floor immediately above it is numbered 2 and so on. The flat A of floor 2 is immediately above the flat A of floor 1 whereas flat B of floor 2 is immediately above the flat B of floor 1 and so on.

Both G and D lives on the same even numbered floor below floor 5. W lives on flat A and three floors above G of the same flat. Only one floor is there between W and Q who lives on the same flat as D but not adjacent to D. R lives on the flat immediately below G's flat and four floors below S. Not more than two floors are there above Q where T lives on the flat immediately above Q's flat. M lives on the same floor as T and immediately below the flat of P. The number of floors below R is one more than the number of floors above M.

51. How many floors are there in the building?

- a) 9
- b) 11
- c) 13
- d) 7
- e) None of these

52. Who among the following lives three flats above W's flat?

- a) P
- b) Q
- c) G
- d) M
- e) None of these

53. In which of the following floor does Q live?

- a) 7th
- b) 5th

c) 9th

d) 11th

e) None of these

54. If N lives on the same floor as P then who among the following lives on the same flat as N?

- a) S
- b) W
- c) R
- d) G
- e) None of these

55. Which of the following floor and flat does D live?

- a) Flat A, floor 2
- b) Flat B, floor 2
- c) Flat A, floor 4
- d) Flat B, floor 4
- e) None of these

Directions (56-60): Answer the questions based on the information given below.

A nine letter word (may or may not be meaningful) with no repeated letters is arranged in three arrangements to form the series. The same letters are used in each of the arrangements.

Arrangement 1:

N is third from one of the extreme ends. O is second to the right of N. Only three letters are there between O and P. W is three letters away from P and second to the left of Y. A is to the immediate right of T but not in any of the ends. More than two letters are there between U and S where U is to the left of S.

Arrangement 2:

All the given letters from arrangement 1 are arranged in alphabetical order from left to right. Thus, forms the new arrangement of the series.

Arrangement 3:

Three meaningful, three letter words are combined to form the new arrangement. The last two letters in arrangement 2, along with the first letter (from the left end) in the same arrangement 2 to form the first meaningful word. W is placed before Y. The first letter (from the right end) in arrangement 1, along with the second and third letter (from the left end) in the same arrangement 1 to form the second meaningful word. The remaining letters are arranged in such a way to form the third meaningful word where P is placed before O.

56. Which of the following three letters meaningful word formed in the arrangement 3?

- a) Nut
- b) Top
- c) Say
- d) Pot
- e) Pay

57. Which of the following letter is second from the left end in the arrangement 1?

- a) S
- b) T
- c) U
- d) A
- e) None of these

58. What is the position of U with respect to O in arrangement 3?

- a) Third to the right
- b) Third to the left
- c) Sixth to the right
- d) Sixth to the left
- e) None of these

59. How many letters are there between W and T in arrangement 1?

- a) Two
- b) Three
- c) One
- d) None
- e) More than three

60. What is the difference of the number of letters between N and S in arrangement 1 and 2?

- a) Four
- b) Two
- c) One
- d) Zero
- e) None of these

Directions (61-65): Answer the questions based on the information given below.

If,

"A * B" means "A is wife of B"

"A @ B" means "A is son of B"

"A \$ B" means "A is mother of B"

"A & B" means "A is brother of B"

"A # B" means "A is sister of B"

"A μ B" means "A is daughter of B"

Then, H \$ F #D @ B; I μ G * D; E @ C; A μ H. E is not the child of A whereas C is a male member. There are three generations in the family with more than two couples.

61. If K is married to A, then how is K related to E?

- a) Father
- b) Mother
- c) Uncle
- d) Aunt
- e) Cannot be determined

62. Who among the following person is the granddaughter of B?

- a) A
- b) I
- c) E
- d) F
- e) None of these

63. If J is another child of F and is of the opposite gender than the previous child, then how is J related to D?

- a) Son
- b) Nephew
- c) Daughter
- d) Niece
- e) Cannot be determined

64. Who among the following is the brother-in-law of A?

- a) G
- b) H
- c) F
- d) C
- e) None of these

65. If L is the son-in-law of D and has a daughter M, then how is M related to G?

- a) Granddaughter
- b) Daughter

c) Great-granddaughter

d) Daughter-in-law

e) None of these

Directions (66-70): Study the following and answer the questions given below:

Eight persons sit around a circular table facing the centre. There are ten seats and two seats are vacant. B sits third to the right of A. Two seats are there between A and D. Four seats are there between B and P. C sits immediate right of R. R does not sit adjacent to A. The vacant seats are not adjacent to each other. Q sits opposite to one of the seats which is adjacent to P. L sits opposite to the one who sits second to the left of the vacant seat. Q is not sitting adjacent to the vacant seat.

66. Who among the following person sits adjacent to the vacant seat?

- a) C
- b) R
- c) A
- d) Both (a) and (b)
- e) D

67. Who sits third to the right of the person who sits opposite to A?

- a) No one
- b) P
- c) D
- d) C
- e) None of these

68. Which of the following statements is true?

- a) Both the seats adjacent to P are vacant

- b) A sits opposite to D
- c) Q sits immediate right of C
- d) L sits opposite to R
- e) None is true

69. Four of the following five are alike in a certain way and hence form a group, which of the following does not belong to that group?

- a) A-R
- b) Q-Vacant
- c) L-D
- d) P-A
- e) C-vacant

70. How many persons sit between P and L when counted from left of L?

- a) One
- b) None
- c) Three
- d) Five
- e) Cannot be determined

Directions (71-75): Study the following and answer the questions given below:

Six files A, B, C, D, E and F are kept in shelves which have two columns i.e. column 1 and column 2 from left to right. In each column, there are three shelves.

Only one shelf is there between A and the HR file. The HR file and A is kept in the same column. HR file is kept below A. C is kept to the left of the marketing file. Only one shelf is there between Accounts file and C. The IT file is kept above the marketing file and below Finance file. B is kept to the right of E. E

is not IT file. D is kept below F which is not accounts file. One of the file is Design files.

71. Which file is kept to the immediate left of F?

- a) The IT file
- b) A
- c) The accounts file
- d) Both a) and b)
- e) Both b) and c)

72. Which of the following is true regarding D?

- I. D is HR file
- II. IT is kept immediately above D in the same column
- III. D is kept to the left of C

- a) Only III
- b) Only II
- c) Both I and II
- d) Both I and III
- e) None of these

73. Which of the following file is of design?

- a) D
- b) C
- c) B
- d) A
- e) None of these

74. Which of the following is not correctly matched?

- a) D-Marketing
- b) B-IT
- c) C-Accounts
- d) F-Finance
- e) E-Design

75. If A and E interchange their positions then which of the following is not true?

- a) Accounts file is immediate left of B
- b) Design file is to the right of F
- c) Only one shelf between E and C
- d) Both a) and b)
- e) None is true

Directions (76-80): Study the following information carefully and answer the questions given below:

@ means that either hour hand or minute hand is in 7

% means that either hour hand or minute hand is in 6

means that either hour hand or minute hand is in 3

\$ means that either hour hand or minute hand is in 9

& means that either hour hand or minute hand is in 12

In the given questions the first symbol represents the hour hand in the clock and the second symbol represents minute hand in the clock. For example- @# represents 7:15 a.m.

Note: All the time is given in a.m. only.

76. Alisha takes 1 hour and 35 minutes to reach her office from her house. Find out at what time she starts to move from her house if she reaches her office at \$#. Also she took 10 minutes more in the traffic of road.

- a) @%
- b) @#
- c) %@
- d) %%
- e) None of these

77. B has to go for a flight at %&. B has to reach before 2 hours of flight time. But B reached 25 minutes before the required time of arrival. At what time did B arrived at the airport?

- a) @#
- b) #@
- c) #&
- d) Cannot be determined
- e) #%

78. A reaches office after C but before D. C reaches office at %%. The time to reach office between A and C is at least 1 hour. D reaches office at \$\$\$. So A reaches office at what time?

- a) @#
- b) @&
- c) %\$
- d) \$& or &&
- e) \$& or \$#

79. Lisa travels 2 hours and 15 minutes by train and 1 hour and 45 minutes by bus and then 1 hour by bike and finally 30 minutes by walk to reach her friend's house. If she reaches her friend's house at \$&, then what time she started her journey?

- a) %#
- b) &#
- c) #%
- d) @#
- e) None of these

80. Sam starts his car at %& and reaches the destination at \$& after travelling for 24km. If the speed of the car increases 4 km/hr, then at what time

should sam start the journey to reach the same destination at the same time?

- a) %%
- b) @%
- c) @#
- d) @&
- e) None of these

Directions (81-85): Study the following information carefully and answer the questions given below:

Ten persons sit in two parallel rows i.e. row 1 and row 2 with five persons sitting on each row. Five persons face north and rest face south. Each person sitting in row 1 sits exactly opposite to each person in row 2. Row 1 is in south direction of row 2.

Z sits third to the right of Q. Z sits opposite to the person who sits immediate right of O. O faces north.

D sits opposite to the one who sits third to the left of M. Z face the opposite direction to Q. Only three persons sit between Q and P who sits in row 1. L is an immediate neighbour of both O and D. S sits second to the right of the person who sits opposite to D. R sits immediate right of N. R faces the same direction as O. S and L face the same direction as Q.

81. How many persons sit between L and R?

- a) Two
- b) Three
- c) One
- d) None
- e) None of these

82. If R is related to Q, N is related to M then in the same manner L is related to ___?

- a) Z
- b) P
- c) O
- d) D
- e) None of these

83. Who sits immediate right of the one who sits opposite to S?

- a) L
- b) R
- c) D
- d) N
- e) None of these

84. Which of the following statements is not true?

- a) S face the same direction as R
- b) R sits at the end of the row
- c) D sits opposite to P
- d) O sits immediate right of L
- e) All are true

85. Which of the following is true regarding M?

- a) M sits at the end of row
- b) M sits opposite to R
- c) M sits immediate left of S
- d) Both a) and c)
- e) None is true

Directions (86-90): When a word and number arrangement machine is given an input line of numbers and words, it arranges them following a particular rule. The following is an illustration of an input and its rearrangement.

Input: 219cat347tea723pen648alt858ear

Step I: ¥ltcat 347tea723pen648858ear12

Step II: c¥t¥lttea723pen648858ear1214

Step III: ¥¥r c¥t¥lt tea723pen858121418

Step IV: p¥n ¥¥r c¥t ¥lt tea85812141812

Step V: t¥¥ p¥n¥¥r c¥t ¥lt12 14 18 12 21

Step V is the last step. Answer the following based on the input given below:

Input: 392 sit 654 tin 754 yak 652 ink 985 hut

86. What is the sum of the fourth element from the left end in step II and the third element from the right end in step IV?

- a) 667
- b) 908
- c) 1009
- d) 889
- e) None of these

87. If 654 is related to h¥t in step I, 13 is related to 985 in step IV then in the same way yak is related to ___ in step III?

- a) tin
- b) s¥t
- c) 754
- d) 985
- e) None of these

88. Which of the following element is fifth to the right of the third element from the left end in step V?

- a) yak
- b) s¥t
- c) 15
- d) 14
- e) None of these

89. What will be the difference between the sum of all the odd numbers and the sum of all the even numbers in step V?

- a) 28
- b) 23
- c) 25
- d) 24
- e) None of these

90. Which of the following element is fifth to the left of the second element from the right end in the penultimate step?

- a) ¥nk
- b) h¥t
- c) yak
- d) 985
- e) None of these

Answer With Explanation

Directions (1-5):

1. Answer: c) E

2. Answer: b) A

3. Answer: a) U

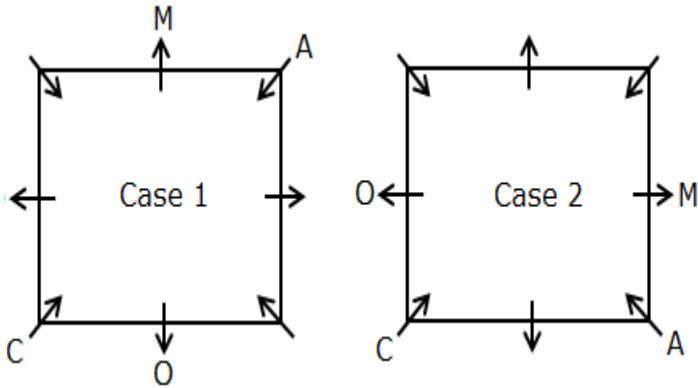
4. Answer: d) Second to the right

5. Answer: e) G

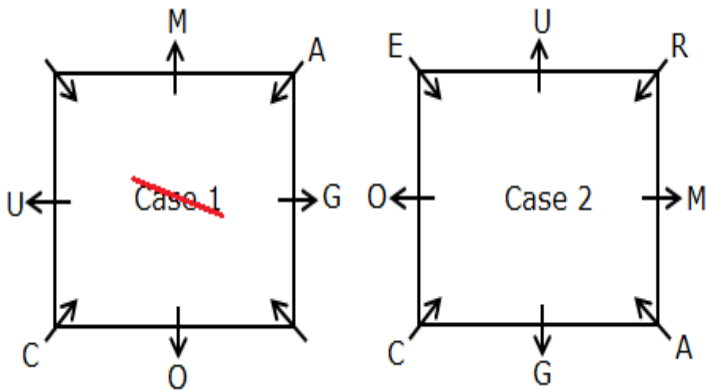
Explanation:

Arrangement 1:

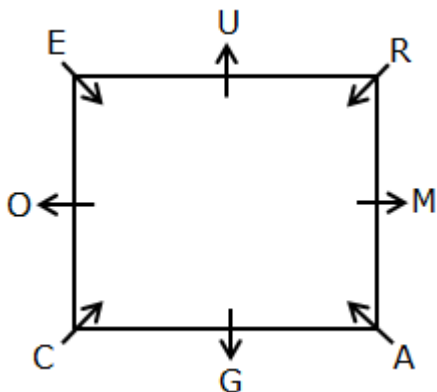
1. Only two persons sit between M and C, who sits facing towards the centre.
2. A sits to the immediate right of M.
3. O sits third to the left of A.



4. U sits second to the right of O.
5. G sits adjacent to A and third to the right of E.
6. R is one of the persons. Hence, case 1 gets eliminated.



Arrangement 1:



Arrangement 2:

All the persons (in alphabetical order) are allowed to roll the die. The persons getting even number are shifted to room X whereas the persons getting odd number are shifted to room Y. The following is the number shown in the die for each person:

A, C, E, G, M, O, R, U

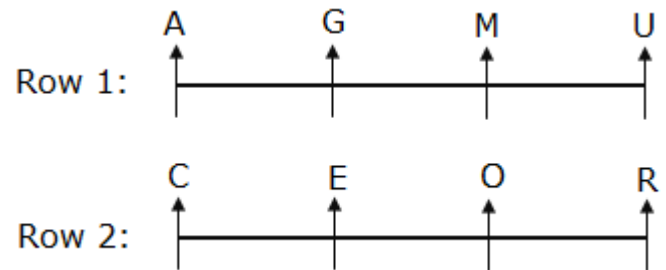
4, 3, 5, 6, 2, 1, 5, 4

Thus, the persons in room X are: A, G, M, U.

The persons in room Y are: C, E, O, R.

Arrangement 3:

All the persons are made to sit in two parallel rows in alphabetical order from left to right facing towards north. The persons from room X sits in row 1 whereas the persons from room Y sits in row 2. The persons in row 2 sit exactly behind the persons in row 1.



Directions (6-10):

6. Answer: b) A

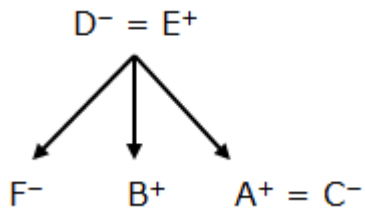
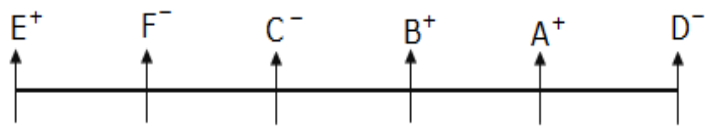
7. Answer: c) E

8. Answer: e) More than three

9. Answer: a) Aunt

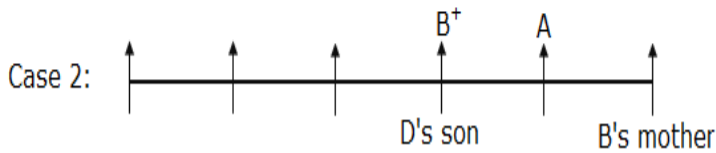
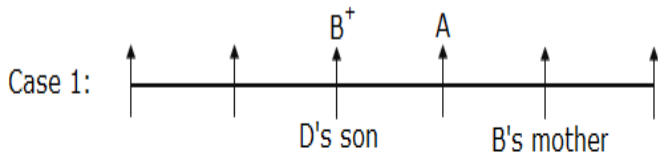
10. Answer: d) Fourth to the left

Solution:

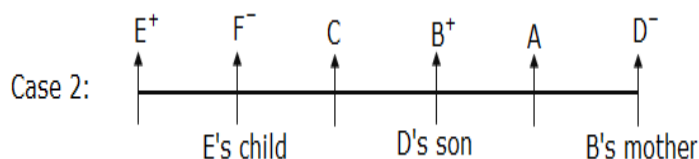
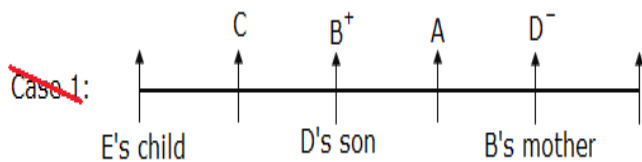


Explanation:

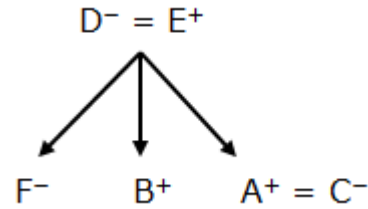
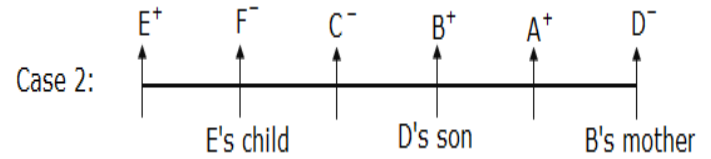
1. B stands third from one of the extreme ends and is second to the left of his mother.
2. B is the son of D and brother of A, who stands to the immediate right of B.



3. C stands second to the left of A and immediate right of the one who is the child of E.
4. E is the father of A and stands to the left of his wife.
5. F is neither the son nor the wife of E. Hence, case 1 gets eliminated.



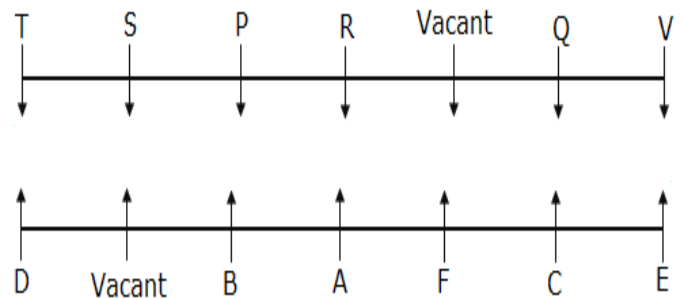
6. C is the daughter-in-law of D whereas B is unmarried. Hence, A is the son of both D and E.



Directions (11-15):

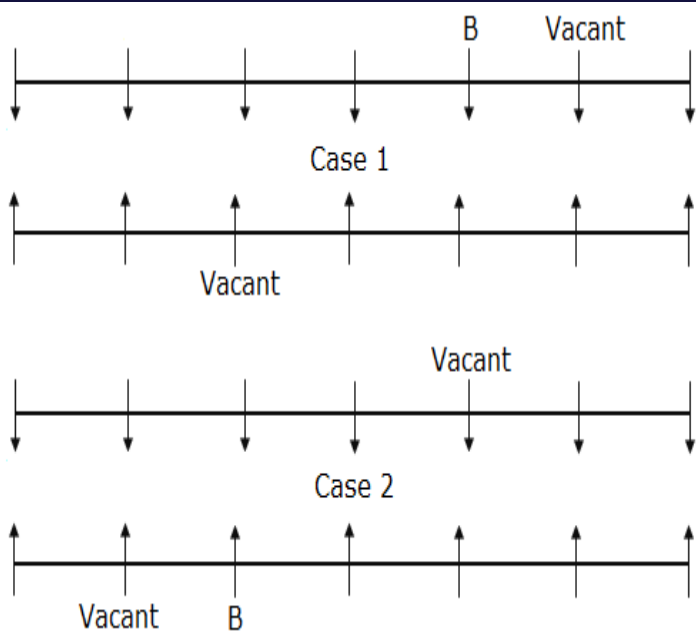
11. Answer: d) F
12. Answer: c) Three
13. Answer: e) None of these
14. Answer: a) E
15. Answer: c) C

Solution:

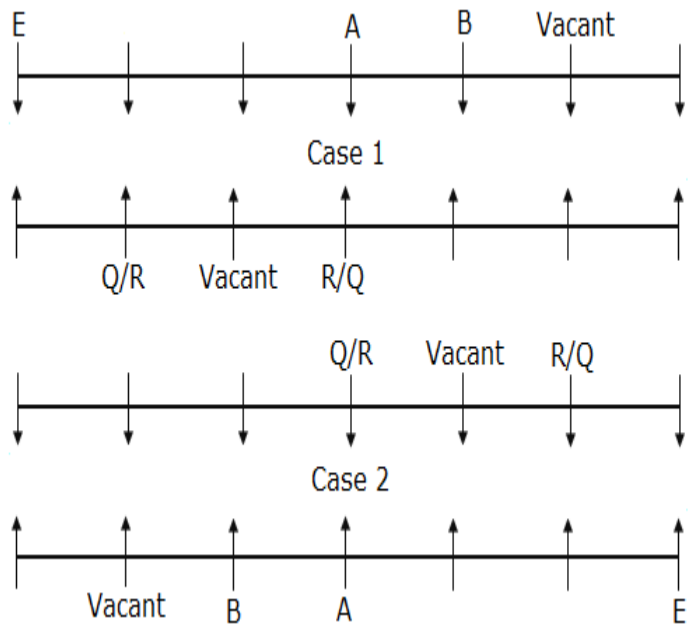


Explanation:

1. B sits third from one of the extreme ends and sits to the immediate right of the vacant seat.
2. More than two persons sit to the right of B.
3. The one who sits exactly opposite to the vacant seat, sits second to the right of B.

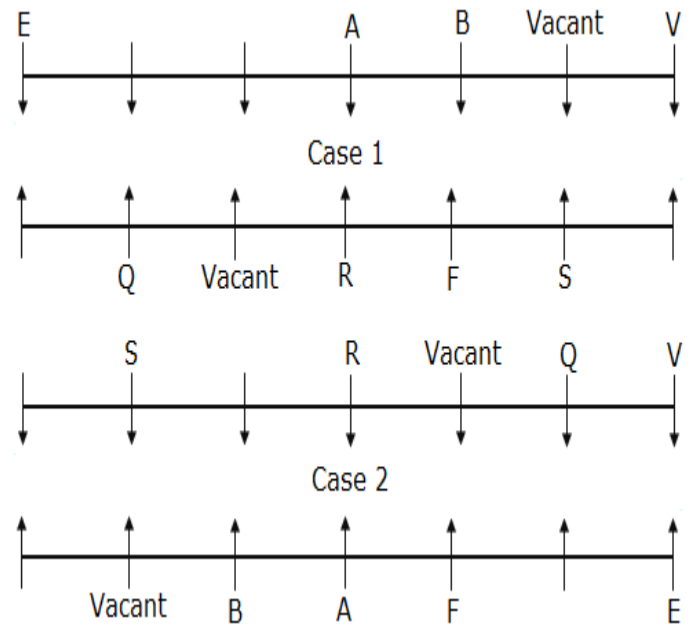


4. Both R and Q sit adjacent to the vacant seat of the same row where neither of them is adjacent to A.
5. Only two persons sit between E and A, who doesn't sit at any of the ends.
6. At least one person sits to the left of E.

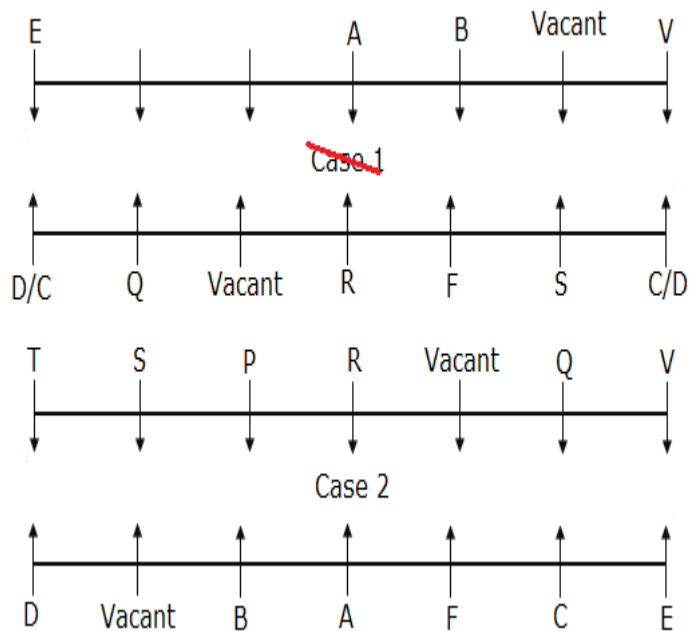


7. S sits second to the right of R.
8. F faces north and sits second to the left of the one who faces V.
9. Neither R nor A is adjacent to V.

10. A does not face Q.



11. More than three seats are between C and D who sits at the extreme end.
12. Only one person sits between T and P who doesn't face D.
13. Hence, case 1 gets eliminated.



Directions (16-20):

16. Answer: c) Step 3

17. Answer: e) None of these

18. Answer: b) Jack

19. Answer: d) 8

20. Answer: a) R♦st 59 Gr¥w 25 B◇sh 43

Explanation:

In each step, one number and one word are arranged simultaneously.

For numbers: Numbers are arranged in ascending order and in each number, 2 is added.

For words: Words are arranged in descending order according to the place value of vowels present in the word (The word having 'u' arranged first, followed by 'o' then 'i' and so on)

Vowels are replaced by some symbols:

u=◇ , o=¥, i=●, e=◆ , a=∅

With the same rules, the following steps are derived for the given input.

Input: Thin 83 Bush 57 Jack 23 75 Rest 41 Grow

Step 1: 25 Thin 83 57 Jack 75 Rest 41 Grow B◇sh

Step 2: Gr¥w 25 Thin 83 57 Jack 75 Rest B◇sh 43

Step 3: 59 Gr¥w 25 83 Jack 75 Rest B◇sh 43 Th●n

Step 4: R♦st 59 Gr¥w 25 83 Jack B◇sh 43 Th●n 77

Step 5: 85 R♦st 59 Gr¥w 25 B◇sh 43 Th●n 77 Jack

Directions (21-25):

21. Answer: b) Q

22. Answer: d) January

23. Answer: a) M

24. Answer: c) P

25. Answer: e) More than three

Solution:

Month	Person
January	K
February	G
April	P
May	T
June	J
July	S
August	R
September	W
November	Q
December	M

Explanation:

1. R visits the place in one of the months having 31 days after May.
2. Only four persons visit between R and G who visits immediately before P.

	Case 1	Case 2	Case 3
Month	Person	Person	Person
January	G		
February	P	G	
April		P	
May			
June			G
July	R		P
August		R	
September			
November			
December			R

3. W visits three persons after the one who visits second after P.
4. Only one person visits between W and M who doesn't visit before R.
5. Hence, case 3 gets eliminated.

	Case 1	Case 2	Case 3
Month	Person	Person	Person
January	G		
February	P	G	
April		P	
May			
June			G
July	R		P
August	W	R	
September		W	
November	M		
December		M	R

6. Q visits after W.
7. J visits in the month having 30 days and immediately after T.
8. K visits before S who neither visits after W nor M.
9. Hence, cases 1 and 1a get eliminated.

	Case 1	Case 1a	Case 2
Month	Person	Person	Person
January	G	G	K
February	P	P	G
April	K	K	P
May	T	T	T
June	J	J	J
July	R	R	S
August	W	W	R
September	Q	S	W
November	M	M	Q
December	S	Q	M

Directions (26-30):

26. Answer: c) D

27. Answer: b) 25

28. Answer: d) Orange

29. Answer: e) None

30. Answer: a) 33

Solution:

Year	Age	Person	Colour
1960	60	D	Green
1965	55	B	Violet
1977	43	E	Blue
1989	31	G	Yellow
1995	25	A	Red
2007	13	C	Orange
2010	10	F	Indigo

Explanation:

1. F's age was an even number and likes Indigo. The difference between the ages of C and F is less than 6. The number of persons

born before and after the one who likes Yellow is the same.

		Case 1		Case 2	
Year	Age	Person	Colour	Person	Colour
1960	60	F	Indigo		
1965	55	C			
1977	43				
1989	31		Yellow		Yellow
1995	25				
2007	13			C	
2010	10			F	Indigo

2. Only one person was born between the one who likes Yellow and B, who likes Violet. The one who likes Green was born immediately before B. The age of E is a prime number but doesn't like Yellow.

		Case 1		Case 2	
Year	Age	Person	Colour	Person	Colour
1960	60	F	Indigo		Green
1965	55	C		B	Violet
1977	43	E		E	
1989	31		Yellow		Yellow
1995	25		Green		
2007	13	B	Violet	C	
2010	10			F	Indigo

3. A likes Red colour whereas C doesn't like Blue. The age difference between G and E is double the value of the age difference between G and A. Hence, case 1 gets eliminated.

		Case 1		Case 2	
Year	Age	Person	Colour	Person	Colour
1960	60	F	Indigo	D	Green
1965	55	C	Orange	B	Violet
1977	43	E	Blue	E	Blue
1989	31		Yellow	G	Yellow
1995	25		Green	A	Red
2007	13	B	Violet	C	Orange
2010	10	A	Red	F	Indigo

Directions (31-35):

31. Answer: b) 5# \$! 3@ @4 48*

Condition II is applied.

32. Answer: a) # \$27 48+1

No condition is applied.

33. Answer: d) + @ @ & +82+

Conditions II and III are applied.

34. Answer: d) & * % # \$! 2+ @ @

35. Answer: b) ! \$2! + ! \$* 57+ & 82!

Condition I is applied.

Directions (36-40):

36. Answer: d) Three

37. Answer: c) 3

38. Answer: e) More than three

39. Answer: a) 9

40. Answer: c) Third from 4

Explanation:

Given: E 6 D # B 8 7 J 4 % G 0 F 9 C S & V * P W 1
@ 3 N \$ R 2 ! Y M 5 ^

step 1: E 6 D # D 8 7 J 4 % I 0 F 9 C S & V * P W 1
@ 3 N \$ T 2 ! Y M 5 ^

step 2: E 6 D # D 8 7 J 7 % I 0 F 9 C S & V * P W 4

@ 3 N \$ T 5 ! Y M 8 ^

step 3: E 6 D # G 8 7 J % I 0 F 9 C S & V * P W 4 @ 3

N \$ T 5 ! Y M ^

41. Answer: e

Solution

a) Abroad, Accept, Active

aabdor, accept, aceitv → bce

b) Battle, Beauty, Become

abeltt, abetuy, bceemo → eee

c) Center, caught, Cancer

ceenrt, acghtu, accenr → egc

d) Danger, Defeat, Degree

adegn, adeeft, deeeegr → eee

e) Engine, Ending, Employ

eeginn, deginn, elmopy → ggm

42. Answer: a

Solution

a) Actor, Drawn, Event, Women → T, A, E,

M → Team, mate, meat, tame

b) Brain, Bring, Badly, Later → A, I, D, T

c) Click, Clear, Cover, Gross → I, E, V, O

d) Broad, Event, Alive, Anger → O, E, I, G

e) Field, Above, Hotel, fixed → E, O, T, X

43. Answer: b

Solution

a) Bath, Area, Back, Coal

→ thba, reaa, kcba, olca → babc

b) Date, Came, good, Ford

→ teda, meca, oogd, rofd → dcfg

c) Hang, Held, Item, King

→ nhga, lhed, tmie, nkig → geii

d) Made, Meal, Pain, Rock

→ meda, mlea, pnia, rokc → deik

44. Answer: c

Solution

a) Art, Ask, Bet, Big

Bsu, btl, cfu, cjh → Two vowels

b) Box, Bug, Cow, Dip

cpy, cvh, dpx, ejq → one vowel

c) Eye, Guy, Hit, Hot

fzf, hvz, iju, ipu → four vowels

d) Map, Met, Mug, Oil

nbq, nfu, nvh, pjn → one vowel

e) Pin, Red, Row, Say

qjo, sfe, spx, tbz → two vowel

45. Answer: e

Directions (46-50):

46. Answer: d) Four

47. Answer: b) S

48. Answer: a) R-black

49. Answer: c) R

50. Answer: c) Fourth

Solution:

From the given statements, Number of persons who live below as well as above U is the same.

Only two persons live between U and the one who likes blue.

So we have two possible cases i.e. case 1 and case 2.

Only one person lives between the one who likes blue and S.

Floors	Case-1		Case-2	
	Persons	Colours	Persons	Colours
7				Blue
6				
5			S	
4	U		U	
3	S			
2				
1		Blue		

More than two persons live between the one who likes red and S.

T lives immediately above the one who likes red. So case-1 is eliminated.

The one who likes white lives on an even numbered floor immediately above V.

No two person lives on adjacent floors according to the English alphabetical order.

Floors	Case-2	
	Persons	Colours
7		Blue
6		
5	S	
4	U	
3		
2	T	White
1	V	Red

The one who likes black lives immediately above the one who likes golden.

Three persons live between P and T.

S does not like black.

P likes green.

R lives above the one who likes yellow. So the final arrangement is:

Floor	Persons	Colours
7	R	Blue
6	P	Green
5	S	Yellow
4	U	Black
3	Q	Golden
2	T	White
1	V	Red

Directions (51-55):

51. Answer: b) 11

52. Answer: d) M

53. Answer: c) 9th

54. Answer: a) S

55. Answer: d) Flat B, floor 4

Solution:

Floors	Flat A	Flat B
11	P	
10	M	T
9		Q
8		
7	W	S
6		
5		
4	G	D
3	R	
2		
1		

Explanation:

- Both G and D lives on the same even numbered floor below floor 5.
- W lives on flat A and three floors above G of the same flat.
- Only one floor is there between W and Q who lives on the same flat as D but not adjacent to D.

Case 1		
Floors	Flat A	Flat B
9		Q
8		
7	W	
6		
5		
4	G	D
3		
2		
1		

Case 2		
	Flat A	Flat B
7		Q
6		
5	W	
4		
3		
2	G	D
1		

- R lives on the flat immediately below G's flat and four floors below S.
- Not more than two floors are there above Q where T lives on the flat immediately above Q's flat.

Case 1		
Floors	Flat A	Flat B
10		T
9		Q
8		
7	W	S
6		
5		
4	G	D
3	R	
2		
1		

CASE 2		
Floors	Flat A	Flat B
8		T
7		Q
6		
5	W	S
4		
3		
2	G	D
1	R	

6. M lives on the same floor as T and immediately below the flat of P.
7. The number of floors below R is one more than the number of floors above M.
8. Hence, case 2 gets eliminated.

Case 1		
Floors	Flat A	Flat B
11	P	
10	M	T
9		Q
8		
7	W	S
6		
5		
4	G	D
3	R	
2		
1		

Case 2		
Floors	Flat A	Flat B
9	P	
8	M	T
7		Q
6		
5	W	S
4		
3		
2	G	D
1	R	

Directions (56-60):

56. Answer: d) Pot

57. Answer: c) U

58. Answer: b) Third to the left

59. Answer: a) Two

60. Answer: e) None of these

Explanation:

Arrangement 1:

1. N is third from one of the extreme ends. O is second to the right of N. Only three letters are there between O and P.

Case 1: P N O

Case 1a: N O P

Case 2: P N O

2. W is three letters away from P and second to the left of Y. A is to the immediate right of T but not in any of the ends. Hence, case 2 gets eliminated.

Case 1: P N W O Y T A

Case 1a: T A N O W Y P

~~Case 2: W Y P N O~~

3. More than two letters are there between U and S where U is to the left of S. Hence, case 1a gets eliminated.

Case 1: P U N W O Y T A S

~~Case 1a: T A N O W Y P~~

Arrangement 2:

All the given letters from arrangement 1 are arranged in alphabetical order from left to right. Thus, forms the new arrangement of the series.

Arrangement 1: P U N W O Y T A S

Arrangement 2: A N O P S T U W Y

Arrangement 3:

1. The last two letters in arrangement 2, along with the first letter (from the left end) in the same arrangement 2 to form the first meaningful word..W is placed before Y.

Arrangement 3: W A Y

2. The first letter (from the right end) in arrangement 1 ,along with the second and third letter (from the left end) in the same

arrangement 1 to form the second meaningful word.

Arrangement 3: W A Y S U N

3. The remaining letters are arranged in such a way to form the third meaningful word where P is placed before O.

Arrangement 3: W A Y S U N P O T

Therefore the final arrangements of the given series are follows.

Arrangement 1: P U N W O Y T A S

Arrangement 2: A N O P S T U W Y

Arrangement 3: W A Y S U N P O T

Directions (61-65):

61.Answer: c) Uncle

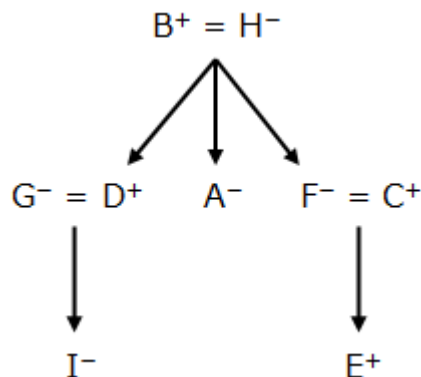
62.Answer: b) I

63.Answer: d) Niece

64.Answer: d) C

65.Answer: a) Granddaughter

Explanation:



Directions (66-70):

66. Answer: c) A

67. Answer: b) P

68. Answer: e) None is true

69. Answer: d) P-A

70. Answer: a) One

Solution:

B sits third to the right of A.

Two seats are there between A and D.

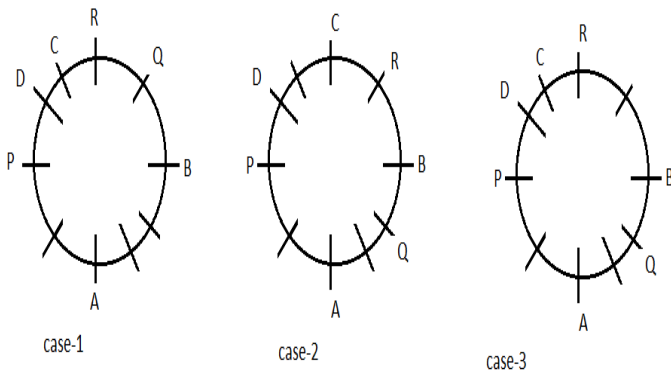
Four seats are there between B and P.

Q sits opposite to one of the seats which is adjacent to P.

C sits immediate right of R.

R does not sit adjacent to A.

So we have three possible cases i.e. case 1, case-2 and case3:

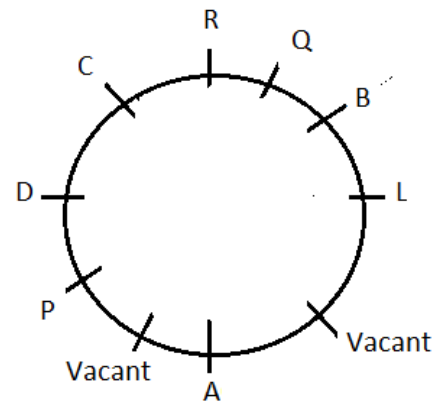


The vacant seats are not adjacent to each other.

L sits opposite to the one who sits second to the left of the vacant seat.

Q is not sitting adjacent to the vacant seat.

So case-2 and case-3 is eliminated. Hence the final arrangement is:



Directions (71-75):

71. Answer: e) Both b) and c)

72. Answer: b) Only II

73. Answer: e) None of these

74. Answer: c) C-Accounts

75. Answer: b) Design file is to the right of F

Solutions:

Only one shelf is there between A and the HR file.

The HR file and A is kept in the same column.

HR file is kept below A. So we have two cases i.e. case-1 and case-2:

Case-1		Case-2	
Column-1	Column-2	Column-1	Column-2
A			A
HR			HR

C is kept to the left of the marketing file.

Only one shelf is there between Accounts file and C.

Case-1		Case-2	
Column-1	Column-2	Column-1	Column-2

A- Accounts/	Accounts/	C	A- marketing
HR-C	Marketing	Accounts	HR

The IT file is kept above marketing file and below Finance file.

So case-2 is eliminated.

B is kept to the right of E.

E is not IT file.

D is kept below F which is not accounts file.

One of the file is Design files. So the final arrangement is:

Column-1	Column-2
A-Accounts	F-finance
E-Design	B-IT
C-HR	D-Marketing

Directions (76-80):

76.Answer: a) @%

Explanation:

Alisha reaches at \$# means 9:15 a.m. She takes 1 hour 35 minutes to reach office. But due to traffic she reaches after 1 hour 45 minutes. So she started before 1 hour 45 minutes i.e. at @% 7:30 a.m.

77.Answer: b) #@

Explanation:

B's flight is at 6:00 a.m. It means B should reach 2 hours before i.e. at 4:00 a.m. But he reached 25 minutes before 4:00 a.m. i.e. at 3:35 a.m. So he reached at #@.

78.Answer: e) \$& or \$#

Explanation:

C reaches at %% i.e. at 6:30 a.m. D reaches at \$\$ i.e. at 9:45 a.m. So A should reach office after at least 7:30 a.m. So A can reach either at \$& or \$# i.e. 9:00 or 9:15 am.

79.Answer: c) #%

Explanation:

Lisa totally travels for 5 hours and 30 minutes to reach her friend's house. If she reaches her friend's house at 9.00 a.m., then she must start her journey at 3.30 a.m. i.e., #%.

80.Answer: d) @&

Explanation:

Sam starts at %& i.e., 6.00 a.m. and reaches the destination at \$& i.e., 9.00 a.m. Therefore Sam travelled 24km in 3 hours. Hence, the speed of the car is 8km/hr.

If the speed of the car is 12km/hr (8+4), then the travel time will be 2 hours. If Sam should reach at 9.00 a.m., then he must start the journey at 7.00 a.m. i.e., @&.

Directions (81-85):

81.Answer: a) Two

82.Answer: a) Z

83.Answer: a) L

84.Answer: d) O sits immediate right of L

85.Answer: c) M sits immediate left of S

Solution:

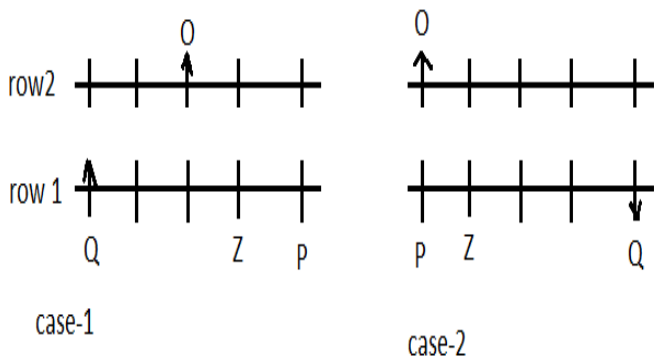
Only three persons sit between Q and P who sits in row 1.

So we have two possible cases i.e. case-1 and case-2.

Z sits third to the right of Q.

Z sits opposite to the person who sits immediate right of O.

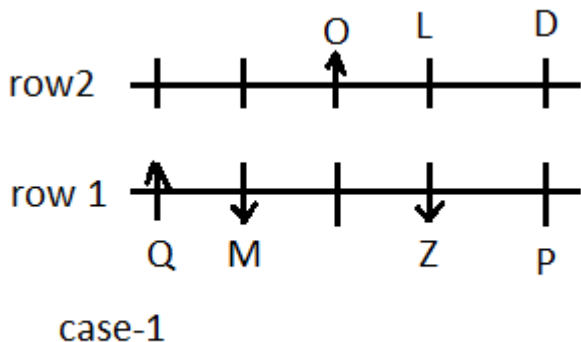
O face north.



D sits opposite to the one who sits third to the left of M.

Z face the opposite direction to Q.

L is an immediate neighbour of both O and D. So case-2 is eliminated.

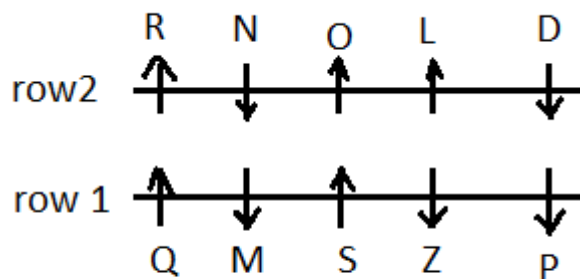


S sits second to the right of the person who sits opposite to D.

R sits immediate right of N.

R face the same direction as O.

S and L face the same direction as Q. So the final arrangement is:



case-1

Directions (86-90):

86. Answer: a) 667

87. Answer: a) tin

88. Answer: c) 15

89. Answer: d) 24

90. Answer: b) h

Solution:

Logic:

In each step, one word and one letter are arranged.

Numbers are arranged in increasing order from the right end and while arranging the numbers the digit within each number is added.

The words are arranged in alphabetical order from the left end and while arranging the vowels in the word is replaced by ¥.

Input: 392 sit 654 tin 754 yak 652 ink 985 hut

Step I: h¥tsit 654 tin 754 yak 652 ink 985 14

Step II: ¥nkh¥tsit 654 tin 754 yak 985 14 13

Step III: s¥t ¥nkh¥ttin 754 yak 985 14 13 15

Step IV: t¥ns¥t ¥nkh¥tyak 985 14 13 15 16

Step V: y¥kt¥ns¥t ¥nkh¥t14 13 15 16 22