

Reasoning Paper-3

Direction(1-5):- Study the following information carefully and answer the below questions

Eight persons Aditi, Bella, Cathy, Diya, Ezra, Flora, Gia and Hawa joined the gym in different months viz. January, February, March, April, May, June, July, August, and September. Only one person joined the gym in each month, but not necessarily in the same order. They are following different kinds of diet plans viz. Paleo diet, Vegan diet, Low-carb diet, Dukan diet, Ultra-low-fat diet, Atkins diet, HCG diet and Zone diet.

There is only one vacant month in which nobody joined the gym. Cathy joined the gym in the month which has an odd number of days but after March. Cathy joined three months after the one who follows HCG diet. The one who follows Low-carb-diet joined the gym in the month which has least number of days. Only three persons joined the gym after Aditi who follows Zone diet. Only one person joined between Flora who follows Vegan diet and the one who follows Zone diet. The one who follows Vegan diet joined the gym neither in August nor April. Gia who follows Ultra-low-fat diet joined the gym three months after the vacant month but not in September. As many persons joined before Ezra as after Bella. Bella joined before the one who follows Dukan diet. Hawa and Flora joined the gym in the adjacent months but neither of them joined in April. Hawa does not join three months before the vacant month. Bella follows Atkins diet. Cathy follows neither Paleo nor Atkins.

Q1. Which of the following month is the vacant month?

A.May B.March C.February D.April E.June

Q2. How many persons joined the gym between the vacant month and Ezra?

A.Two B.As many as joined between Cathy and the one who follows Vegan diet
C.Four D.As many as joined between the one who follows HCG diet and Flora
E.Five

Q3. If the one who follows Zone diet is related to the one who follows Vegan diet and the one who follows Paleo diet is related to the one who follows Ultra-low-fat diet in a certain way, then which of the following is related to the one who follows HCG diet?

A.The one who follows Atkins diet B.The one who follows Zone diet C.The one who follows Low-carb diet D.The one who follows Dukan diet E.None of these

Q4. Who among the following follows Paleo diet?

A.Gia B.The one who joins in January C.Cathy D.Diya E.The one who joins in September.

Q5. Which among the following statement(s) is/are true in the final arrangement?

I. Cathy follows Dukan diet **II.** Gia joined the gym in July **III.** Flora follows Low-carb diet

A.Only I B.Only II C.Only I and II D.Only II and III E.All I, II, III

Direction(6-10):- Study the following information carefully and answer the questions given below.

Seven persons viz. M, N, O, P, Q, R and S from the same family are visiting a tourist spot on seven different days starting from Sunday to Saturday of the same week, but not necessarily in the same order. There are three generations and atleast one married couple

in the family. No single parent has a child. The number of males is more than the number of females.

Only three days are there between the visit of R and S, where none of them visits on the first and last day of the week and both of them are of the same gender. The one who visits immediately before R is the mother of O. The number of days between the visit of S and O's mother is the same as between R and M's brother. The persons visiting on the adjacent days of O are of opposite gender i.e., if one person is male, then the other person is female. Only one person visits between S and the spouse of S. O, who is not the spouse of S and visits two days after his father, who visits after his wife. The number of persons visiting between Q and N is one more than between Q and M, who doesn't visit on the last day of the week. M is the father of R, who is the sibling of Q who is married. N is a female member of the family.

Q6. On which of the following day does the grandson of S visit?

A.Friday B.Thursday C.Saturday D.Tuesday E.None of these or no such person

Q7. Who among the following person visits on the last day of the week?

A.Father of O B.Brother of Q C.Son of N D.Uncle of R E.None of these

Q8. How is N related to the one who visits on Wednesday?

A.Wife B.Sister C.Daughter D.Daughter-in-law E.Cannot be determined

Q9. How many persons visit between the one who is the mother of R and Q?

A.As many persons visit between O and P B.Two C.Three D.As many persons visit before S E.None

Q10. If all the persons visit in the alphabetical order from the last, then how many persons remain unchanged in their position?

A.One B.Two C.Three D.More than three E.None

Direction(11-15):- Study the following information carefully and answer the below questions.

A machine follows a certain frequency to illuminate five different bulbs viz.- Red, Blue, Green, Yellow, and Pink. String of numbers are arranged in a 5x5 matrix in such a way rows of the matrix are denoted by P, Q, R, S, and T from top to bottom respectively, whereas column of the matrix is denoted by @, %, \$, &, and # from left to right respectively. The numbers in each column is a consecutive multiple from top to bottom. The value of T@ is 40 and numbers in column @ is a consecutive multiple of 5. The difference between Q@ and S\$ is 20. The value of Q\$ is 27. The value of S% is 10 more than the value of P\$. The difference between Q% and S% is 14. The value of P\$ is the same as T#. The difference between P# and R# is 6. The value of Q& is 9 more than the value of S#. The value of T& is twice the value of Q&.

Condition:

I. If all the numbers in a string is even, then the product of unit digit of all the numbers is taken.

II. If all the numbers in a string is odd, then the product of tenth digit of all the numbers is taken,

III. If a perfect square number is immediately followed by a prime number then the difference between the highest and the lowest number from the given series is taken.

IV. If a prime number is immediately followed by a number which is multiple of 4, then

the square of the digital sum of the highest number from the given series is taken.

V. If more than one string is given, then the sum of the resultant of individual string is taken.

Note: If more than one condition follows then only one condition is applied as per the given sequence.

Conditions for glowing of bulb:

I. If the outcome of the string is between 25 and 45, then Yellow bulb glows.

II. If the outcome of the string is between 55 and 85, then Red bulb glows.

III. If the outcome of the string is between 90 and 125, then Blue bulb glows.

IV. If the outcome of the string is between 130 and 150, then Green bulb glows.

V. If the outcome of the string is between 155 and 200, then Pink bulb glows.

Q11. If $X = P \& P\% T \& R\%$ then which of the following bulb blinks?

A.Blue B.Green C.No Bulb Blinks D.Red E.Yellow

Q12. If $X = S@ S\# R\% Q\%$ and $Y = P\% S\% T\$ P@$ then which of the following bulb blinks?

A.Pink B.Blue C.No Bulb Blinks D.Red E.Yellow

Q13. If $X = S@ S\# R\% Q@$, then which of the following bulb blinks?

A.Blue B.Green C.No Bulb Blinks D.Red E.Yellow

Q14. If $X = T\% R\% _ S\%$, then what comes in blank space such that Red bulb blinks? A.S# B.Q\$ C.S@ D.Q@ E.None

Q15. If $X = T\$ R\$ R\# Q\&$, then which of the following bulb blinks?

A.Pink B.Blue C.No Bulb Blinks D.Red E.Yellow

Q16. If 1st, 2nd, 4th, 5th, 6th, and 9th letters of the word "COMPENDIUM" are taken to form a new meaningful word (use each letter only once), then which of the following letter is second from the right end of the word? If more than one word is formed, then mark "X" as the answer, if no word is formed, then mark "Y" as the answer.

A.C B.X C.N D.O E.Y

Q17. If all letters within the words are rearranged in alphabetical order from the left end and all vowels are changed to the immediate next letter and each consonant is changed to immediate previous letters as per the alphabetical series, then which of the following combination of letters is the third letter from the right end of each word?

I). GRAPHICS II). UNIFORM III). MOTION

A.OPM B.QPL C.OPP D.JPM E.None of these

Direction(18-22):- Study the following information carefully and answer the below questions

Twelve persons- O, P, Q, R, S, T, U, V, W, X, Y and Z are sitting around two circular tables such that one table is inscribed in another table. Persons who are all sitting in the inner circle facing outside and the persons sitting in the outer circle facing inside.

Note: Each person sits in the inner circle sits exactly opposite to the one who sits in the outer circle.

P faces the one who sits second to the right of R. One person sits between R and Q. Z sits to the immediate left of Q. One of the immediate neighbors of Z faces T. Y sits third

to the right of T. W doesn't sit in the same circle as T. S and V sit adjacent to each other, one of them faces the person who sits second to the left of W. The number of persons sitting between U and O is two more than the number of persons sitting between V and S. V faces the one who sits third to the left of U. X faces outside

Q18. Who among the following person faces V?

A.R B.The one who sits second to the left of Z C.Q D.The one who sits third to the right of U E.Z

Q19. In which of the following option first person sits to the immediate right of the second person?

A.XT B.SV C.ZQ D.OR E.WU

Q20. Who among the following person sits to the immediate left of Z?

A.The one who sits second to the right of Q B.O C.The one who sits immediate right of W D.Y E.None of these

Q21. Four of the following five are alike in a certain way as per the given arrangement and hence form a group. Find the one that doesn't belong to that group.

A.P B.X C.S D.Z E.Y

Q22. Which among the following statement(s) is/are false as per the final arrangement?

I. T sits in the inner circle **II.** W faces outside and faces Y **III.** X sits opposite to U

IV. V sits to the immediate right of S.

A.Only I and III B.Only II and IV C.Only III and IV D.Only II and III E.None of these

Study the following statements and then decide which of the given conclusions logically follow from the given statements disregarding the commonly known facts.

P%Q: All P are Q

P\$Q: Some P are Q

P#Q: Some P are not Q

P@Q: Only a few P are Q

P*Q: Only P is Q

P&Q: No P is Q

^: Possibility Case

Q23. Statements: $A\$B\%C@D\&Q$

A.B\$^A B.B&Q C.A#C D.C%^D E.C#Q

Q24. Statements: $P\&Q\$R@S*T$

A.R&P B.S%T C.R#^P D.Q\$^S E.T\$^R

Q25. Statements: $G@H\&I\$J*K$

A.G\$^I B.I&^K C.J%^I D.G%H E.I&G

Q26. Statements: $L\#M\%N@O*P$

A.N#^P B.L&P C.P\$^N D.M\$ L E.O%^N

Q27. For which of the following expressions $B > Q$ is definitely true and $L < M$ is definitely false?

A.Z > L = P < Q = M < U = B B.B ≥ T = M > Q = P > L = Z C.L ≤ H = B < M ≥ Z > Q = P D.P = B > M = Q < H < L < Z E.None of these

Q28. What comes in the place of blank space in the given expression such that $Q > L$ is definitely true and $M < V$ is definitely false?

$Z = Q \quad _ \quad V = T \quad _ \quad L \geq G > M$

A.= and < B.< and \geq C. \leq and > D. \geq and > E.None of these

Direction(29-33):- Study the following information carefully and answer the below questions.

Eight persons – A, B, C, D, E, F, G, and H are sitting in a row in such a way some are facing north whereas some are facing south. Each person likes different numbers viz.- 8, 13, 14, 15, 16, 23, 25, and 28. All the information is not necessary in the same order.

Note: Not more than two persons facing in the same direction are sitting together. The consecutive alphabetically named persons are not sitting together.

E sits third from one of the extreme ends and sits fourth to the left of the one who likes 25. The one who likes 25 sits second to the left of A and faces north. Only two persons are sitting between A and the one who likes 28. F sits third to the left of H, both are facing in the same direction. H, who likes 16, sits immediate left of E. F likes a number which is seven more than the number liked by D. E likes a number which is nine more than the number liked by C. G sits immediate right of C. B and the one who likes 14 are facing in the same direction. At least one person sits between the one who likes 8 and A.

Q29. How many persons are sitting to the left of the one who likes 13?

- A.As many persons are sitting to the right of B
B. Four
C.As many persons are sitting between D and H
D.As many persons are sitting to the right of G
E.None of these

Q30. Who among the following persons are sitting between the one who likes 13 and F?

- I. The one who likes 28 II. G III. The one who likes 16
A.Both I and III B.Only III C.Both I and II D.Only I E.None of these

Q31. What is the position of E with respect to the one who likes 15?

- A.Fifth to the right B.Immediate left C.Second to the right D.Third to the left
E.None of these

Q32. Which of the following statement is not true?

- A.Three persons are sitting to the left of the one who likes 13
B.B likes 28 C.More than two persons are sitting to the right of C D.More than two persons are sitting to the left of G E.All the above statements are true

Q33. What is the difference between the numbers liked by A and F?

- A.5 B.2 C.8 D.11 E.None of these

Direction(34-35):- Study the following information carefully and answer the below questions

Seven persons- H, L, M, N, Q, T, and V are of different ages lies between 10 to 40 years. T is elder than M and younger than N. N is two years younger than H. Neither V nor L is the eldest person. The age difference between N and L is 10 years. L is younger than M. The age of M is four years more than the youngest person. Neither Q nor V is the youngest person. V is not younger than H. The age of the second youngest person is

the perfect square of an even number.

Q34. If the sum of the age of L and H is equal to the age of Q, then V is five years elder than H, then what is the sum of the age of Q and V?

- A.65 B.64 C.60 D.72 E.70

Q35. If the age difference between N and M is one year more than the age difference between V and H, then what is the age of V?

- A.20 B.27 C.29 D.28 E.30

Direction(36-39):-Study the following information carefully and answer the given questions.

Twelve houses – O, P, Q, R, S, T, U, V, W, X, Y, and Z in two parallel lanes in such a way that six houses in each lane. Three houses on each side of each lane. Lane I is north of lane II. The length of each lane is 100ft. The gap between two adjacent houses is 8ft and

9ft for lane I and lane II respectively. The lengths of each house are different.

Note: If house A shares a common front wall with house B, that means both houses are in the same lane. If house A shares a common back wall with house B, that means both houses are in a different lane. The length of the front wall of none of the houses is less than 12ft nor more than 45ft.

The house whose common front wall length is 31ft shares a common back wall with house X, which is west of the house whose common front wall length is 33ft. House X is in lane II. House Y is second to the west of the house whose front wall length is 18ft. The house whose front wall length is 35ft shares a common front wall with Y, whose front wall length is 5ft less than house W. House T shares a common back wall with a house whose front wall length is 35 ft and is not to the west of house X. The house whose front wall length is 32ft is immediate west of W. W shares a common front wall with P, which is immediate west of house S whose front wall length is 26ft. O shares a common front wall with house U, which is east of R. The front wall of house R is 17ft more than Z. House T, whose front wall length is 6ft less than O. House V shares a common front wall with the house whose front wall length is 23ft.

Q36.What is the length of a house which shares a common back wall with O?

- 1.20ft 2.26ft 3.18ft 4.41ft 5.24ft

Q37.What is the difference between the length of the front wall of houses Y and P?

- 1.8ft 2.9ft 3.12ft 4.10ft 5.15ft

Q38.Which of the following house is west of house O?

- 1.The house whose front wall is 26ft 2.R 3.V 4.The house whose front wall is 28ft

5.U

Q39.Which of the following statements is/are not true as per the given arrangement?

- 1.X shares common front wall with the house whose length is 41ft 2.The length of the front wall of house U is 33ft 3.V is sharing a common back wall with house T
4.W is immediate east of Q 5.None is true

Direction(40-44):-Study the following information carefully and answer the

given questions. There are two rows in each question. To find out the results of a particular row, the below conditions are to be followed. The operations of numbers progress from left to right.

Condition 1: If an even number is followed by a non-prime even number, then both numbers are to be added.

Condition 2: If an even number is followed by a prime number, then both numbers are multiplied.

Condition 3: If an odd number is followed by an even number which is a multiple of 4, then that even number and the square value of that odd number are to be added.

Condition 4: If an odd number is followed by another odd number, then subtract both numbers. (Ignore the negative sign)

Condition 5: If an even number is followed by a non-prime odd number, then multiplied the first digits of each number's square value.

Condition 6: If an odd number is followed by an even number which is not a multiple of 4, then the larger number is divided by the smaller number and the quotient is taken as a resultant.

Q40. What is the product of the square value of the resultant of both rows?

26 16 33

27 12 62

1.100 2.169 3.144 4.121 5.131

Q41. If X is the resultant of Row 1, then what will be the product of the resultants of both Rows?

37 13 28

51 22 X

1.2808 2.2818 3.2718 4.2708 5. None of these

Q42. What is the difference between the resultants of both rows?

42 11 24

23 72 54

1.485 2.465 3.425 4.475 5.375

Q43. What is the sum of the resultant of both rows?

25 56 79

12 03 07

1.754 2.845 3.814 4.744 5.854

Direction(44-47):-Study the following information carefully and answer the given questions.

Nine persons – B, D, G, L, P, R, T, W, and Z live on different floors of an eleven storeyed building where the lowermost floor is numbered one, the one above that is numbered two and so on till the topmost floor is numbered eleven. They are from different countries viz.- Japan, Germany, France, Guyana, Denmark, Colombia, Hungary, Belgium, and Israel. No two persons live on the same floor.

Note:

I. One odd numbered floor and one even numbered floor is vacant. None of the adjacent floors are vacant.

II. Neither the lowermost nor the topmost floor is vacant.

The one who is from France lives six floors below D, who lives above floor number 7. Only two persons live between D and the one who is from Belgium. The one who is from Belgium lives on an odd numbered floor. W, who is from France, lives two floors above the one who is from Guyana. Only three persons live between the one who is from Guyana and L, who doesn't live on a prime numbered floor. The number of persons living below L is **two more** than the number of persons living between G and Z, who is from Colombia. Both L and T are neither from Israel nor Hungary. Z lives four persons above the one who is from Israel. As many persons live between the one who is from Guyana and P as between T and the one who is from Germany. T lives immediately above the one who is from Japan. G is from neither Germany nor Denmark. At least two persons live between P and R.

Q44. How many persons live below the one who is from Israel?

1. None 2. As many persons live between Z and the one who is from Denmark 3. Three

4. As many persons live above the one who is from Japan 5. Four

Q45. Who among the following person is from Japan?

1. L 2. The one who lives immediately above T 3. B

4. The one who lives two floors below G 5. R

Q46. Which of the following combination is not true?

1. Floor 10 – Denmark 2. G – Hungary 3. L – Floor 4 4. Floor 8 – Colombia 5. B – Israel

Q47. Which of the following statements is/are not true as per the given arrangement?

1. Only three persons live below the one who is from Germany

2. The one who is from Denmark lives on floor number 10

3. Only three persons live between D and W

4. W lives immediately above the one who is from Israel

5. All the above statements are true

Direction(48-50):-Study the following information carefully and answer the following questions

In a certain code language following words are coded as:

“Honest Review Empirical Crown Over” is coded as “P@ F@ %M S@ %A”.

“Event More Identify Origin Care” is coded as “O@ %U K@ A@ Z@”.

“Second Theory Major Player Dream” is coded as “R@ %K N@ %B Q@”.

Q48. How “Identify Player” is coded in the given code language?

1. Z@ %K 2. %B O@ 3. N@ Z@ 4. %U N@ 5. None of these

Q49. How “Below Origin” is coded in the given code language?

1. Y@ %U 2. A@ O@ 3. O@ %Z 4. %U C@ 5. None of these

Q50. What is the phrase for the code “%A R@” in the given code language?

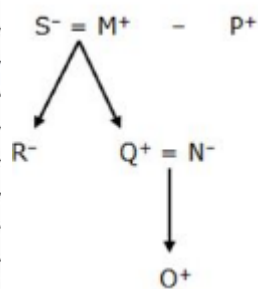
1. Dream Over 2. Review Player 3. Honest Dream 4. Major Care 5. Crown Theory

Solution(1-5):- 4 3 5 5 3

| Month | Case2 | | Case3 | |
|-----------|--------|---------------|--------|---------------|
| | Person | Diet Plan | Person | Diet Plan |
| January | Bella | | Bella | Atkins |
| February | Hawa | Low-carb | Hawa | Low-carb |
| March | Flora | Vegan | Flora | Vegan |
| April | Diya | HCG | --- | --- |
| May | --- | --- | Diya | HCG |
| June | Aditi | Zone | Aditi | Zone |
| July | Cathy | | Gia | Ultra-low-fat |
| August | Gia | Ultra-low-fat | Cathy | Dukan |
| September | Ezra | | Ezra | Paleo |

Solution(6-10):- 2 4 4 2 3

| Day | Case 1 Person |
|-----------|-------------------------------|
| Sunday | O's mother (N ⁻) |
| Monday | R ⁻ |
| Tuesday | O's father (Q ⁺) |
| Wednesday | S' husband (M ⁺) |
| Thursday | O ⁺ |
| Friday | S ⁻ |
| Saturday | M's brother (P ⁺) |



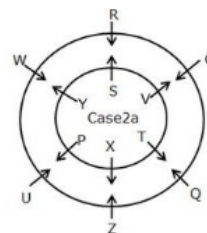
Solution(11-15):- 5 2 3 3 1

- The value of T@ is 40 and numbers in column @ is a consecutive multiple of 5. Thus, the value of P@ must be 20.
 - The difference between Q@ and S\$ is 20. The value of Q\$ is 27.
 - Thus, the value of column '\$' must be a consecutive multiple of '9' starting from 18.
 - The value of S% is 10 more than the value of P\$.
 - Thus, S% must be 28.
 - The difference between Q% and S% is 14, thus, % must a consecutive multiple of 7.
 - The value of P\$ is the same as T#.
 - The difference between P# and R# is 6.
- Thus, the value of column # must a consecutive multiple of 3 starting from 6.
 The value of Q& is 9 more than the value of S#. The value of T& is twice the value of Q&.
 Thus, the value of column & must be a consecutive multiple of 8 and starting from 16.
 Based on the above given information we have:

| | @ | % | \$ | & | # |
|---|----|----|----|----|----|
| P | 20 | 7 | 18 | 16 | 6 |
| Q | 25 | 14 | 27 | 24 | 9 |
| R | 30 | 21 | 36 | 32 | 12 |
| S | 35 | 28 | 45 | 40 | 15 |
| T | 40 | 35 | 54 | 48 | 18 |

Solution(16-17):- 1 3

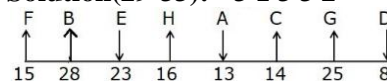
Solution(18-22):- 4 1 3 4 4



Solution(23-26):- 5 4 1 2

Solution(27-28):- 4 5

Solution(29-33):- 3 1 3 3 2



Solution(34-35):- 1 3

$Q > V > H (24) > N (22) > T > M (16) > L (12)$

Solution(36-39):- 2 1 3 2

| | | | |
|---------|-----|-----|-----|
| Lane I | Q32 | W28 | Z24 |
| | T27 | 8ft | P31 |
| | | | 8ft |
| | | | S26 |
| Lane II | V35 | 9ft | X14 |
| | | | 9ft |
| | | | O33 |
| | Y23 | | R41 |
| | | | U18 |

Solution(40-43):- 4 1 4 5

Solution(44-47):- 2 4 3 1

| Floor | Case (1) |
|-------|--------------|
| 11 | G - Hungary |
| 10 | T - Denmark |
| 9 | D - Japan |
| 8 | Z - Colombia |
| 7 | ----- |
| 6 | L - Germany |
| 5 | P - Belgium |
| 4 | ----- |
| 3 | W - France |
| 2 | B - Israel |
| 1 | R - Guyana |

Solution(48-50): 3 3 5

For letter: If the word starts with a vowel then, change the last letter to its immediate succeeding letter, else if the word starts with a consonant then change the first letter to the second previous letter of the English alphabetical series.

For symbol: If the number of letters in the word is even then use '@' else if the number of letters in the word is odd then use '%'