

# BANK PO MAINS REASONING CAPSULE PDF





## Bank PO Mains Reasoning Capsule

### Index

No. of Topics	Topics Name
Topic 1	Seating Arrangement & Puzzle
Topic 2	Input & Output
Topic 3	Logical Reasoning
Topic 4	Direction Sense
Topic 5	Coding & Decoding
Topic 6	Blood Relation
Topic 7	Alphabetical and Numerical Series
Topic 8	D.S

### Seating Arrangement & Puzzle (Topic -1)

**Directions (1-5):** Study the information carefully and answer the questions given below.

Six people Tarun, Charu, Visakha, Monika, Anko and Viraj are born in different years with the current base is taken as 2018. None of them is older than 90 years old. They like different fruits apple, Orange, Grapes, Cherry, Mango, Banana.

Note- The last two digits or reverse of the last two digits of the year in which a person is born can be the age of some other person. (Like A is born in 1943 and age of B is denoted by the last two digits of the birth year of A. Then B's age will be either 34 or 43).

Tarun was born in the year 1983. The difference of age between Tarun and Charu is 21 years. Visakha age is sum of the digits of the year in which Charu was born. The one who likes mango is 5 years elder to Visakha. Anko age is either the last two digits or reverse of the last two digits of the year in which the person who likes mango was born. Only one person is elder to Anko and Visakha likes apple. The one likes cherry is just younger to Anko. The difference between Viraj's and the one who likes cherry is 24 years. The one who likes banana was born in an even year. The one who likes orange is younger to the one who likes grapes both in odd number of years. Monika is younger than Viraj.

**(IBPS PO 2018)**

Q1. Who among the following likes Banana?

- (a) Anko
- (b) Tarun
- (c) Charu
- (d) Visakha
- (e) none of these

Q2. Who among the following is the eldest?

- (a) Anko



- (b) Tarun
- (c) Charu
- (d) Vishakha
- (e) none of these

Q3. Which of the following combination is true?

- (a) Anko- 1959-mango
- (b) Viraj- 1983- apple
- (c) Charu-1962-cherry
- (d) Monika-1995- grapes
- (e) none of these

Q4. Which of the following statement is correct?

- (a) Anko is three years older than the one who likes cherry
- (b) Viraj is the eldest
- (c) Anko born in 1959
- (d) Monika is born before Visakha
- (e) All are correct

Q5. In which of the following year Monika was born?

- (a) 1995
- (b) 2000
- (c) 2012
- (d) 2007
- (e) None of these

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

There are three floors in a given building such that floor 2 is above floor 1 and floor 3 is above floor 2. In the building there are two flats in each floor such Flat A is in the west of Flat B. In the building each Flat has an area of 576 ft and each flat has some certain number of room and no two flat has same number of rooms. The area of each rooms of one of the flat on the even number floor is 64ft. Total rooms on floor number third is seven. The flat which has rooms of area of 72 ft is on odd number floor. Area of each rooms in the flat which is exactly below 9 rooms flat is 288 ft. There is only one floor between the flat who's each room area is 192 ft and the flat whose rooms area is 72 ft. There is no flat on the west of the flat having 6 rooms. **(IBPS PO 2018)**

Q6. What is the area of a room in Flat A on floor 2?

- (a) 94
- (b) 92
- (c) 96
- (d) either (a) or (c)
- (e) None of these

Q7. What is the total number of rooms on floor 2<sup>nd</sup>?

- (a) 12
- (b) 14
- (c) 13



- (d) 15  
(e) None of these
- Q8. Which of the following statement is true?  
(a) Total number of rooms on floor 2 is 14  
(b) Area of each room is 94 ft of flat A on floor 1  
(c) Total rooms in Flat A of all three floors is 17.  
(d) All are correct  
(e) None is correct
- Q9. What is the area of room of flat B on floor 3<sup>rd</sup>?  
(a) 144 ft  
(b) 140.5  
(c) 138.5  
(d) 142  
(e) None of these
- Q10. How many rooms are there of the west of the flat whose each room area is 288 ft?  
(a) 6  
(b) 4  
(c) 3  
(d) 8  
(e) None of these

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

Seven persons have their birthday on seven different dates of seven different months viz. January, February, March, April, May, June, July. G has birthday on 11. Difference between the dates of birthdays of G and C is 8. The difference between the birthdays of B and F is of more than 9 days but less than 13 days. A's birthday is in the month having least number of days. B's birthday is in a month having 30 days. C's birthday is in a month immediately after G but in a month having 30 days. F's birthday is in one of the month after C's birthday. The one whose birthday is in a month having least number of days has birthday on 26. Difference between the dates of the birthdays of C and A is not less than 10. The one whose birthday is in June has birthday on a date which is immediately after A's birthday. F's birthday is on an even date. The one whose birthday is in May month has birthday on an odd date before the date on which B's has birthday. The difference between the birthdays of B and E is more than 36 days but less than 39 days. The difference between the dates of the birthdays of D and A is same as the difference between the dates of the birthdays of A and E. (IBPS PO 2018)

- Q11. C has birthday in which of the following month?  
(a) March  
(b) May  
(c) January  
(d) April  
(e) none of these

Q12. E has birthday on which of the following date?



- (a) 21
- (b) 19
- (c) 20
- (d) 25
- (e) none of these

Q13. How many months gap is there between the birthday months of D and E?

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

Q14. F has birthday on which of the following date?

- (a) 11
- (b) 8
- (c) 9
- (d) 27
- (e) none of these

Q15. How many persons have born before C?

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

**Directions (16-17):** Study the information carefully and answer the questions given below

Six persons sits around a triangular table such that three of them sit at the corners and the rest on the middle of the side. The one who sits at the corner face away from the center and the one who sit at the middle of the side face towards the center. They also like different animals i.e. fish, dog, rabbit, pigeon, duck and cat. The one who likes fish sits at the corner. The one who likes cat sits immediate right to the one who likes duck. C sits 2<sup>nd</sup> right to B, who likes rabbit. D faces the center and sits 3<sup>rd</sup> right to the one who likes pigeon. E sits immediate right to D. F sits at one of the corner but does not like pigeon and cat. A is one of the person. E does not like Duck and Fish. (IBPS PO 2018)

Q16. Who among the following likes ducks?

- (a) E
- (b) F
- (c) C
- (d) B
- (e) none of these

Q17. Who among the following sits 2<sup>nd</sup> to the right of the one who is 3<sup>rd</sup> left of A?

- (a) E





- (b) F
- (c) C
- (d) B
- (e) none of these

**Directions (18-21):** Study the following information carefully and answer the questions given below. (IBPS PO 2018)

Given some information:

A@ means the one who earns double amount than A sits 2<sup>nd</sup> to the right of A.

A# means the one who earns 800 more than A sits immediate left of A.

A% means one who earns 480 less than A sits 4<sup>th</sup> to the left of A.

A& means the difference between the earning of A and the one who sits 3<sup>rd</sup> to the left of

A is greater than 2000.

There are eight friends i.e. P, B, C, D, E, M, N and O are sitting around a circular table such that facing towards the Centre. They earn different amounts as their monthly salary. N sits third to the right of B. The one who earns Rs 2790 is the immediate neighbour of N. P earns 5100 and sits second to the right of the one who earns Rs 2790. E sits third to the right of P. Only one person sits between E and O, who sits second to the right of M. M and D are not immediate neighbours.

Q18. What is the monthly income of N if the code is 'N% and O#'?

- (a) 4800
- (b) 4780
- (c) 4500
- (d) 4900
- (e) None of these

Q19. What is the difference of salary of D and E if the code is 'N%, O#, D% and E@'?

- (a) 3190
- (b) 3200
- (c) 3250
- (d) 3170
- (e) None of these

Q20. What will possibly be the salary of B if the code is 'P# and B&' (Note B earn more than M)?

- (a) 7850
- (b) 6520
- (c) 2370
- (d) 8050
- (e) 7580

Q21. What is the sum of the salary of B and M if the code is 'B% and P#'?

- (a) 8250
- (b) 7270
- (c) 5900



- (d) 9170  
(e) None of these

**Direction (22-24):** Study the following information carefully and answer the questions given below:

A square table is inscribed in another square table. Eight family members P, Q, R, S, T, U, V and W are sitting in middle of the side of squares. Each person sits at one square is facing their spouse. V faces Q. Only one person sits between V and husband of R. W faces the one who is an immediate neighbor of R. P is an immediate neighbor neither of R nor of W. W doesn't face T. P sits immediate left of S, who faces inside. **(SBI PO 2019)**

22. Who among the following sits immediate right of the wife of S?

- (a) Q  
(b) R  
(c) T  
(d) U  
(e) None of these

23. Who among the following is the spouse of U?

- (a) P  
(b) S  
(c) V  
(d) W  
(e) None of these

24. Who among the following faces to T?

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

**Direction (25-26):** Study the following information carefully and answer the questions given below: **(SBI PO 2019)**

Eight persons A, B, C, D, E, F, G, H are sitting around a circular table and all are facing towards the center.

1. P @ Q means P sits 2<sup>nd</sup> to the left of Q
2. P # Q means P sits opposite to Q
3. P \$ Q means P is an immediate neighbor of Q
4. P % Q means P sits 3<sup>rd</sup> to the left of Q
5. P & Q means P sits 3<sup>rd</sup> to the right of Q
6. P ^ Q means P is not an immediate neighbor of Q.

Given Statements:

H&E\$G, B#E, C@G, D#F, E^C^F

25. Which of the following is true?

- (a) H%D  
(b) A\$D  
(c) D#B



- (d) G\$F  
(e) Both (a) and (d)  
26. Who among the following sits 3<sup>rd</sup> to the left of B?  
(a) C  
(b) D  
(c) A  
(d) E  
(e) None of these

**Directions (27-31): Study the information carefully and answer the questions given below. (SBI PO 2018)**

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

27. Which of the following represents the distance between B and F?  
(a) 144  
(b) 72  
(c) 99  
(d) 108  
(e) none of these  
28. Who among the following are immediate neighbor of J?  
(a) K, L  
(b) G, A  
(c) H, M  
(d) F, D  
(e) none of these  
29. Who among the following sits 4<sup>th</sup> to the right of the one who is 6<sup>th</sup> to the left of A?  
(a) K  
(b) G  
(c) H  
(d) D  
(e) none of these  
30. Which of the following represents the distance between H and L?  
(a) 144  
(b) 180  
(c) 345  
(d) 108  
(e) none of these  
31. Four of the following belongs to a group find the one that does not belong to that group?  
(a) B, C  
(b) M, J





- (c) I, D
- (d) K, E
- (e) L, M

**Directions (32-36): Study the following information carefully to answer the given questions: (SBI PO 2018)**

There are six employees A, B, C, D, E, F of a company and all of them are working on six different designation of a company viz. CMD, MD, CEO, COO, SE, JE. All the designations given are to be considered in a given order (as CMD is considered as Senior-most and JE is considered as the Junior-most). Only two persons are senior than A. The one who is junior than only one person likes Litchi. The one who likes Mango is senior than B. F likes Guava and is junior than B. B does not like Litchi. C is senior to the one who likes Kiwi. The one who likes Kiwi is not JE. The one who is JE neither likes Banana nor Grapes. D does not like Litchi and also is not SE. E does not like Kiwi and is junior than C but senior than F. D is junior than the one who likes Banana. C is not junior than the one who likes Grapes. The one who likes Kiwi is just junior than D. A does not like Banana. The one who likes Grapes is senior than the one who likes Mango.

32. Who among the following is JE of the company?

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

33. Who among the following likes Grapes?

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

34. How many persons are junior than B?

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

35. The one who is CMD like which among the following fruit?

- (a) Guava
- (b) Mango
- (c) Kiwi
- (d) Grapes
- (e) Banana

36. Who among the following is just junior than A?

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



- (d) B
- (e) D

**Directions (37-41): Study the following information carefully and answer the questions given below. (SBI PO 2018)**

Six persons J, L, R, O, X, Z of a family born in six different years 1978, 1982, 1995, 1997, 2013 and 2015. (All the ages of the given persons have been calculated on base year 2018 and all the persons are considered to be born on same date of same month). There is a difference of 18 years between the ages of O and J. O is the father of J. L is younger than R. X is not the oldest person of the family. R is not married to Z. Z was born in an even numbered year. L is the only granddaughter of the mother of O. Father of O is 4 years older than O's mother. J is the son of R.

37. How is L related to X?

- (a) grand father
- (b) grand mother
- (c) grand daughter
- (d) grand son
- (e) none of these

38. Who among the following born in 1982?

- (a) O
- (b) R
- (c) X
- (d) J
- (e) L

39. R was born in which of the following year?

- (a) 1997
- (b) 2015
- (c) 2013
- (d) 1982
- (e) None of these

40. How is R related to Z?

- (a) Daughter-in-law
- (b) mother
- (c) aunt
- (d) Daughter
- (e) none of these

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

- (a) O
- (b) R
- (c) X
- (d) J
- (e) L

**Directions (42-46): Study the information carefully and answer the questions given below.**

There are fifteen people live on different floors in the given three building X, Y and Z such that each of the floor of the building is occupied by the given person. **Building X is immediate west of building Y, which is immediate west to building Z. In the**



building ground floor is numbered as 1, above it is floor 2 and so on... In the building floor-1 of building Y is immediate east of floor-1 of building X but immediate west of floor-1 of building Z and so on..

**Note: A is west to B does not mean A is immediate west to B. Above or below does not mean in the same building.**

N lives to the west of L on 3<sup>rd</sup> floor. M is immediate west to I. K is immediate east to E. A lives on the top floor of the building such that none of the person lives above A in any of the building. The number of floors between J and H is same as between H and I. I lives below J. The one who is either immediate above or immediate below N is immediate left to B. Two persons live between B and M. M lives in the same building as B. B does not live in the same building as J. **Building Z** has more number of floor than **building Y** but less than **building X**. H is not in the same building as L. Two persons live between D and C. F live to the west of G. D lives above O, but in the same building. D does not live on the even number floor. **(SBI PO 2018)**

Q42. How many persons are living above B in the same building?

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

Q43. Who among the following lives to the immediate east of F?

- (a) L
- (b) J
- (c) H
- (d) B
- (e) A

Q44. Which of the following true regarding O?

- (a) Lives in the same building as L
- (b) lives on 2<sup>nd</sup> floor
- (c) lives to the west of G
- (d) all are true
- (e) none is true

Q45. On which of the following floor does C live?

- (a) 3<sup>rd</sup>
- (b) 1<sup>st</sup>
- (c) 2<sup>nd</sup>
- (d) 4<sup>th</sup>
- (e) none of follows

Q46. Who among the following lives just above N in the same building?

- (a) L
- (b) F
- (c) H
- (d) B
- (e) A

**Directions (47-51):** Study the information carefully and answer the questions given below. **(RRB PO 2018)**

Seven persons A, B, C, D, E, F and G are born in different years 1950, 1953, 1961, 1968, 1972, 1985, 1996 but not necessarily in the same order. They are born on same date of



the same month in different years. (All the calculations of ages are done by considering 2018 as the base year) They like different fruits i.e. grapes, litchi, fig, mango, guava, apple, pomegranate.

The sum of the present age of B and E is 90 years. The person who is 2<sup>nd</sup> eldest likes mango. C is younger to F. The sum of the present age of G and the one who likes guava is 103 years. Neither C nor A likes grapes and fig. The difference between the present ages of the one who likes guava and the one who likes fig is 11 years. The number of persons born before A is same as the number of persons born after the one who likes apple. The youngest person likes pomegranate. The sum of the present age of D and A is 115 years. A is younger to D. The one who likes litchi is older to the one who likes grapes. The number of persons born between the one who likes guava and grapes is more than the persons born between the ones who like grapes and litchi. G does not like fig and B is younger to E.

47. Who among the following likes fig?

- (a) G
- (b) F
- (c) C
- (d) B
- (e) none of these

48. Which among the following pair of persons are the oldest and youngest respectively?

- (a) E, A
- (b) F, C
- (c) C, F
- (d) B, D
- (e) none of these

49. In which of the following year was E born?

- (a) 1968
- (b) 1950
- (c) 1961
- (d) 1985
- (e) none of these

50. Which of the following statement is true regarding F?

- (a) E was born before F
- (b) F is the youngest
- (c) the difference between the present ages of G and F is divisible by 3
- (d) F likes guava
- (e) none of these

51. How many persons were born between A and E?

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



**Directions (52-56):** Study the information carefully and answer the questions given below. **(RRB PO 2018)**

Ten people are seating on two parallel rows. P, Q, R, S and T are seating in row 1 and facing towards south. A, B, C, D and E are seating in row 2 and facing north. They like different Colors- pink, blue, black, yellow and orange. Two persons like same color such that one of them is in row 1 and the other is in row 2 (i.e. both the persons who like Pink colour sit in different rows)

R sits second from one of the ends. The one who sits immediate right of R faces C. P sits right to T but not immediate right. The number of persons sitting to the left of C is same as the number of persons sitting to the right of T. D faces the one who likes yellow. The one who likes pink in row 1 faces the one who sits 2<sup>nd</sup> to the left of the one who likes pink in row 2. Only one person sit between S and the one who likes orange. The one who likes black sits 3<sup>rd</sup> to the left of the one who likes pink in row 2. More than two person sits between D and A. E does not like pink. C likes yellow. R does not like orange and pink. S faces the one who likes blue. The one who likes yellow sits immediate left to R. P does not like black.

52. Who among the following likes blue in row 1?

- (a) P
- (b) Q
- (c) R
- (d) S
- (e) none of these

53. How many persons sit between E and the one who likes black?

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

54. Which of the following statement is true regarding S?

- (a) E faces S
- (b) A likes same color as S
- (c) D faces S
- (d) B sits 3<sup>rd</sup> left to the one who faces S
- (e) none of these

55. Which of the following color is liked by R?

- (a) blue
- (b) black
- (c) orange
- (d) yellow
- (e) none of these

56. Four of the following belongs to a group based on their seating arrangement find the one that does not belong to that group?

- (a) T



- (b) C
- (c) R
- (d) B
- (e) A

**Directions (57-61):** Study the following information carefully and answer the given questions. **(RRB PO 2018)**

Nine persons A, B, C, D, E, F, G, H, I like different flowers tulip, lily, rose, lotus, sunflower, orchid, iris, Tithonian and Cosmos also each of them live in three different cities Patna, Surat and Mumbai. Not less than two and not more than four live in same cities.

G lives with only the one who likes tulip. B lives with H and the one who likes Lotus D and F lives with the one who likes Sunflower. The one who likes Tithonian does not live in Surat. The one who likes Lily and the one who likes Orchid live in the same city but not in Patna. Neither A nor H likes Tithonian. The one who likes Iris lives with A and I. E lives in Surat but does not like Lily. G does not live in Patna. H does not like Iris. A does not like Rose and Lotus. D does not like Orchid. The one who like Rose and the one who like Cosmos live in same city. Neither A nor I likes Sunflower.

57. Who among the following like Tulip?

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

58. In Which of the following city D and E live respectively?

- (a) Mumbai and Surat
- (b) Both in Patna
- (c) Patna and Surat
- (d) Both in Surat
- (e) None of these

59. A likes which of the following flower?

- (a) Lily
- (b) Tithonian
- (c) Cosmos
- (d) Orchid
- (e) None of these

60. Four of the following are alike in a certain way so form a group which of the following does not belong to that group?

- (a) B
- (b) H
- (c) A
- (d) F
- (e) I

61. C lives with which among the following?

- (a) B and H
- (b) D, F and E





- (c) A, I and E
- (d) Only G
- (e) None of these

**Directions (62-66):** Study the following information carefully and answer the given questions. **(RRB PO 2018)**

Seven members of a family are sitting in a row facing north. G is third from one of the ends. G's mother is second to the right of G. G's wife is immediate left of G. M is an immediate neighbour of G's mother. B is third to the left of M. Only one person sit between D and M. D's father sit second to the left of D. Only one person sit between L's daughter and M. B is a male. B's father is third to the left of L's daughter. V is D's son and Q is daughter-in-law of L. Q sits to the left of L.

62. How many persons are sitting between Q and L?

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

63. How many persons sit to the left of L?

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

64. Who among the following is the grandson of M?

- (a) D and B
- (b) L
- (c) V and B
- (d) Q and D
- (e) D

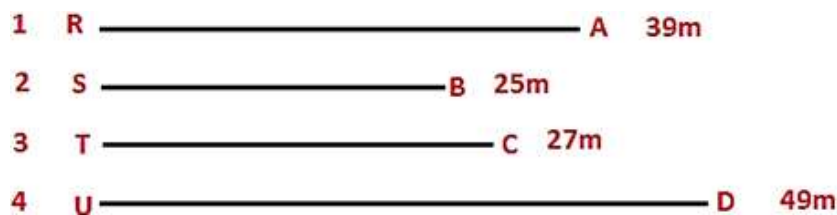
65. How is D related to G?

- (a) Sister
- (b) Brother
- (c) Mother
- (d) Father
- (e) Sister-in-law

66. Who among the following sit forth to the right of B's father?

- (a) M
- (b) L
- (c) V
- (d) Q
- (e) D

**Directions (67-71):** Study the following information carefully and answer the questions that follow: **(IBPS PO 2017)**



In the given figure the four-line segments 1,2,3,4 are RA, SB, TC, UD respectively. The lengths of the line are 39m,25m,27m and 49m respectively.

Six people Mohan, Sohan, Rohan, Ankit, Vinit and Sumit are standing in line 1-RA. All of them are facing north. With distance between them increasing in multiples of 7 from the left end (i.e. suppose Mohan is left end of the line at point R then the remaining people will stand at a distance as follows -7m, 14m, 21m.... from the end)

Mohan is standing at the left end of the line. Two persons are standing between Mohan and Sohan. Rohan stand second to the left of Sohan. Sumit is an immediate neighbor of Rohan. Only one person stands between Sumit and Ankit.

Similarly, six people Anita, Ambika, Amrita, Aanchal, Arpita and Ajita are standing in line-4 UD. All of them are facing south. with distance between them increasing in multiples of 9 from the end (i.e. if first person is right end of the line at point U and the remaining will be stand at the distance as follows-9m, 18m,27 m.... from point U).

Amrita is standing is at 3<sup>rd</sup> position from the right end. Arpita is an immediate neighbor Of Amrita. Two people are standing between Arpita and Ajita. More than three persons stand between Ajita and Anita. Aanchal stands to the immediate left of Ajita. Ambika and Arpita are immediate neighbours.

\* Point S and Point T is left end of the row in line SB and line TC.

67. In the line-4 UD, what is the distance between Arpita and point D?

- (a) 14m
- (b) 16m
- (c) 22m
- (d) 24m
- (e) None of these

68. If in line-1 RA, if peoples stand in distance of at multiples of 9 in the same order, and rest of them move to line-2 SB and stands from left end in the same order. And if in line 4-UD, if people stand in distance at multiples of 11 in the same order and rest of them move to line-3 TC, stands from left end in the same order. Then total together how many people are standing in lines 2 and 3?

- (a) 1
- (b) 2
- (c) 3
- (d) 4
- (e) None of these

69. If in line 4-UD, if people stand in multiples of 13 in the same order and rest of them move to line-3 TC and stands from left end in the same order. Then the distance between Anita and point C is?

- (a) 2
- (b) 12
- (c) 14
- (d) 20



(e) None of these

70. Suppose line-1 RA is joined to line-2-SB to form a new straight-line RB in such a way that distance between point A and S is 5m. If the people in line-1 RA are made to stand in multiples of 12, then how far is Sohan from point B?

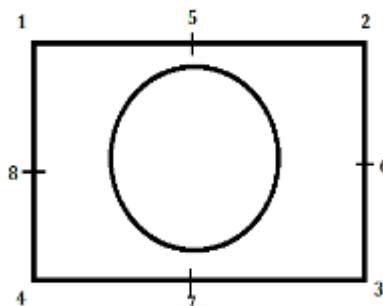
- (a) 16
- (b) 21
- (c) 26
- (d) 33
- (e) None of these

71. If in line-1 RA people stand in distance at multiples of 9 in the same order and rest of them move to line-2 SB in the same order, then who will be standing in line-2?

- (a) Ankit
- (b) Sumit
- (c) Sohan
- (d) Sohan and Sumit
- (e) None of these

**Direction (72-76):** Study the following information carefully and answer the question below- **(IBPS PO 2017)**

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



Eight persons Abhay, Isha, Riya, Rahul, Piya, Diya, Sahil, Sanyam are sitting around the circle having eight vacant chairs. Four of them are facing towards the center while four are facing outside the center.

Only two persons are sitting between Isha and Abhay. Sahil sits second right of Abhay. Rahul and Sahil are immediate neighbours. Riya sits third left of Rahul. Both Abhay and Isha are facing outside the center. Rahul is facing opposite direction of Isha. Piya sits immediate right of Sahil who is facing same direction as Abhay. Sanyam sits second left of Riya. Both Sanyam and Piya are facing same direction.

Now they start playing cards game. They shuffled a pack of cards. 1. Isha draws one card and changes her place according to the given conditions, 2. Abhay draws one card and changes his place according to the given conditions similarly others draw cards given in the condition below-

Conditions:

1. If the card drawn is spade, the person who draws first moves to position 5 facing opposite direction of current direction, then the second person who also draw spade moves to position 6, similarly 7 and 8.
2. If card drawn is heart, person remains on the same position facing same direction.



3. If the card drawn is diamond, the person who draws first moves to corner 1 facing same direction, then the second person, who also draw diamond moves to corner 2, similarly 3 and 4.

4. If card drawn is club, person remains on the same position facing opposite direction of current direction.

Draws:

1. Isha draws queen of Club
2. Abhay draws Jack of Club
3. Piya draws 3 of Spade
4. Rahul draws a King of Diamond
5. Diya draws Ace of Heart
6. Sahil draws 9 of Heart
7. Sanyam draws 7 of Diamond
8. Riya draws 4 of Spade

\*Note- All the persons draws card in a serial way as given above.

(ex- First Isha draws then Abhay draws .....so on.....)

72. After all persons changed their places based on the above conditions, who among the following is sitting at the corner 2 of the square?

- (a) Isha
- (b) Diya
- (c) Sahil
- (d) Sanyam
- (e) None of these

73. After all persons changed their places based on the above conditions, how many persons are remains in the circle?

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

74. After all persons changed their places based on the above conditions, then who among the following is sitting to the immediate right of Diya?

- (a) Sahil
- (b) Riya
- (c) Abhay
- (d) Piya
- (e) None of these

75. After all persons changed their places based on the above conditions, then how many persons facing away from the center?

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



76. After all persons changed their places based on the above conditions, then who among the following is sitting at the position 6 of the square?

- (a) Sahil
- (b) Riya
- (c) Piya
- (d) Sanyam
- (e) None of these

**Directions (77-81):** Read the following information carefully and answer the questions given below: **(SBI PO 2017)**

There are six cars – A, B, C, D, E, F – parked in a row facing north direction, but not necessarily in the same order. The distances between two adjacent cars are successive multiples of three (i.e., if the distance between the 1<sup>st</sup> and the 2<sup>nd</sup> car is 3 m, 1<sup>st</sup> and the 3<sup>rd</sup> cars is 6 m and between 1<sup>st</sup> and 4<sup>th</sup> cars is 9 m and so on.)

Information regarding all the cars:

- The distance between 'A' and 'B' is 33 m and car 'A' is to the immediate left of car 'B'.
- The distance between the cars 'E' and 'F' is 99 m. the distance between 'E' and 'D' is a multiple of '2'.
- The car 'B' is 75 m away from car 'C'. Car 'D' is in one position to the left of car 'C'; but not to the immediate left of 'C'.
- Car 'F' starts moving towards north and after going 18 m, it turns right, then it moves 63 m and then it goes another 7 m to its right turn and stops at point 'Z'
- Car 'C' moves 33 m towards south direction, and then takes a right turn and goes 75 m straight. Then it turns again to its right direction and moves another 17 m and halts at point 'X'.
- An another car 'M' is parked at 13 m to the west of point 'Z', Now 'M' starts moving towards further west and covers 77 m and reached point 'Y'.

77. How many cars are there in between cars 'D' and 'F'?

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

78. What is the distance between point 'Z' and point 'X'?

- (a) 25 m
- (b) 18 m
- (c) They don't align in the same straight line
- (d) 32 m
- (e) 27 m

79. What is the position of Car 'M' with respect to the Car 'F'?

- (a)  $5\sqrt{34}$  m towards north-west
- (b) 50 m towards south-east
- (c)  $10\sqrt{17}$  m towards north-east



- (d)  $5\sqrt{34}$  m towards south-east
- (e) None of these

80. Which car will be met first, if 'M' moves through the shortest distance from point 'Y'?

- (a) E
- (b) F
- (c) C
- (d) D
- (e) None of these

81. What is the position of car 'A' with respect to car 'E'?

- (a) 75 m towards right
- (b) To the immediate right
- (c) 36 m towards left
- (d) 69 m towards left
- (e) None of the above

**Directions (82-86):** Study the following information carefully and answers the questions given below. **(SBI PO 2017)**

There are 10 shelves numbered 1, 2.....10. They are arranged in two rows one above the other. The shelves 1, 2.....5 are in row 1 and rest in row 2 which is above row 1. The shelves are arranged in increasing order of number given to them. Like the shelf number 1 is placed on extreme left of row 1, then shelf number 2 and so on. Similarly the shelf number 6 is placed on extreme left of row 2, and so on. Each shelf contains a certain number of glass slabs and photo frames. There is at least one glass slab in each shelf. The length of each glass slab is 15 cm and that of each photo frame is 6 cm.

The shelf 3 has length 33 cm. There is one shelf between shelf 3 and yellow shelf. The yellow shelf contains 1 glass slab and 6 photo frames more than that in shelf 3. The silver shelf is just above the yellow shelf. The silver shelf contains same number of glass slabs as yellow shelf and 1 photo frame. There are 2 shelves between silver and green slabs. The length of green shelf is 3 cm greater than the silver shelf. The blue shelf is immediate next in number to green shelf. The blue shelf contains 1 glass slab more than that in silver shelf and 1 photo frame less than that in green shelf. There is one shelf between blue and orange shelves. The white shelf is just below the orange shelf. There is one shelf between white and red shelf. Black shelf is in row 2. The pink shelf is just below the black shelf. The black shelf has same number of photo frames and glass slabs. The orange shelf has 1 glass slab more than black shelf. The length of orange shelf is 24 cm more than the length of pink shelf. The length of violet shelf is half the length of yellow shelf. The red shelf has greater than or equal to four glass slabs. The length of pink shelf is 6 cm less than the shelf immediate next in number. The length of row 1 is 267 cm and that of row 2 is 249 cm.

82. How many more photo frames can the row 2 adjust?

- (a) 1
- (b) 2
- (c) 3
- (d) None





- (e) 4
83. The color of shelf 2 is?  
(a) Cannot be determined  
(b) Violet  
(c) Red  
(d) White  
(e) Pink
84. How many total glass slabs do the silver, black and red shelves contain?  
(a) 7  
(b) 9  
(c) 10  
(d) Other than those given in options  
(e) 12
85. What is the total length of the pink, orange and blue shelves?  
(a) 146 cm  
(b) 134 cm  
(c) 141 cm  
(d) 133 cm  
(e) 126 cm
86. If all the photo frames of silver and white shelves are removed and added in black shelf then what will be the length of black shelf?  
(a) 67 cm  
(b) 66 cm  
(c) 61 cm  
(d) 69 cm  
(e) 62 cm

**Directions (87-91):** Read the following information carefully and answer the questions that follow:

Eight friends A, B, C, D, E, F, G and H born on 7th, 9th, 16th and 19th in March and July. Each one of them likes either a colour or a fruit. The persons who likes colours were born on that day which is a perfect square and the colour they likes are:- Yellow, Green, Red and Blue. The persons who were born on the day which denotes a prime numbers like fruits – Apple, Cherry, Mango and Banana.

The one who likes yellow colour was born on a day which is a perfect square in the month of march. No person was born between D and the one who likes yellow. D doesn't like colours. Three persons were born between D and the one who likes Mango. There is no person born between the one who likes Mango and Blue colour. The number of people born after the one who likes blue colour is one less than the number of persons born before A. The one who likes Apple was born immediately before B. B do not like Mango.



The number of people born before B is same as the number of persons born after G. Three persons were born between the one who likes Green and H. H and the one who likes Cherry was born in the same month but not in March. C was born after the one who likes Blue colour. E doesn't like any colour. F doesn't like Apple. (RRB PO 2017)

87. Who among the following likes green colour?

- (a) B
- (b) A
- (c) G
- (d) H
- (e) C

88. Who was born on 16<sup>th</sup> March?

- (a) D
- (b) A
- (c) G
- (d) F
- (e) E

89. Who among the following likes cherry?

- (a) F
- (b) G
- (c) H
- (d) A
- (e) B

90. Who was born on 19<sup>th</sup> July?

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

91. Who among the following likes red colour?

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

**Directions (92-96):** Read the following information carefully to find given questions.

8 persons namely P, Q, R, S, W, X, Y and Z are sitting around a square table facing towards center. 4 of the persons are sitting in 4 corners while 4 of the persons are sitting in the middle of the sides. They have different ages. Those who sit in the corners having the ages multiple of 3. Those who sit at the middle of the sides having the ages multiple of 2.

P sits 2nd to the right of the one who has the age of 44. P is an immediate neighbour of the one who is 39 years old. Two persons sit between Q and having the age of 39. Q has



not the age of 44. W sits 2nd to the left of Q. S is immediate right of the person having age of 15. Three persons sit between Z and the one having age of 15. The difference between the ages of Z and the one who is 2nd to the left of Z is 6. S is older than Z. Immediate neighbours of S are younger than S. Person having age 22 sits 2nd to the right of the person having age 10. Age of P is not 10. Y sits immediate left of the person having age of 22. Age of Y is 51. Age of R is greater than 20. Age of R is 24 ages more than X. Age of X is 3 years more than age of P.

**(RRB PO 2017)**

92. Who among the following is of 9 years old?

- (a) P
- (b) S
- (c) W
- (d) X
- (e) No one

93. Who sits 2<sup>nd</sup> right of the one who sits immediate left of the one whose age is 51 years old?

- (a) R
- (b) S
- (c) Y
- (d) Q
- (e) W

94. How many persons sit between the one who is of 15 years old and the one who is of 12 years old, when counted anticlockwise from the one who is of 15 years old?

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

95. Who among the following sits diagonally opposite to Z?

- (a) X
- (b) T
- (c) S
- (d) P
- (e) W

96. Who among the following sits immediate right of S?

- (a) P
- (b) W
- (c) Y
- (d) R
- (e) Z

**Directions (97-101):** Read the following information carefully and answer the following questions.



Twelve persons were born on two dates either 7<sup>th</sup> or 16<sup>th</sup> of six different months of a year viz. January, March, June, July, September, and October but not necessarily in the same order. The persons whose name starts with a letter before the letter 'M' were born in the first half of the year and the persons whose name starts with a letter after the letter 'M' were born in the second half of the year. All letters are according to the English alphabet series. Example- If a person name is Rajesh then he will be born in the second half of the year. The person whose name consists of even number of letters after counting the number of letters is born on an odd numbered date and Vice-Versa. Example- If a person name is 'Ramesh' then he will be born on an odd number date (i.e 7) because the sum of number of letters is 6.

Only two persons were born between Pranav and Kumar. The number of persons born before Gaurav is same as born after Yaati. Only four persons were born between Kunal and Gaurav. The number of persons born between Kunal and Sriti is one more than the persons born between Puja and Ram. Ayush was born before Kishan and Gopi. Puja was born in the month of having 31 days. Not more than two persons were born between Kishan and Ram. Swathi is one of the persons. **(IBPS PO Mains 2020)**

97. The number of persons born between Yaati and Sriti is same as persons born between \_\_\_\_ and \_\_\_\_?

- (a) Kunal and Swathi
- (b) Kumar and Puja
- (c) Pranav and Kishan
- (d) Kumar and Gaurav
- (e) None of these

98. How many persons were born between Kumar and Sriti?

- (a) Three
- (b) Four
- (c) Two
- (d) Six
- (e) Five

99. On which date Gaurav was born?

- (a) 7<sup>th</sup> January
- (b) 16<sup>th</sup> January
- (c) 16<sup>th</sup> March
- (d) Cannot be determined
- (e) None of these

100. Four of the following five are alike in a certain way based on a group, which among the following does not belong to that group?

- (a) Ayush
- (b) Gopi
- (c) Kumar
- (d) Ram
- (e) Kunal

101. Which of the following statement is true?

- I. Gopi was born before Kishan
  - II. Kunal was born in the March month
  - III. Three persons were born between Ayush and Kunal
- (a) Both I and II
  - (b) Only III
  - (c) All I, II and III
  - (d) Only II
  - (e) Both I and III



**Directions (102-104):** Read the following information carefully and answer the following questions.

Eight persons P, Q, R, S, T, U, V, and W live in a building of eight floors such that the topmost floor is numbered as 8 and the lowermost floor is numbered as 1 but not necessarily in the same order. They shop on eight different e-commerce websites viz. Flipkart, Ajio, Myntra, Jabong, Amazon, Shopclues, Jiomart, and Tata Cliq but not necessarily in the same order.

The one who shops on Flipkart lives immediately above the one who shops on Shopclues. Neither V nor P shops on Flipkart, Tata Cliq and Myntra. Three persons live between V and S, who lives below V and also does not shop on Jabong. Only three persons live between W and R, who shops on Amazon. R lives on one of the even numbered floor above W and Q, who does not shop on Flipkart and Myntra and also does not live on the second floor. Two persons live between Q and the one who shops on Jabong. Three persons live between the one who shops on Jabong and the one who shops on Ajio. The number of persons living between the one who shops on Jabong and R is same as the number of persons living between the one who shops on Ajio and P. T lives on one of the floors below U. Both W and Q live on the even numbered floor. **(IBPS PO Mains 2020)**

102. Who among the following lives on the fourth floor?

- (a) S
- (b) Q
- (c) The one who shops on Shopclues
- (d) U
- (e) Both (b) and (c)

103. Who among the following shops on JioMart?

- (a) V
- (b) R
- (c) S
- (d) T
- (e) None of these

104. How many persons live between the one who shops on JioMart and the one who shops on Ajio?

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

**Directions (105-108):** Read the following information carefully and answer the following questions.

Seven persons A, B, C, D, E, F, and G are born on seven different dates in a year but not necessarily in the same order and they like different fruits. There is a gap of three days between the birth dates of every person. Ex- If R was born on 12<sup>th</sup> May then the person born immediately after R and immediately before R should be born a gap of 3 days. F was born on 16<sup>th</sup> June. Only two persons were born before F. The number of persons born before D, who likes Apple is equal to the number of persons born after G, who likes Guava. Only one person was born between G and A, who likes Oranges. B does not like Kiwi was born one of the dates before E but after C. B was not born after A. E does not like Grapes, Peach, and Kiwi. F does not like Peach, Kiwi, and Pear. **(IBPS PO Mains 2020)**

105. Who among the following was born on 28<sup>th</sup> June?

- (a) The one who likes Pear
- (b) B
- (c) The one who likes Peach
- (d) E
- (e) Both (a) and (d)

106. Who among the following was born just after the one who likes Grapes?



- (a) A
- (b) The one who likes Peach
- (C) The one who likes Kiwi
- (d) Both (a) and (b)
- (e) None of these

107. How many persons were born between the one who likes Guava and the one who likes Grapes?

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

108. Who among the following was born on 2<sup>nd</sup> July?

- (a) G
- (b) D
- (C) E
- (d) None of these
- (e) Either (a) or (b)

**Directions (109-112):** Read the following information carefully and answer the following questions.

Eleven Houses A, B, C, D, E, F, P, Q, R, S, and T are located in a straight row such that the opening gates of some of them opens in north direction and some of them opens in south direction but not necessarily in the same order. No two adjacent houses opening gates opens in the same direction. House B is not located near House A. House Q is located to the immediate left of House B. House P is located fourth to the right of House D, which is located to the immediate left of House R. Number of Houses located to the left of House P is one more than the number of Houses located between House R and House P. Only two houses are located to the left of House A. The number of houses located between House P and House A is one less than the number of Houses located between House T and House C. House T is located near House P. Only one house is located between House F and House Q and the Gates of both of the houses doesn't open in south direction. Only one house is located between House E and House S, which is not located near House C. House D is 2<sup>nd</sup> from one of the ends. **(IBPS PO Mains 2020)**

109. Which of the following pair of Houses represents the immediate neighbors of P's House?

- (a) House D and House F
- (b) House T and House F
- (c) House S and House T
- (d) House D and House A
- (e) None of these

110. How many houses are located to the right of House S?

- (a) One
- (b) Four
- (c) Five
- (d) Three
- (e) Two

111. How many houses are located between House A and House B?

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





112. What is the position of House E with respect to House P?

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

**Direction (113-116):** Study the following information carefully and answer the given questions.

Eight persons i.e. A, B, C, D, P, Q, R and S are sitting around two inscribed square table in such a way that four persons are seating at four corners each inner square and outer square. Persons sitting at inner square and outer square are facing to each other.

C faces the one who sits 2<sup>nd</sup> to the right of S. Q is neither an immediate neighbor of S nor C. D faces to R and is an immediate neighbor of Q. A sits immediate left of R. B faces to P. Both B and C are not an immediate neighbor. Neither P nor A face outside.

**(IBPS PO Mains 2020)**

113. Who among the following sits 3<sup>rd</sup> to the left of the one who faces D?

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

114. How many persons sit between S and D, when counted to the right of S?

- (a) None
- (b) Two
- (c) One
- (d) Either One or Two
- (e) Both sit on different table

115. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?

- (a) B
- (b) D
- (c) S
- (d) Q
- (e) C

116. The number of persons sit between P and R, when counted to the left of R and is same as the number of persons sit between B and \_\_\_ when counted to the right of \_\_\_?

- (a) S
- (b) Q
- (c) D
- (d) Either (a) or (c)
- (e) None of these

**Direction (117-120):** Study the following information carefully and answer the given questions.

Eight persons A, B, C, D, E, F, G and H are working in a company in three different departments – Production, Management and Finance on two posts – Manager and General Manager but not necessarily in the same order. All they have different ages in the whole number.

E's age is twice of C's age. A is 53 years old and working in production. The persons whose total age is 100 years are working in Finance as General Manager. F is working in Production. B is working in management but not with D and posts of B and D are different. Both H and G are working at same post but not in production department. Both H and F are working at different post. Not more than two persons working on same post in same department. Both E and A working in same department but at different post. Both A and D work in different post. Sum of the ages of C and G is 64 years. Both



C and D are manager but in different departments but not in the production. E is 12 years older to F and 12 years younger to H. Difference between the age of C and D is equal to H's age. B is 30 years old and its age is half the H's age. **(IBPS PO Mains 2020)**

117. How many persons are working as manager?

- (a) Four
- (b) Five
- (c) Three
- (d) Two
- (e) One

118. Who among the following is 40 years old?

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

119. Four of the following five are alike in a certain way and so form a group. Find the one who does not belong to that group?

- (a) E-48
- (b) D-84
- (c) G-40
- (d) C-36
- (e) B-30

120. Which of the following is the bpost and department of B respectively?

- (a) Manager – Finance
- (b) General Manager – Management
- (c) Manager- Management
- (d) Can't be determined
- (e) None of these

**Directions (121-124):** Study the following information carefully to answer the given question.

There are eight members i.e. M, N, Q, A, R, O, B and P in a family having three generation and all are related to Q in a certain way and there are only two married couple in the family. They all sit around a circular table such that all face towards the centre. Q sits third to the left of his mother-in-law, who sits second to the left of sister of R. N is unmarried. O has only one son. B is the grandson of A, who sits third to the right of N, who is the aunt of B. O is the mother of R. M is the mother-in-law of P and sits on the immediate left of brother in law of Q. N is the only daughter of M. A and O is not the married couple. Son of Q sits third to the right of Q's brother-in-law. R is not married. N is not the immediate neighbour of P. P is married to Q. **(SBI PO Mains 2020)**

121. How is O related to Q?

- (a) Mother
- (b) Father
- (c) Grandmother
- (d) Mother-in-law
- (e) None of these

122. Who among the following sits second to the right of son of Q?

- (a) Mother of Q
- (b) Father of B
- (c) Father of N
- (d) Brother of N



(e) None of these

123. How many persons sit between P and sister of Q?

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

124. Who among the following is the mother of B?

- (a) P
- (b) M
- (c) O
- (d) R
- (e) None of these

**Directions (125-128): Read the given information carefully and answer the questions given below. (SBI PO Mains 2020)**

There is a family of nine members A, D, G, J, K, L, M, P and R. All of them are sitting on a straight bench in the garden with an equal distance between them, but not necessarily in the same order. Some of them are facing north and rest are facing south. There are three generation in the family.

D, who is L's mother sits fourth to the left of P. The ones who sit at the extreme ends face the south direction. P is the only son of R and both face the opposite directions. D sits immediate to M. A is not married and faces the same direction as K. R, who is the sister of A sits at one of the extreme ends with a male member. D's neighbours are males and face the opposite directions. G's soul mate D faces the south direction. M, who is the husband of K sits exactly in the middle of the bench and faces the north direction. L, who is a male, is the only sibling of K, who sits exactly between A and P's sister, who is a female. L faces the same direction as G. A sits third to the left of G, who is P's grandfather and who sits immediate to M.

125. How many female members are there in the family?

- (a) Two
- (b) Five
- (c) Four
- (d) Six
- (e) Three

126. How many members face the north direction?

- (a) Two
- (b) Four
- (c) Three
- (d) Five
- (e) More than five

127. How is J related to L?

- (a) Son
- (b) Brother
- (c) Sister
- (d) Nephew
- (e) Daughter

128. Which of the following pair sits at the extreme ends of the bench?

- (a) R, A



- (b) P, R
- (c) R, J
- (d) K, R
- (e) None of these

**Directions (129-133):** Study the following information carefully and answer the questions given below. **(SBI PO Mains 2020)**

There are seven boxes i.e. A, B, C, D, E, F and G which are of different colour and kept one above the another. The boxes are of different weights. Only two boxes are kept between box A and box C. Yellow colour box is kept immediately below C. Box A is of Blue colour. There is only one box kept between Yellow colour box and Black colour box. Blue colour box is kept above Black colour box. Only two boxes are lighter than Blue colour box. Only three boxes are kept between Red colour and Black colour box. White colour box is heavier than Red colour box but just lighter than Black colour box. Yellow colour box is just lighter than Red colour box. Black colour box is not the heaviest. Only two boxes are kept between box B and Red colour box. Box B is heavier than box E which is kept immediately below box B. Black colour box is just lighter than box D. Only one box kept between box E and box F. Box G is kept immediately below Green colour box. One of the box is of Pink colour.

129. Which of the following box is of Green colour?

- (a) Box D
- (b) Box B
- (c) Box E
- (d) Box C
- (e) None of these

130. Which of the following box is the lightest?

- (a) Box E
- (b) Box D
- (c) Box F
- (d) Box B
- (e) None of these

131. How many boxes are lighter than the box which is kept immediately below A?

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

132. Box C is of which colour box?

- (a) Green
- (b) Red
- (c) White
- (d) Black
- (e) None of these

133. How many boxes are kept below the box which is just lighter than box D?

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



**Directions (134-138):** Study the following information carefully and answer the questions given below:

Six employees i.e., P, Q, R, S, T and U are working in a company at different designations i.e., Chief Legal Officer (CLO), Chief Marketing Officer (CMO), Chief Technology Officer (CTO), Chief Financial Officer (CFO), Chief Operating Officer (COO) and Chief Executive Officer (CEO). Sequence of the posts are same as mentioned above with Chief Legal Officer (CLO) being the junior most position and Chief Executive Officer (CEO) being the topmost position and . They all have different years of working experiences and gets different salaries on the basis of the sequence of their designation (senior most employee get the highest salary and has the maximum years of experience and the junior most has least experience and salary). All the information is not necessarily in the same order.

The salary of P is a multiple of 11. The one who has 10 years of experience earns 10K less than U who is not CFO. At most one person is senior to S. Only two employees are junior than the one who has 8 years of working experience. The one who is COO has 3 years more experience than the one who is getting 60K. The sum of the salaries of CLO and CMO is same as the salary of the one who has the maximum work experience. 15 years is the maximum years of working experience. Only two designations are there in between the designations of S and P. The working experiences of CMO and CTO are in consecutive years. CMO is getting 50K. R is junior than P. The CEO salary is 5k less than the square of the smallest two digit number. Q is junior than R and having the working experience equal to the sum of the digit of the salary what R gets. The salary of CTO is less than 57K. **(SBI PO Mains 2020)**

134. Who among the following has 10 years of working experience?

- (a) The one who gets 55K
- (b) The one who is just junior than U
- (c) T
- (d) Both (b) and (c)
- (e) Both (a) and (c)

135. Who among the following is Chief Executive Officer (CEO)?

- (a) S
- (b) T
- (c) The one who is getting 70 k
- (d) Q
- (e) None of these

136. What is the difference between the working experience (years) of Chief Operating Officer (COO) and the one who is 55k salary?

- (a) 3
- (b) 4
- (c) 5
- (d) 2
- (e) None of these

137. Which of the following statement is true?

- (a) T is senior than U
- (b) S is getting 95K salary
- (c) More than two employees are junior than P
- (d) P's salary is more than T's salary
- (e) T is the junior among all



138. Who among the following employee is just senior than the one who has 13 Years of working experience?

- (a) S
- (b) T
- (c) P
- (d) R
- (e) None of these

**Directions (139-142):** Study the information carefully and answer the questions given below. Six people Varun, Charu, Trisha, Mohit, Anko and Virat are born in different years with the current base is taken as 2018. None of them is older than 90 years old. They like different colours Red, Blue, White, Pink, Yellow, Black.

Note- The last two digits or reverse of the last two digits of the year in which a person is born can be the age of some other person. (Like A is born in 1943 and age of B is denoted by the last two digits of the birth year of A. Then B's age will be either 34 or 43).

Virat is just older than the one who likes Black colour. Anko was born in the year 1979. The difference of age between Anko and Varun is 24 years. Trisha's age is sum of the digits of the year in which Varun was born. The one who likes Blue colour is just younger than Mohit. Mohit's age is either the last two digits or reverse of the last two digits of the year in which Trisha was born. Only one person is older than Mohit. The one who likes Red colour is 3 years elder to Trisha. The one who likes white colour is 1 year younger than the one who likes Pink color. Charu is born before Anko. **(SBI PO Mains 2020)**

139. Who among the following likes Yellow colour?

- (a) Anko
- (b) Trisha
- (c) Charu
- (d) Varun
- (e) none of these

140. Who among the following is the eldest?

- (a) Anko
- (b) Mohit
- (c) Charu
- (d) Virat
- (e) none of these

141. Which of the following combination is true?

- (a) Anko- 1979-Red
- (b) Varun- 1955- Yellow
- (c) Charu-1928- pink
- (d) Trisha-1998- Blue
- (e) none of these

142. Which of the following statement is correct?

- (a) Anko is younger than Virat
- (b) Virat is the youngest
- (c) Trisha born in 1998
- (d) Varun is the eldest
- (e) All are correct



**Directions (143-147):** Read the following information carefully and answer the given questions.

Thirteen persons are standing in four different queues in front of the four different counters viz. A, B, C and D. All the counter are in the same line aligned in west to east direction starting with counter A at the easternmost end followed by counter B to the west of it till counter D at the westernmost end. All the persons are facing towards North. The distance between two persons standing in a queue is same for all the queue. Among the thirteen persons four of them are married couple and no couple stands in the queue of same counter.

Two person stands between K and J in a queue. Number of persons standing in queue against counter D and counter A is same. The first person standing at counter D and A is a female. Number of person at counter B and C is less than counter A. The first person at counter B is a male and he is not married. Only one person stands to the east of R, who is married to Q. Number of person standing at counter B is less than counter C. N is a female and is married to K. P is a male and stands immediately ahead of M who is married to J. More than one person stands on the west of P. Q stands immediately ahead of S, who stands to the west of O, who is a male. L is married to U, who is a female. L stands on the west of T. T is male. The one who stands last at counter A is a female and is not married to K. N does not stand in the same queue with O. V is one of the person standing in the queue. Q is a female. The wife of L does not stand first in the queue. **(SBI PO Mains 2020)**

143. Who among the following person stands first at counter B?

- (a) N
- (b) M
- (c) T
- (d) L
- (e) None of these

144. Who among the following is standing at the third position in the queue on counter D?

- (a) Q
- (b) M
- (c) S
- (d) Cannot be determined
- (e) None of these

145. Who among the following is standing behind O in the queue?

- (a) K
- (b) L
- (c) P
- (d) No one
- (e) None of these

146. The wife of K is standing against which of the following counter?

- (a) A
- (b) B
- (c) C
- (d) D
- (e) Either Counter B or D

147. Who among the following is standing to the immediate right of the person standing at the second position in the queue on counter C?

- (a) M





- (b) J  
(c) O  
(d) N  
(e) None of these

### Answer:

Person	Birth year	Age	Fruit
Viraj	1938	80	Banana
Anko	1959	59	Grapes
Charu	1962	56	Cherry
Tarun	1983	35	Orange
Monika	1995	23	Mango
Vishakha	2000	18	Apple

- 1.Ans(e)  
2.Ans(e)  
3.Ans(c)  
4.Ans(e)  
5.Ans(a)

### Answer:

Sol.

Floor	Flat A	Flat B
3	3 Rooms	4 Rooms
2	6 Rooms	9 Rooms
1	8 Rooms	2 Rooms

- 6.Ans(c)  
7.Ans(d)  
8.Ans(c)  
9.Ans(a)  
10.Ans(d)

Months	Person	Days
--------	--------	------



<b>January</b>	D	31
<b>February</b>	A	26
<b>March</b>	G	11
<b>April</b>	C	3
<b>May</b>	E	21
<b>June</b>	B	27
<b>July</b>	F	8

11. Ans(d)

12. Ans(a)

13. Ans(d)

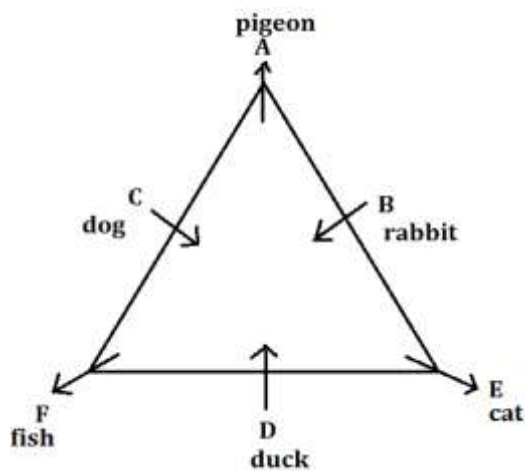
14. Ans(b)

15. Ans(a)

**Answer:**

16. Ans(e)

17. Ans(d)



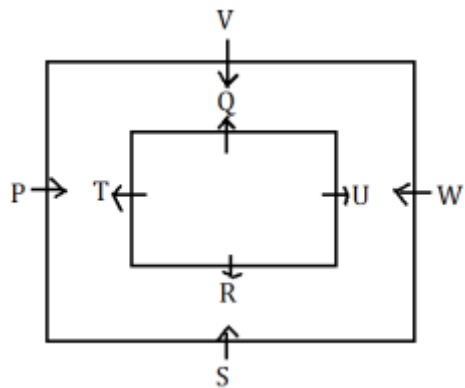
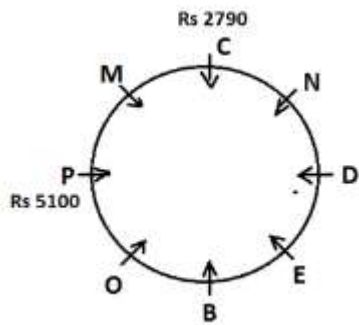
**Answer:**

18. Ans(b)

19. Ans (a)

20. Ans (d)

21. Ans (d)

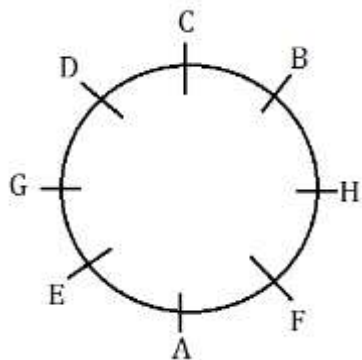


22. Ans. (c)

23. Ans. (d)

24. Ans. (a)

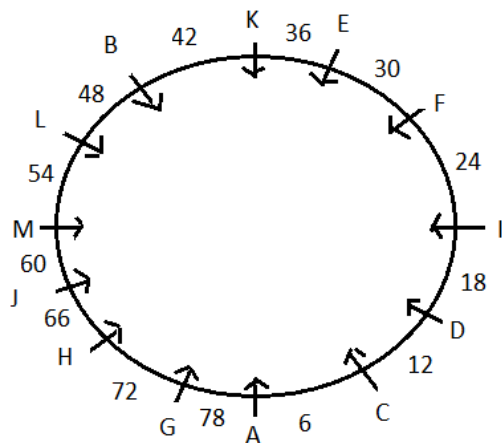
Direction (25-26):



25. Ans. (a)

26. Ans. (c)

Directions (27-31):



27. Ans(d)

28. Ans(c)

29. Ans(c)

30. Ans(b)

31. Ans(a)

**Direction(32-36)**

Designations	Persons	Fruits
CMD	C	Banana
MD	E	Litchi
CEO	A	Grapes
COO	D	Mango
SE	B	Kiwi
JE	F	Guava

32. Ans. (e)

33. Ans. (c)

34. Ans. (a)

35. Ans. (e)

36. Ans. (e)

**Direction (37-41):**

Years	Persons
1978	Z
1982	X
1995	O
1997	R
2013	J
2015	L



X(-) == Z(+)

|  
R(-) == O(+)

|  
L(-) — J(+)

37. Ans. (c)

38. Ans. (c)

39. Ans. (a)

40. Ans. (a)

41. Ans. (c)

**Directions (42-46):**

Floor			
6	A		
5	J		D
4	F	B	G
3	N	H	L
2	E	K	C
1	O	M	I

42. Ans(e)

43. Ans(d)

44. Ans(e)

45. Ans(c)

46. Ans(b)

**Directions (47-51):**

Year	Person	Fruit
1950	F	Fig
1953	D	Mango
1961	E	Guava
1968	A	Apple
1972	G	Litchi
1985	B	Grapes
1996	C	Pomegranate

47. Ans(b)

48. Ans(b)

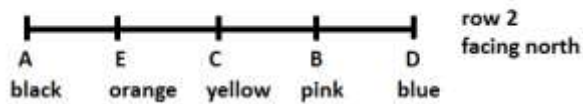
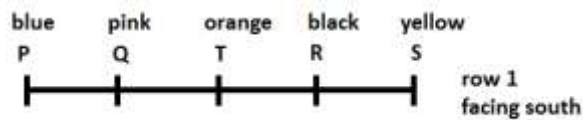
49. Ans(c)

50. Ans(e)

51. Ans(e)

**Directions (52-56):**

Sol.



52. Ans(a)

53. Ans(e)

54. Ans(c)

55. Ans(b)

56. Ans(e)

**Direction (57-61):**

Persons	City	Flower
A	Patna	Cosmos
B	Patna	Iris
C	Mumbai	Tulip
D	Surat	Lily
E	Surat	Sunflower
F	Surat	Orchid
G	Mumbai	Tithonian
H	Patna	Rose
I	Patna	Lotus

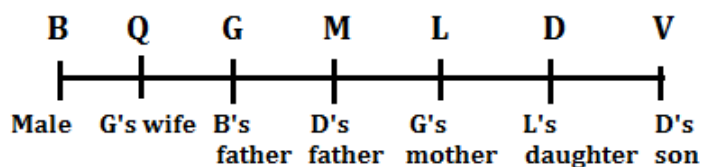
57. Ans. (a)

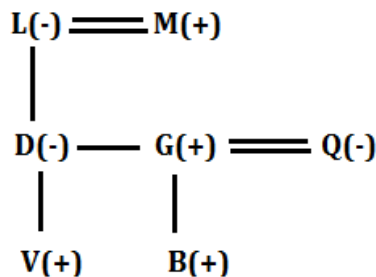
58. Ans. (d)

59. Ans. (c)

60. Ans. (d)

61. Ans. (d)

**Direction (62-66):**



62. Ans. (d)

63. Ans. (c)

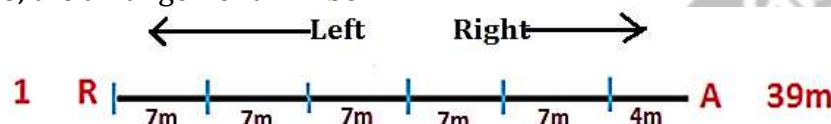
64. Ans. (c)

65. Ans. (a)

66. Ans. (c)

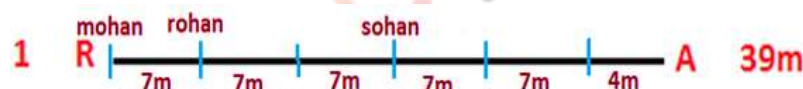
**Direction (67-71):**

Sol. Step I: Let us start with the detail solution. As given in the diagram that there is a line-1 RA and Six people Mohan, Sohan, Rohan, Ankit, Vinit and Sumit are standing in line 1-RA. All of them are facing north. With distance between them increasing in multiples of 7 from the left end (i.e. suppose Mohan is left end of the line at point R then the remaining people will stand at a distance as follows -7m, 14m, 21m.... from the end). So, the arrangement will be----

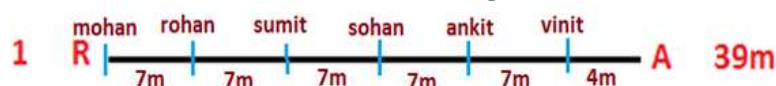


In this arrangement the distance between two persons standing next to each other is seven whereas from first person standing at left end the distance will be in multiple of 7. And as the total length of the line is 39m and five persons are standing in the line at a distance of multiple of 7 so it will be 35m, remaining distance will be 39-35=4m from the right end.

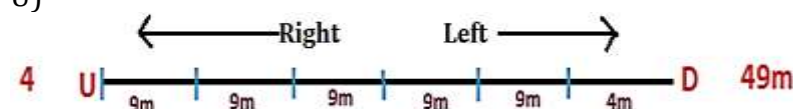
Step II: Now, let us start with the sitting arrangement of line 1-RA. Mohan is standing at the left end of the line. Two persons are standing between Mohan and Sohan. Rohan stand second to the left of Sohan.



Step III: Sumit is an immediate neighbor of Rohan. Only one person stands between Sumit and Ankit. So, the final arrangement of line1-RA is-----



Step IV: Similarly, six people Anita, Ambika, Amrita, Aanchal, Arpita and Ajita are standing in line-4 UD. All of them are facing south. with distance between them increasing in multiples of 9 from the end (i.e. if first person is left end of the line at point U and the remaining will be stand at the distance as follows-9m, 18m,27 m....from point U)



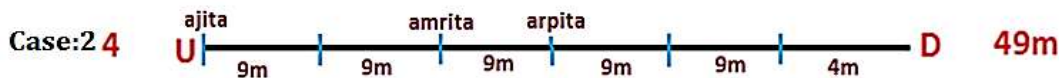
In this arrangement the distance between two persons standing next to each other is nine whereas from first person standing at right end the distance will be in multiple of





9. And as the total length of the line is 49m and five persons are standing in the line at a distance of multiple of 9 so it will be 45m, remaining distance will be  $49-45=4$ m from the right end.

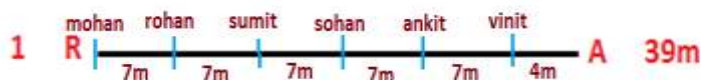
Step V: Amrita is standing is at 3<sup>rd</sup> position from the right end. Arpita is an immediate neighbor Of Amrita. Two people are standing between Arpita and Ajita. From this there can be two possible cases-----



Step VI: More than three persons stand between Ajita and Anita. Aanchal stands to the immediate left of Ajita. Ambika and Arpita are immediate neighbours. So, case-1 will be eliminated and the final arrangement of line 2-UD is-



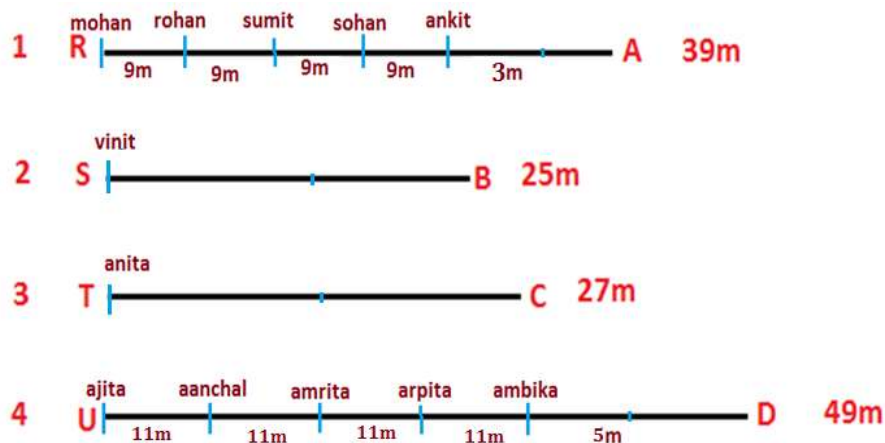
Now, final solution is-----



**67. Ans.(c)**

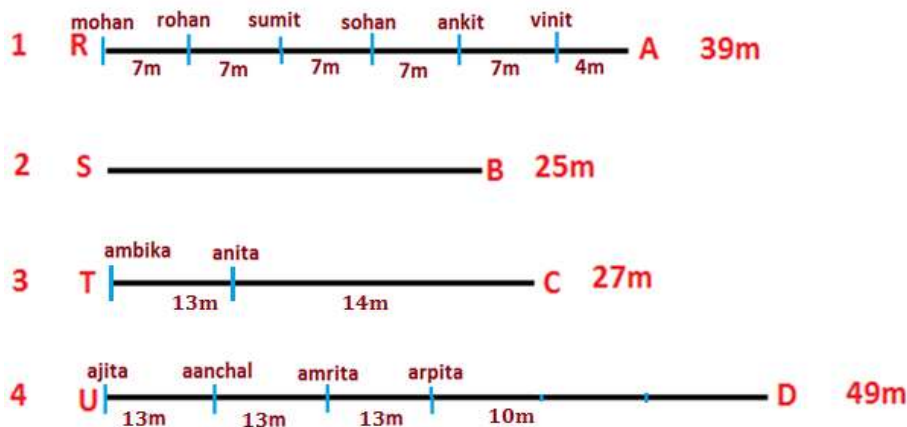
**68. Ans.(b)**

Sol. As only five people can stand in both lines RA and UD at a distance in multiples of 9m and 11m respectively, So one person from each line will move to line 2-SD and line 3-TC respectively.



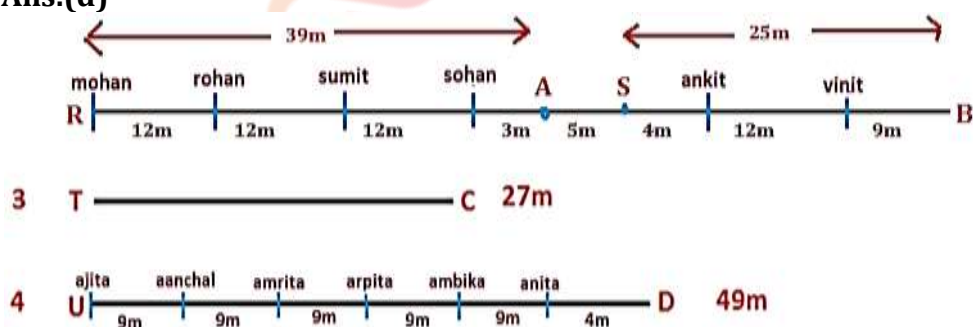
69. Ans.(c)

As only four people can stand in line 4- UD at a distance in multiples of 13m, So two person from line 4-UD will move to line 3-TC respectively.



Sol.

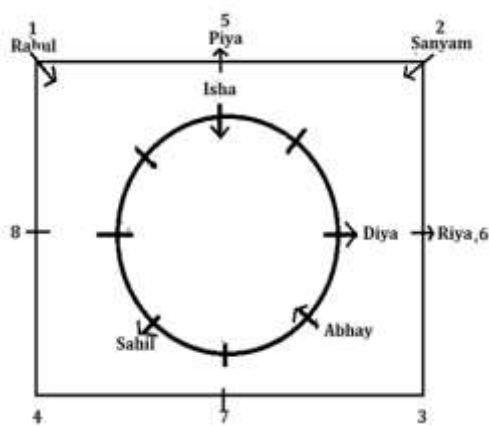
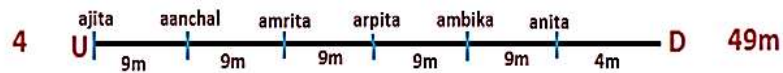
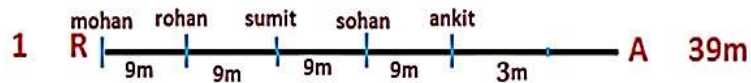
70. Ans.(d)



Sol.

71. Ans.(e)

Sol.



72. Ans. (d)

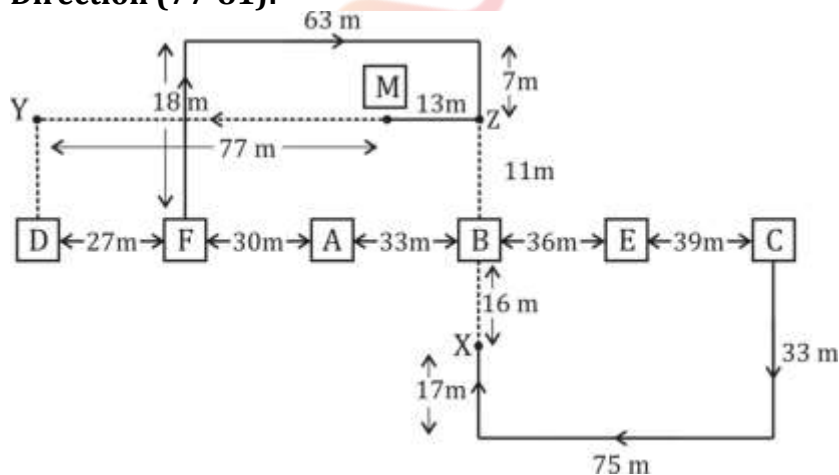
73. Ans. (b)

74. Ans. (c)

75. Ans. (e)

76. Ans. (b)

**Direction (77-81):**



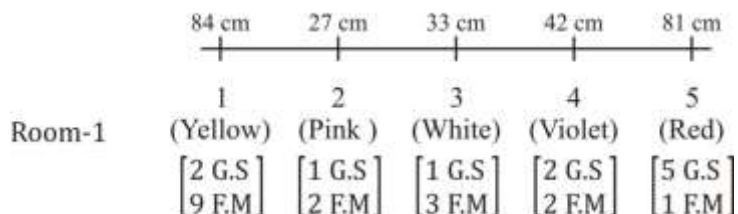
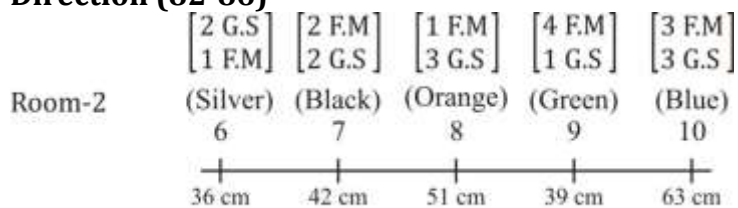
77.b

78.e

79.a

80.d

81.d

**Direction (82-86)**

82.c

83.e

84.b

85.c

86.b

**Directions (87-91):**

Month	Date	Persons	Colour/Fruit
March	7	E	APPLE
March	9	B	GREEN
March	16	A	YELLOW
March	19	D	BANANA
July	7	F	CHERRY
July	9	H	RED
July	16	G	BLUE
July	19	C	MANGO

87. Ans.(a)

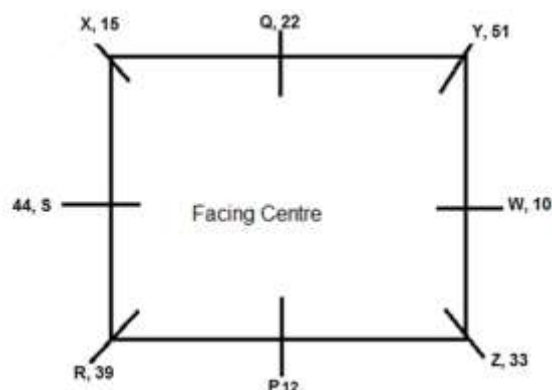
88. Ans.(b)

89. Ans.(a)

90. Ans.(a)

91. Ans.(c)

**Directions (92-96):**



92. Ans. (e)

93. Ans. (d)

94. Ans. (b)

95. Ans. (a)

96. Ans. (d)

**Directions (97-101):**

From the given statements, the persons whose name starts with a letter before the letter 'M' were born in the first half of the year and the persons whose name starts with a letter after the letter 'M' were born in the second half of the year.

It means Ayush, Gaurav, Gopi, Kishan, Kumar and Kunal were born in the months of January, March and June. Pranav, Puja, Ram, Sriti, Swati and Yati were born in the months of July, September and October.

The person whose name consists of even number of letters after counting the number of letters is born in the month having odd number of days and Vice-Versa.

It means – Pranav, Gaurav, Swathi, Puja, Kishan and Gopi were born on 7<sup>th</sup> and Kumar, Kunal, Ram, Yaati, Ayush and Sriti were born on 16<sup>th</sup>.

Months	Date	Persons
January	7	Gaurav
	16	Ayush
March	7	Gopi
	16	Kumar
June	7	Kishan
	16	Kunal
July	7	Pranav
	16	Ram
September	7	Swathi
	16	Sriti
October	7	Puja
	16	Yaati

Sol.

97. Ans. (c)

98. Ans. (e)

99. Ans. (a)

100. Ans. (b)

101. Ans. (e)

**Directions (102-104):**



By using the given information:

Only three persons live between W and R, who shops on Amazon. R lives on one of the even number floor above W and Q, who does not shops on Flipkart and Myntra and also does not lives on the second floor. Both W and Q live on the even numbered floor. Two persons live between Q and the one who shops on Jabong. Three persons live between the one who shops on Jabong and the one who shops on Ajio. We have three possible cases for that. Case1, Case2, and Case3.

Floors	Case1		Case2		Case3	
	Persons	Website	Persons	Website	Persons	Website
8	R	Amazon				
7		Ajio		Jabong		
6	Q		R	Amazon	R	Amazon
5						Ajio
4	W		Q		Q	
3		Jabong		Ajio		
2			W		W	
1						Jabong

The number of persons living between the one who shops on Jabong and R is same as the number of persons living between the one who shops on Ajio and P. Now Case2 and Case3 will be eliminated as we can't place P. Three persons live between V and S, who lives below V and also does not shops on Jabong. The one who shops on Flipkart lives immediately above the one who shops on Shopclues. Neither V nor P shops on Flipkart and Myntra.

Case1		
Floors	Persons	Website
8	R	Amazon
7		Ajio
6	Q	
5	V	Flipkart
4	W	Shopclues
3		Jabong
2	P	
1	S	

T lives on one of the floors below U. Q, who does not shop on Flipkart and Myntra. Neither V nor P shops on Flipkart, TataCliq and Myntra so S shops on Myntra and Q shops on Tatacliq and P shops on Jiomart. Now we have our final arrangements.

Floors	Persons	Website
8	R	Amazon
7	U	Ajio
6	Q	Tatacliq
5	V	Flipkart
4	W	Shopclues
3	T	Jabong
2	P	JioMart
1	S	Myntra

102. Ans. (c)

103. Ans. (e)

104. Ans. (e)

#### Directions (105-108):

By using given information:

If R was born on 12<sup>th</sup> May then the person born immediately after R and immediately before R should be on gap of 3 days. F was born on 16<sup>th</sup> June. So, the person born immediately before F was born on 12<sup>th</sup> June and the person born immediately after F was born on 20<sup>th</sup> June. Only two persons



were born before F. From this we get all the dates. i.e. 8<sup>th</sup> June, 12<sup>th</sup> June, 16<sup>th</sup> June, 20<sup>th</sup> June, 24<sup>th</sup> June, 28<sup>th</sup> June, and 2<sup>nd</sup> July.

The number of persons born before D, who likes Apple is equal to the number of persons born after G, who likes Guava. We have four possible cases for that. Case1, Case1(a), Case2, Case2(a).

Dates	Case1 Persons	Case1(a) Persons	Case2 Persons	Case2(a) Persons
8 <sup>th</sup> June	D	G		
12 <sup>th</sup> June			D	G
16 <sup>th</sup> June	F	F	F	F
20 <sup>th</sup> June				
24 <sup>th</sup> June				
28 <sup>th</sup> June			G	D
2 <sup>nd</sup> July	G	D		

Only one person was born between G and A, who likes Oranges. Now Case1(a) will be eliminated as we can't place A. B, who does not like Kiwi was born one of the dates before E but after C.

Dates	Case1 Persons	Case2 Persons	Case2(a) Persons
8 <sup>th</sup> June	D	C	C
12 <sup>th</sup> June	C	D	G
16 <sup>th</sup> June	F	F	F
20 <sup>th</sup> June	B	A	A
24 <sup>th</sup> June	A	B	B
28 <sup>th</sup> June	E	G	D
2 <sup>nd</sup> July	G	E	E

B was not born after A. Now Case2, and Case2(a) will be eliminated as we can't place B. E do not like Grapes, Peach, and Kiwi. F does not like Peach, Kiwi, and Pear.

Dates	Persons
8 <sup>th</sup> June	D
12 <sup>th</sup> June	C
16 <sup>th</sup> June	F
20 <sup>th</sup> June	B
24 <sup>th</sup> June	A
28 <sup>th</sup> June	E
2 <sup>nd</sup> July	G

E do not like Grapes, Peach, and Kiwi, so E likes Pear. F does not like Peach, Kiwi, and Pear, so F likes Grapes. The number of persons born before D, who likes Apple is equal to the number of persons born after G, who likes Guava. B, who does not like Kiwi, so B likes Peach was born one of the dates before E but after C, who likes Kiwi. Now we have our final arrangements.

Dates	Persons	Fruits
8 <sup>th</sup> June	D	Apple
12 <sup>th</sup> June	C	Kiwi
16 <sup>th</sup> June	F	Grapes
20 <sup>th</sup> June	B	Peach
24 <sup>th</sup> June	A	Oranges
28 <sup>th</sup> June	E	Pear
2 <sup>nd</sup> July	G	Guava

105. Ans. (e)





106. Ans. (b)

107. Ans. (c)

108. Ans. (a)

**Directions (109-112):**

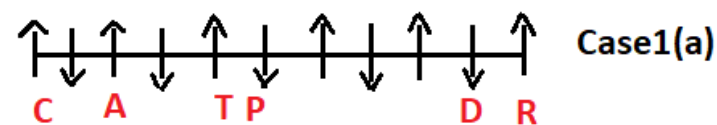
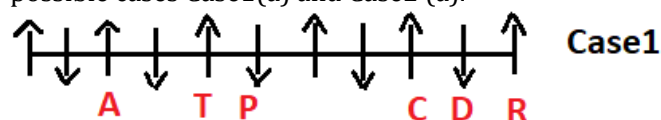
By using given information:

House P is located fourth to the right of House D, which is located to the immediate left of House R.

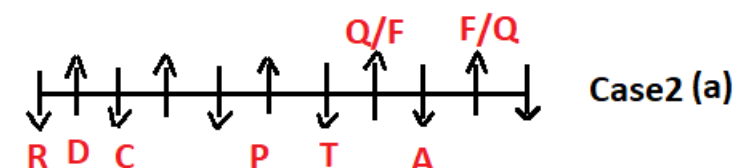
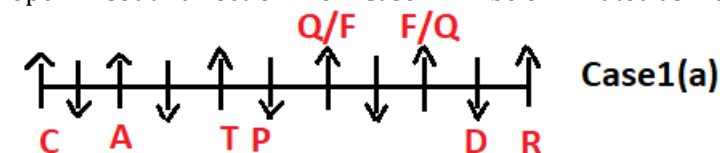
Number of Houses located to the left of House P is one more than the number of Houses located between House R and House P. Only two houses are located to the left of House A. House D is 2<sup>nd</sup> from one of the ends. We have two possible cases for that Case 1 and Case 2.

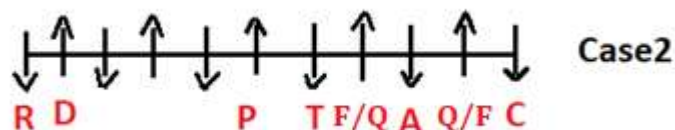


The number of houses located between House P and House A is one less than the number of Houses located between House T and House C. House T is located near House P. Now we have two more possible cases Case1(a) and Case2 (a).

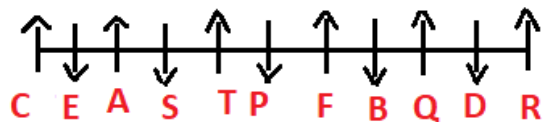


Only one house is located between House F and House Q and the Gates of both of the houses doesn't open in south direction. Now Case 1 will be eliminated as we can't place House Q and House F.





Only one house is located between House E and House S, which is not located near House C. Now case 2(a) will be eliminated as we can't place House E and House S. House B is not located near House A. House Q is located to the immediate left of House B. Now case 2 will be eliminated as we can't place B. Now we have our final arrangements.



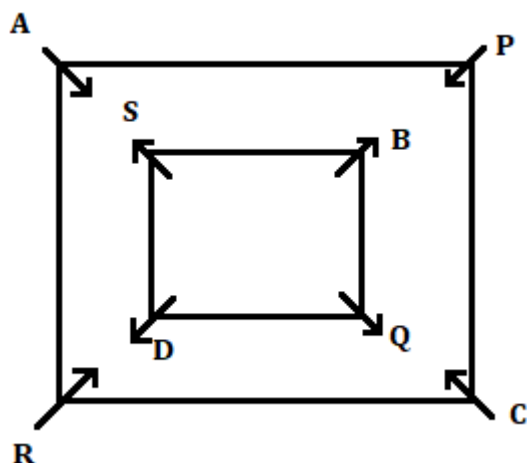
109. Ans. (b)

110. Ans. (d)

111. Ans. (b)

112. Ans. (a)

Direction (113-116):



Sol.

113. Ans. (a)

114. Ans. (b)

115. Ans. (e)

116. Ans. (c)

Direction (117-120):

Post/Department	Production	Management	Finance
General Manager	A-53	B-30	H-60 G-40
Manager	E-48 F-36	D-84	C-24

Sol.

117. Ans. (a)

118. Ans. (b)

119. Ans. (d)

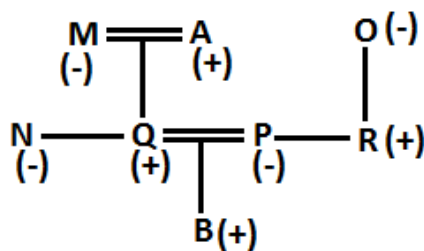
120. Ans. (b)

**Directions (121-124):**

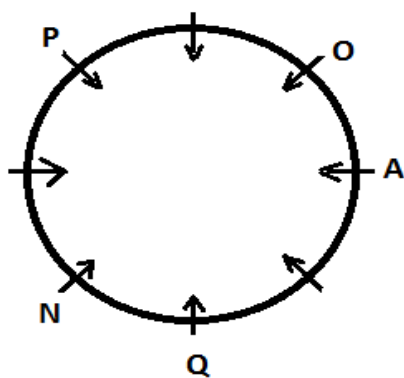
Sol.

Step 1:- From the given conditions, first we will establish the blood relation among the eight members of the family who all are related to Q in a certain way, Q sits third to the left of his mother-in-law from this statement it is clear that Q is a male. B is the grandson of A, N is the aunt of B. N is unmarried. N is the only daughter of M. A and O is not the married couple. O has only one son. O is the mother of R. Son of Q sits third to the right of Q's brother-in-law. R is not married. M is the mother-in-law of P. From this given condition N is sister of Q. Q is married to P, who is sister of R. A is husband of M, who is the mother of N. P is married to Q.

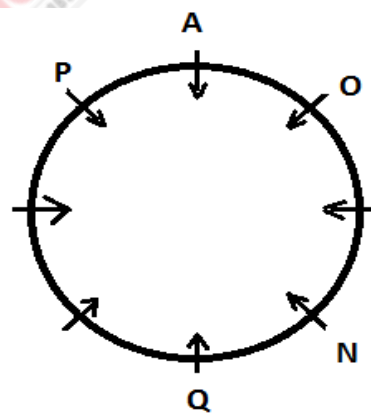
Blood Relation Tree



Step 2 :- Using the given conditions, Q sits third to the left of his mother-in-law, who sits second to the left of sister of R (i.e. P). N is not the immediate neighbour of P. A sits third to the right of N. So, there will be two possible cases in which N sits either on the immediate left or on immediate right of Q.

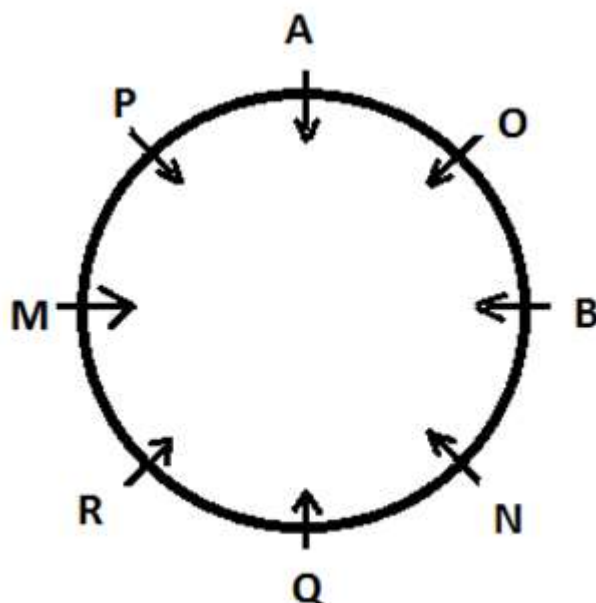


Case 1



Case 2

Step 3 :- From the remaining conditions, M sits on the immediate left of brother in law of Q (i.e. R). So case 1 will be eliminated as there is no possible sitting for M and R. Now continuing with case 2, Son of Q (i.e. B) sits third to the right of Q's brother-in-law (i.e. R) from these condition we get our final solution.



121.Ans.(d)

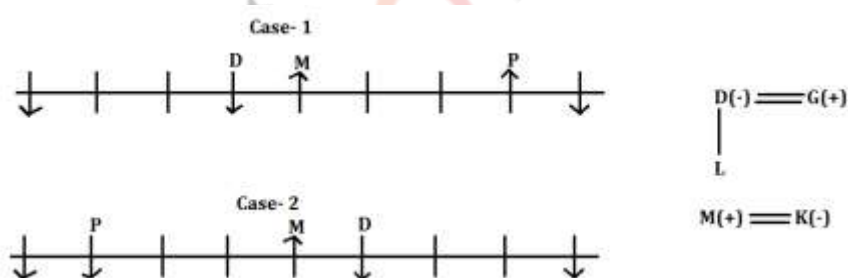
122.Ans.(c)

123.Ans.(a)

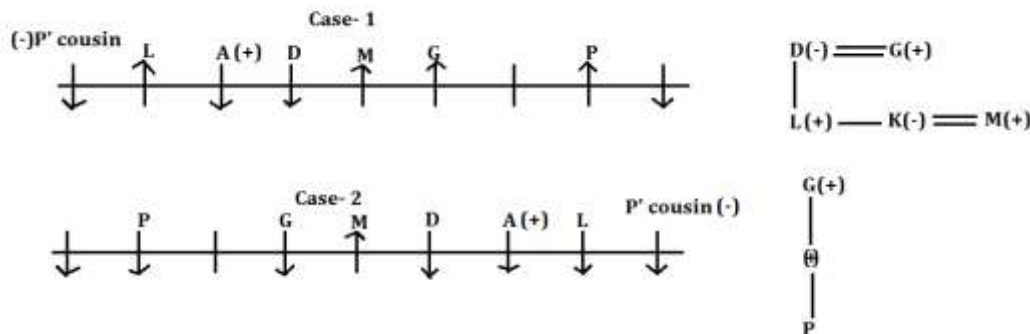
124.Ans.(a)

**Directions (125-128):**

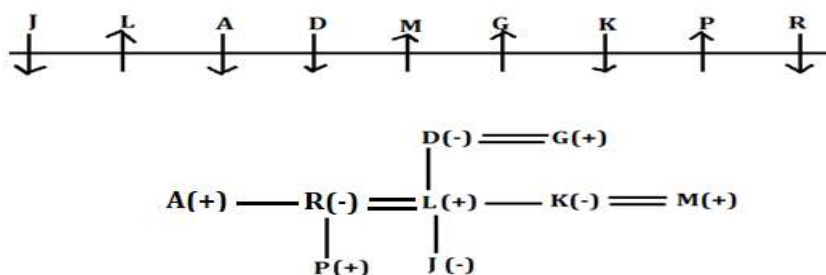
**Sol.** D, who is L's mother sits fourth to the left of P. The ones who sit at the extreme ends face the south direction. G's soul mate D faces the south direction. M, who is the husband of K sits exactly in the middle of the bench and faces the north direction. D sits immediate to M. From these conditions we have two possible cases-



A sits third to the left of G, who is P's grandfather and one of them who sits immediate to M. L, who is male, is the only sibling of K sits exactly between A and P's cousin, who is a female. D's neighbours are males and face the opposite directions. L faces the same direction as G. So new arrangement will be-



R, who is the sister of A sits at one of the extreme ends with a male member. P is the only son of R and both face the opposite directions. So, R is married to L. By these conditions case- 2 is cancelled. A is not married and faces the same direction as K. There is only one possibility that J is sister of P. So final arrangement will be-



125. Ans.(c)

126. Ans.(b)

127. Ans.(e)

128. Ans.(c)

### Directions (129-133):

Sol.

Only two boxes are kept between box A and box C. Yellow colour box is kept immediately below C. Box A is of Blue colour. There is only one box kept between Yellow colour box and Black colour box. Box A is of Blue colour. Blue colour box is kept above Black colour box. Only two boxes are lighter than Blue colour box.

Case 1		Case 2	
Box	Colour	Box	Colour
A	Blue	A	Blue
			Black
C		C	
	Yellow		Yellow
	Black		

> > > > A(Blue) > >

Only three boxes are kept between Red colour and Black colour box. White colour box is heavier than Red colour box but just lighter than Black colour box. Yellow colour box is just lighter than Red colour box. Black colour box is not the heaviest. Only two boxes are kept between box B and



Red colour box. Box B is heavier than box E which is kept immediately below box B. So from these statements case 2a will be eliminated.

Case 1		Case 2a		Case 2b	
Box	Colour	Box	Colour	Box	Colour
A	Blue	A	Blue		Red
	Red		Black	A	Blue
C		C		B	
	Yellow		Yellow	E	Black
B				C	
E	Black		Red		Yellow

> > > > A(Blue) > (Red) > (Yellow)  
 & B > E(Black) > (White) > (Red) > (Yellow)

Black colour box is just lighter than box D. Only one box kept between box E and box F. Box G is kept immediately below Green colour box. So, case 2b gets eliminated.

Case 1	
Box	Colour
A	Blue
D	Green
G	Red
C	White
F	Yellow
B	Pink
E	Black

B (Pink) > D (Green) > E (Black) > C (White) > A (Blue) > G (Red) > F (Yellow)

129. Ans(a)  
 130. Ans(c)  
 131. Ans(e)  
 132. Ans(c)  
 133. Ans(a)

#### Directions (134-138):

From the given statements, only two employees are junior than the one who has 8 years of working experience. 15 years is the maximum years of working experience which means CEO has 15 years of experience. The CEO salary is 5k less than the square of the smallest two digit number which means CEO has 95k salary (100-5=95). At most one person is senior to S. Here we have two possible cases i.e. case1 and case2. Only two designations are there in between the designations of S and P.

Designations	CASE 1			CASE 2		
	Persons	Experience (years)	Salary	Persons	Experience (years)	Salary
Chief Legal Officer (CLO)						
Chief Marketing Officer (CMO)	P					



Chief Technology Officer (CTO)		8		P	8	
Chief Financial Officer (CFO)						
Chief Operating Officer (COO)	S					
Chief Executive Officer (CEO)		15	95k	S	15	95k

CMO is getting 50K. The sum of the salaries of CLO and CMO is same as the salary of the one who has the maximum work experience which means CLO gets 45K. The working experiences of CMO and CTO are in consecutive years which means CMO has 7 years of experience.

Designations	CASE 1			CASE 2		
	Person	Experience (years)	Salary	Persons	Experience (years)	Salary
Chief Legal Officer (CLO)			45K			45K
Chief Marketing Officer (CMO)	P	7	50K		7	50K
Chief Technology Officer (CTO)		8		P	8	
Chief Financial Officer (CFO)						
Chief Operating Officer (COO)	S					
Chief Executive Officer (CEO)		15	95k	S	15	95k

R is junior than P. Q is junior than R and having the working experience equal to the sum of the digit of the salary what R gets and therefor, case 1 gets eliminated here. Hence, Q has 5 years of experience. The salary of CTO is less than 57K which means CFO gets 60 K. The one who is COO has 3 years more experience than the one who is getting 60K which means COO has 13 years of experience. The one who has 10 years of experience earns 10K less than U who is not CFO. The salary of P is a multiple of 11 which means salary of P is 55k (between 50K and 60K)

Designations			
	Persons	Experience(years)	Salary
Chief Legal Officer (CLO)	Q	5	45K
Chief Marketing Officer (CMO)	R	7	50K
Chief Technology Officer (CTO)	P	8	55K
Chief Financial Officer (CFO)	T	10	60K
Chief Operating Officer (COO)	U	13	70K
Chief Executive Officer (CEO)	S	15	95K

134. Ans.(d)

135. Ans.(a)

136. Ans.(c)

137. Ans.(b)

138. Ans.(a)

#### Directions (139-142):

Sol.

Anko was born in the year 1979. The difference of age between Anko and Varun is 24 years. Trisha's age is sum of the digits of the year in which Varun was born. (i.e. there are two possibilities for the birth year of Varun and Trisha that if Varun born in 2013(5years) then Trisha born in 2010(8years) and if Varun born in 1955 then Trisha born in 1998.) The one who likes





Red colour is 3 years elder to Trisha (two possible cases for then one who like Red colour which is 2010/1995).

Case 1				Case 2			
Person	Year	Age	Colour	Person	Year	Age	Colour
Varun	1955	63 yrs		Anko	1979	39 yrs	
Anko	1979	39 yrs		Varun	2003	15 yrs	
	1995	23 yrs	Red		2010	8 yrs	Red
Trisha	1998	20 yrs		Trisha	2013	5 yrs	

Mohit's age is either the last two digits or reverse of the last two digits of the year in which Trisha was born. So, in case 2 age of mohit can be 13 or 31, but only one person is older than Mohit. Therefore, age of mohit is 31 in case 2 and 89 in case 1.

Case 1				Case 2			
Person	Year	Age	Colour	Person	Year	Age	Colour
	1928	90 yrs		Anko	1979	39 yrs	
Mohit	1929	89 yrs		Mohit	1987	31 yrs	
Varun	1955	63 yrs					
Anko	1979	39 yrs		Varun	2003	15 yrs	
	1995	23 yrs	Red		2010	8 yrs	Red
Trisha	1998	20 yrs		Trisha	2013	5 yrs	

Charu is born before Anko. Therefore, case 2 will be eliminated. The who likes Blue color is just younger than Mohit. The one who likes white colour is 1 year younger than the one who likes Pink colour.

Case 1			
Person	Year	Age	Colour
Charu	1928	90 yrs	Pink
Mohit	1929	89 yrs	White
Varun	1955	63 yrs	Blue
Anko	1979	39 yrs	Yellow
Virat	1995	23 yrs	Red
Trisha	1998	20 yrs	Black

139. Ans(a)

140. Ans(c)

141. Ans(c)

142. Ans(c)

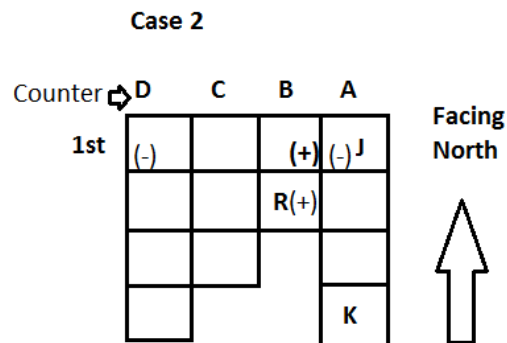
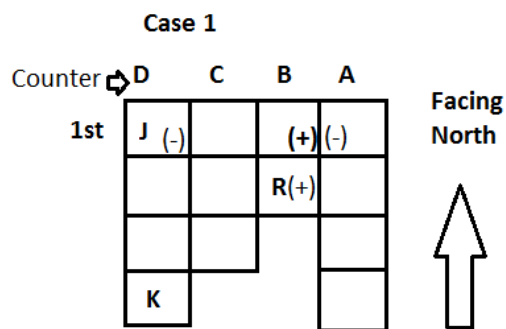
### Directions (143-147):

Sol.

Number of persons standing in ques against counter D and counter A is same. The first person standing at counter D and A is a female. Number of person at counter B and C is less than counter A. Number of person standing at counter B is less than counter C. So, from these conditions we get that number of persons standing on counter D and A is 4, while number of persons on counter C is 3 and B is 2. The first person at counter B is a male and he is not

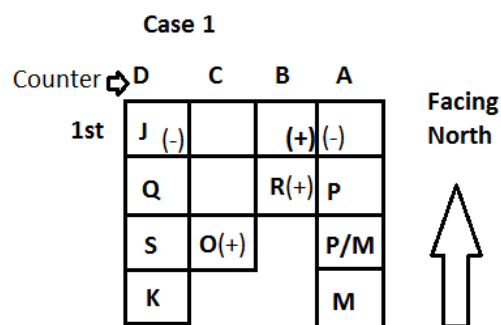


married. Only one person sits on the east of R, who is married to Q. N is a female and is married to K. Two person stands between K and J. Q is a female.



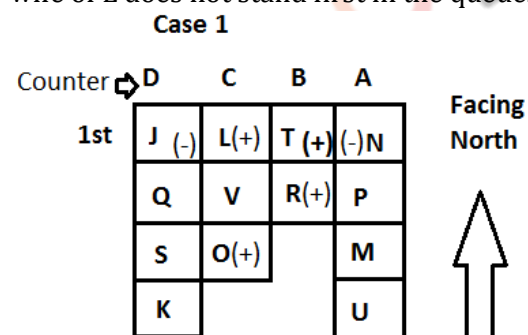
Married Couple- (+)R  $\equiv$  Q (-)

P is a male and stands immediately ahead of M who is married to J. More than one person stands on the west of P. So from these case 2 will be eliminated as no couple stands in the same queue. Q stands immediately ahead of S, who stands to the west of O, who is a male.



Married Couple- (+)R  $\equiv$  Q (-)  
M(+)  $\equiv$  J (-)

L is married to U, who is a female. L stands on the west of T. T is male. The one who stands last at counter A is a female and is not married to K. N does not stand in the same queue with O. The wife of L does not stand first in the queue.



Married Couple- (+)R  $\equiv$  Q (-)  
M(+)  $\equiv$  J (-)  
(+)K  $\equiv$  N (-)  
(+)L  $\equiv$  U (-)

143. Ans(c)

144. Ans(c)

145. Ans(d)

146. Ans(a)

147. Ans(e)



## Aatma Nirbhar Reasoning Topic Wise Online Test Series

### Topic 2- Input & Output

**Directions (1-3):** Study the given information and answer the questions:

When a number arrangement machine is given an input line of numbers, it arranges them following a particular rule. The following is an illustration of an input and its rearrangement. **(IBPS PO 2018)**

<b>Input-</b>	65	18	41	53	72	34	89	26
<b>Step1-</b>	195	36	123	159	144	68	267	52
	↙	↘	↙	↘	↙	↘	↙	↘
<b>Step2-</b>	159	159	36	303	76	335	215	
<b>Step3-</b>	45	45	18	0	42	45	10	
<b>Step4-</b>	22.5	22.5	9	0	21	22.5	5	

Step IV, is the last step of the above arrangement as the intended arrangement is obtained.

As per the rules followed in the given steps find out the appropriate steps for the given input:

**Input:** 25   22   93   56   17   74   39

Q1. What is the sum of the numbers at both the ends in step III of the given arrangement?

- (a) 36
- (b) 63
- (c) 60
- (d) 123
- (e) None of the above

Q2. Which element is 2<sup>nd</sup> to the right of the one which is 4<sup>th</sup> to the left element in step I?

- (a) 112
- (b) 44
- (c) 148
- (d) 75
- (e) None of these

Q3. What is the products of the numbers which is 3<sup>rd</sup> from the right end and 3<sup>rd</sup> from the left end in final step of the given arrangement?

- (a) 189
- (b) 72
- (c) 13.5
- (d) 180
- (e) No such step



**Direction (4-7):** A number arrangement machine when given an input line of numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement. (SBI PO 2019)

**Input: 734269 825497 647538 219354 961357 321658**

Step I: 962437 794528 835746 453912 753169 856123

Step II: 453912 753169 794528 835746 856123 962437

Step III: 135924 135796 579248 357468 135268 379246

Step IV: 3458 33554 351832 152848 31048 211824

Step V: 20 20 22 28 16 18

Step V is the last step of the above arrangement as the intended arrangement is obtained. As per the rules followed in the given steps find out the appropriate steps for the given input:

**Input: 856347 745982 329584 512379 954267 463512**

Q4. What is the difference between the 3<sup>rd</sup> number from left in step II and 2<sup>nd</sup> number from right in step IV?

- (a) 391834
- (b) 391826
- (c) 134099
- (d) 134091
- (e) None of these

Q5. Which of the following number is 3<sup>rd</sup> from right in step V?

- (a) 10
- (b) 20
- (c) 22
- (d) 23
- (e) None of these

Q6. What will come when the number which is 2<sup>nd</sup> from right in step IV is divided by the number which is 2<sup>nd</sup> from left in final step?

- (a) 14912
- (b) 15992
- (c) 13592
- (d) 12952
- (e) None of these

Q7. What is the sum of 2<sup>nd</sup> number from left in step II and 4<sup>th</sup> number from right in step III?

- (a) 1119927
- (b) 1121707
- (c) 647015
- (d) 648795
- (e) None of these

**Directions (8-12):** Study the following information to answer the given questions:



A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement. **(RRB PO 2018)**

Input: 78 former 44 quicker colder 65 taller outer 27 8

Step I: cold former 44 quicker 65 taller outer 27 8 79

Step II: 9 cold former 44 quicker 65 outer 27 79 tall

Step III: form 9 cold 44 quicker outer 27 79 tall 66

Step IV: 28 form 9 cold 44 quicker 79 tall 66 out

Step V: quick 28 form 9 cold 79 tall 66 out 45

Step V is the last step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

Input: warmer 76 94 scraper locker 11 greater 52 39 adopter

8. How many steps would be needed to complete the arrangement?

- (a) IV
- (b) V
- (c) VII
- (d) VI
- (e) None of these

9. What will the addition of the numbers which is third from the right end in step II and 2nd from the right end in step IV?

- (a) 112
- (b) 210
- (c) 151
- (d) 116
- (e) None of these

10. Which of the following would be the difference of the numbers which is 3rd from left end in step IV and 2<sup>nd</sup> from right end in Step II?

- (a) 90
- (b) 83
- (c) 25
- (d) 10
- (e) None of these

11. Which of the following element will be 6<sup>th</sup> to the left of 3<sup>rd</sup> from the right end in step V?

- (a) 95
- (b) adopt
- (c) 40
- (d) scrap
- (e) None of these

12. In which of the following step '39 95 warm' would be find in the same order?

- (a) Step V
- (b) Step II and III
- (c) Step II
- (d) Step III and IV



(e) None of these

**Direction (13-16):** A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement. **(IBPS PO 2017)**

**Input- njes glfu 53 18 31 44 wird dect**

Step I: yktf 106 njes glfu 18 31 44 dect

Step II: plgu 88 yktf 106 glfu 18 31 dect

Step III: inhw 62 plgu 88 yktf 106 18 dect

Step IV: fgev 36 inhw 62 plgu 88 yktf 106

Answer the following questions based on the following input: -

**Input- olpu htqs 21 73 48 9 xcek bdgv**

13. What will be the resultant if fifth number from the left end of step I is added to fifth number from right end of step III?

- (a) 153
- (b) 106
- (c) 117
- (d) 98
- (e) None of these

14. What will be the third step of the given input?

- (a) Step III-42 jvsu qnrw 96 zegm 146 9 bdgv
- (b) Step III- jvsu 42 qnrw 96 zegm 146 bdgv 9
- (c) Step III- jvsu 42 qnrw zegm 96 146 9 bdgv
- (d) Step III- jvsu 42 qnrw 96 zegm 146 9 bdgv
- (e) None of these

15. Which of the following word/number will be fourth to the left of sixth from the left end in step II?

- (a) 96
- (b) 146
- (c) zegm
- (d) bdgv
- (e) None of these

16. What will be the twice of the difference of sixth number from the left end of step I and fifth number from right end of step IV?

- (a) 14
- (b) 12
- (c) 28
- (d) 44
- (e) None of these

**Directions (17-18):** Study the following diagram and convert it into other diagrams by implementing the instructions which is given in each step to get next step. **(SBI PO 2017)**



I4	RS2	EK3
AC9		MT7
F8	O5	UL

Interchange the Alphabets to get step 1 as arrows mention in the above figure.

UL4	O2	F3
MT9		AC7
EK8	RS5	I

Step-1

For Step-2:

- (i) If the alphabets contain one consonant and one vowel and the number with them is greater than 3, then subtract 3 from the given number.
- (ii) If the alphabets are two consonant and the number with them is greater than 5, then change the letters with the previous letter in alphabetical series.

UL1	O2	F3
LS9		AC4
EK5	RS5	I

Step-2

For Step-3 : step 3 is coded in some special pattern.

EK5	R2	I
UL1		F3
LS9	WX5	AC4

Step-3

As per the rules followed in the above step, find out the appropriate steps for the given input.

And answer the following questions.

A5	LM3	FT2
ZU8		BC6
G5	S7	MO

17. Which element comes in step-2 in the second column of third row?

- (a) LM7
- (b) KL7





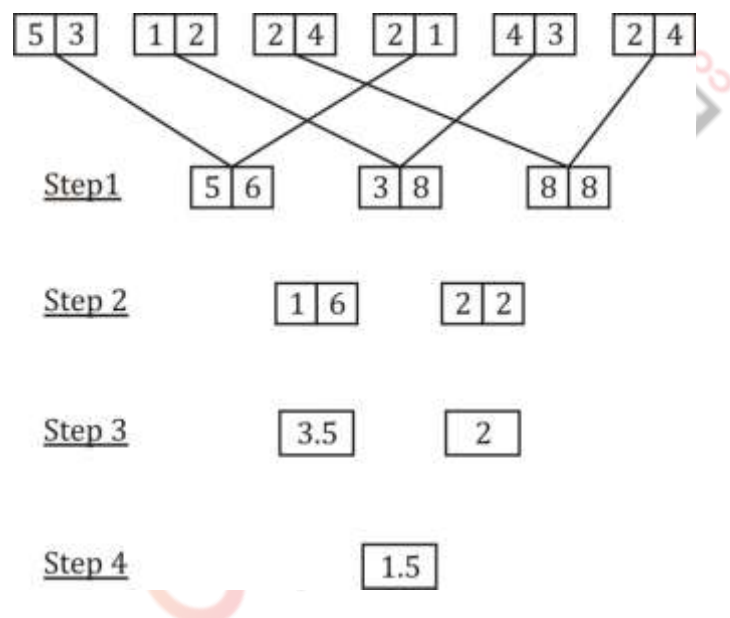
- (c)ZU3  
(d)AB8  
(e)None of these

18. Which element replaces AB8 in step-3?

- (a)PQ7  
(b)ZU3  
(c)FT5  
(d)M02  
(e)None of these

**Directions (19-21):** Study the given information carefully and answer the given questions.

An input-output is given in different steps. Some mathematical operations are done in each step. No mathematical operation is repeated in next step. **(SBI PO 2017)**



As per the rules followed in the steps given above, find out in each of the following questions the appropriate step for the given input.

$\begin{bmatrix} 4 & 2 \end{bmatrix}$   $\begin{bmatrix} 5 & 1 \end{bmatrix}$   $\begin{bmatrix} 2 & 9 \end{bmatrix}$   $\begin{bmatrix} 3 & 2 \end{bmatrix}$   $\begin{bmatrix} 7 & 1 \end{bmatrix}$   $\begin{bmatrix} 1 & 4 \end{bmatrix}$

19. Find the addition of the two numbers obtained in step III?

- (a) 1.5  
(b) 3  
(c) 7  
(d) 3.5  
(e) None of these

20. Find the difference between sum of numbers which obtained in 1st step and sum of numbers obtained in all other steps?

- (a) 232  
(b) 185



- (c) 188
- (d) 183.5
- (e) None of these

21. Find the multiplication of the numbers obtained in step II?

- (a) 426
- (b) 462
- (c) 188
- (d) 98
- (e) None of these

**Directions (22-26):** Study the following information carefully to answer the given questions: **(RRB PO 2017)**

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule. The following is an illustration of input and rearrangement.

**Input: 97 nosy 21 snow cold 32 asian 46 65 viral 83 high**

Step I: 211 97 nosy snow cold asian 46 65 viral 83 high 322

Step II: asian 211 97 nosy snow 46 65 viral 83 high 322 cold

Step III: 463 asian 211 97 nosy snow viral 83 high 322 cold 654

Step IV: high 463 asian 211 97 snow viral 83 322 cold 654 nosy

Step V: 835 high 463 asian 211 snow viral 322 cold 654 nosy 976

Step VI: snow 835 high 463 asian 211 322 cold 654 nosy 976 viral

Step VI is the last step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

**Input: peak 18 utility 76 emerge 27 beautiful 37 51 visible 86 know**

22. How many steps would be needed to complete the arrangement?

- (a) X
- (b) VIII
- (c) V
- (d) VI
- (e) None of these

23. What will the addition of the numbers which is fifth from the left end in step II and 5<sup>th</sup> from the right end in step IV?

- (a) 312
- (b) 210
- (c) 162
- (d) 165
- (e) None of these

24. Which of the following would be the difference of the numbers which is 2<sup>nd</sup> from left end in step IV and 2<sup>nd</sup> from right end in Step II?

- (a) 290
- (b) 83
- (c) 193



- (d) 101  
(e) None of these

25. Which of the following element will be 6<sup>th</sup> from the left of 3<sup>rd</sup> from the right end in step V?

- (a) 181  
(b) beautiful  
(c) 373  
(d) know  
(e) None of these

26. In Step IV, which of the following word/number would be on 4<sup>th</sup> position (from the left end)?

- (a) visible  
(b) 181  
(c) 97  
(d) utility  
(e) None of these

**Directions (27-31):** Read the following information carefully and answer the following questions. A number arrangement machine when given an input line of numbers rearranges them following a particular rule. The following is an illustration of input and rearrangements. (IBPS PO Mains 2020)

**Input: stadium language lunatic ambition condition consonant**

Step I: stadium lunatic language consonant condition ambition

Step II: ttadiun munatid manguagf donsonanu donditioo bmbitioo

Step III: adinttu adimntu aafggmnu adnnnoosu ddiinooot bbiimoot

Step IV: bejouuv bejnouv bbghhnov beooopptv eejjopppu ccjnpupu

Step V: bbghhnov bejnouv bejouuv beooopptv ccjnpupu eejjopppu

Step V is the last step of the rearrangements. Based on the following logic rearrange the given input.

**Input: dangerous duplicate murder cannot survive triangle**

27. In which step 'efostv' will appear before the final step?

- (a) Step III  
(b) Step II  
(c) Step IV  
(d) Step I  
(e) None of these

28. What will be the Step III of the given input?

- (a) adegruz firtuvv eenrsu acefilptu aeegnortu adnnou  
(b) adegruz firtuvv denrsu acefilptu aeegnortu adnnov  
(c) bdegruz firtuvv denrsu acefilptu aeegnortu adnnou  
(d) afgilnru firtuvv denrsu acefilptu aeegnortu adnnou  
(e) None of these

29. What is the position of 'beoopv' from left end in Step IV?

- (a) Second  
(b) Third  
(c) Fourth  
(d) Fifth  
(e) None of these



30. What will be the last step of the given input?

- (a) bdfgjmquv befhsva beoopv bffhopsuv bfostv gjsuvww
- (b) befgjmquv befhsva beoopv bffhopsuv efostv gjsuvww
- (c) cdfgjmquv befhsva beoopv bffhopsuv efostv gjsuvww
- (d) bdfgjmquv beoopv bffhopsuv bghjmosv efostv gjsuvww
- (e) None of these

31. Which words are immediate left and immediate right of 'nurdes' in Step II respectively?

- (a) uragedz turvivf
- (b) eangerout dannou
- (c) euplicatf eangerout
- (d) turvivf, euplicatf
- (e) None of these

**Directions (32-34):** Study the given information and answer the questions: **(SBI PO Mains 2020)**

When a number arrangement machine is given an input line of numbers, it arranges them following a particular rule. The following is an illustration of an input and its rearrangement.

**INPUT: 76 91 29 83 47 66 39 57**

**STEP I: 152 182 58 166 94 132 78 114**

**STEP II:** 60 120 216 130 76 105 72

**STEP III:** 15 7 22 10 22

**STEP IV:** 5 7 4 0 4

Step IV, is the last step of the above arrangement as the intended arrangement is obtained. As per the rules followed in the given steps find out the appropriate steps for the given input:

**Input: 52 36 69 73 57 23 41 84**

32. What is the sum of all the numbers in the last step of the given arrangement?

- (a) 17
- (b) 23
- (c) 28
- (d) 16
- (e) None of the above

33. Which element is 2<sup>nd</sup> to the right of the one which is 4<sup>th</sup> from the left element in step II?

- (a) 105
- (b) 68
- (c) 64
- (d) 46



(e) None of these

34. What is the product of the numbers which is 2<sup>nd</sup> from the right end and 3<sup>rd</sup> from the left end in final step of the given arrangement?

- (a) 28  
(b) 140  
(c) 18  
(d) 100  
(e) None of the above

### Answer:

#### Direction (1-3):

Sol. In this input output question only numbers is arranged in each step. Let us understand the logic behind it- In each step the numbers are arranged

In step 1: all the even number (input) are multiplied with 2 and all the even numbers are multiplied with 3.

Step 2: Is given in the pattern as firstly the numbers are subtracted and then added respectively.

Step 3: The resultant of the multiplication of its digits in the previous step.

Step 4: The numbers in the previous step is divided by 2.

<b>Input-</b>	25	22	93	56	17	74	39
<b>Step1-</b>	75	44	279	112	51	148	117
	↙	↘	↙	↘	↙	↘	↙
<b>Step2-</b>	31	323	167	163	97	265	
<b>Step3-</b>	3	18	42	18	63	60	
<b>Step4-</b>	1.5	9	21	9	31.5	30	

1.Ans(b)

2.Ans(c)

3.Ans(a)

#### Direction (4-7):

Sol. Logic: Step I: 1<sup>st</sup> digit is replaced by 6<sup>th</sup> digit, 2<sup>nd</sup> digit is replaced by 5<sup>th</sup> digit and so on until 6<sup>th</sup> digit is replaced by 1<sup>st</sup> digit in each number.

Step II: numbers are arranged in ascending order from left to right

Step III: first arranged odd digits then even digits in ascending order in each number.

Step IV: multiplied 1<sup>st</sup> and 2<sup>nd</sup> digit, 3<sup>rd</sup> and 4<sup>th</sup> digit, 5<sup>th</sup> and 6<sup>th</sup> digit in each number.

Step V: total sum of the numerical value of all digits in each number.

Input: 856347 745982 329584 512379 954267 463512

Step I: 743658 289547 485923 973215 762459 215364

Step II: 215364 289547 485923 743658 762459 973215

Step III: 135246 579248 359248 357468 579246 135792

Step IV: 31024 351832 151832 152848 351824 33518

Step V: 10 22 20 28 23 20



4. Ans. (c)
5. Ans. (e)
6. Ans. (b)
7. Ans. (d)

#### Direction (8-12):

Sol. In the given input output, one word and one number is arranged in each step. In odd numbered steps such as I, III and V the word is getting arranged from the left end while the number is getting arranged from the right end. While in even numbered steps such as II and IV the numbers are arranged from the left end while the words are arranged from the right end. For step I- The word which is first according to the alphabetical order is arranged from the left end while the highest number is arranged from the right end and so on in the odd steps. For step II- The number which is lowest is arranged from the left end while the word which is last according to the alphabetical order is arranged from the right end and so on in even steps. Also while arranging each of the number is added by 1 and 'er' is removed from each word while arranging.

Input: warmer 76 94 scraper locker 11 greater 52 39 adopter

Step I: adopt warmer 76 scraper locker 11 greater 52 39 95

Step II: 12 adopt 76 scraper locker greater 52 39 95 warm

Step III: great 12 adopt scraper locker 52 39 95 warm 77

Step IV: 40 great 12 adopt locker 52 95 warm 77 scrap

Step V: lock 40 great 12 adopt 95 warm 77 scrap 53

8. Ans. (b)
9. Ans. (d)
10. Ans. (b)
11. Ans. (c)
12. Ans. (b)

#### Direction (13-16):

Sol. In this new pattern coding decoding each letter, except vowel, is assigned a number from 1-8 So, B-1, C-2, D-3, F-4, G-5, H-6, J-7, K-8, L-1, M-2, N-3, P-4, Q-5, R-6, S-7, T-8, V-1, W-2, X-3, Y-4, Z-5.

Each vowel is assigned a different symbol as-%, #, \$, @, &. So, for vowels the symbols are - A-\$, E-%, I-#, O- @, U-&.

13. Ans.(d)

14. Ans.(a)

Sol. The code will be- \*3\$\* 2\$7 \*\$7\*

15. Ans.(c)

16. Ans.(b)

Sol. The code will be- '786%3586 \*\* 5@3'

#### Directions (17-18):

17. Ans.(b)



A5	LM3	FT2
ZU8		BC6
G5	S7	MO

The alphabets are arranged according to the direction of arrows.

MO5	S3	G2
BC8		ZU6
FT5	LM7	A

Step-1

MO2	S3	G2
AB8		ZU3
FT5	KL7	A

Step-2

In step 3, the elements arranged in the first and third column in the same column in such way that the element in third row placed in first row and first row element is placed in second row and second row element is placed in third row. The alphabet of first row second column is replaced with the alphabet which is placed three places after the alphabet in alphabetical series. The alphabet of third row second column is replaced with the alphabet which is placed five places after the alphabet in alphabetical series.

FT5	V3	A
MO2		G2
AB8	PQ7	ZU3

Step-3

Sol.

**18. Ans.(d)**

A5	LM3	FT2
ZU8		BC6
G5	S7	MO

The alphabets are arranged according to the direction of arrows.

MO5	S3	G2
BC8		ZU6
FT5	LM7	A

Step-1





MO2	S3	G2
AB8		ZU3
FT5	KL7	A

Step-2

In step 3, the elements arranged in the first and third column in the same column in such way that the element in third row placed in first row and first row element is placed in second row and second row element is placed in third row. The alphabet of first row second column is replaced with the alphabet which is placed three places after the alphabet in alphabetical series. The alphabet of third row second column is replaced with the alphabet which is placed five places after the alphabet in alphabetical series.

FT5	V3	A
MO2		G2
AB8	PQ7	ZU3

Step-3**Direction (19-21):**

**For step-I,** both the numbers of 1<sup>st</sup> block is written as, 1<sup>st</sup> number of block-1 of the Input is multiplied with 2<sup>nd</sup> no. of block-4 of the Input same as 2<sup>nd</sup> number of block-1 is multiplied with 1<sup>st</sup> number of block-4. This process is same for Block-2 and Block-3 in step-1.

**For step-II,** All 1<sup>st</sup> digit of each block is added and that sum is written in 1<sup>st</sup> block and all 2<sup>nd</sup> digit of each block is added and that sum is written as 2<sup>nd</sup> block.

**For step-III,** Half of the addition of 1<sup>st</sup> and 2<sup>nd</sup> digit of each block.

**For Step- IV,** Subtraction of both numbers of Step-3.

So,

**INPUT: 42 51 29 32 71 14**

Step-1: 86 57 89

Step-2: ....21....22....

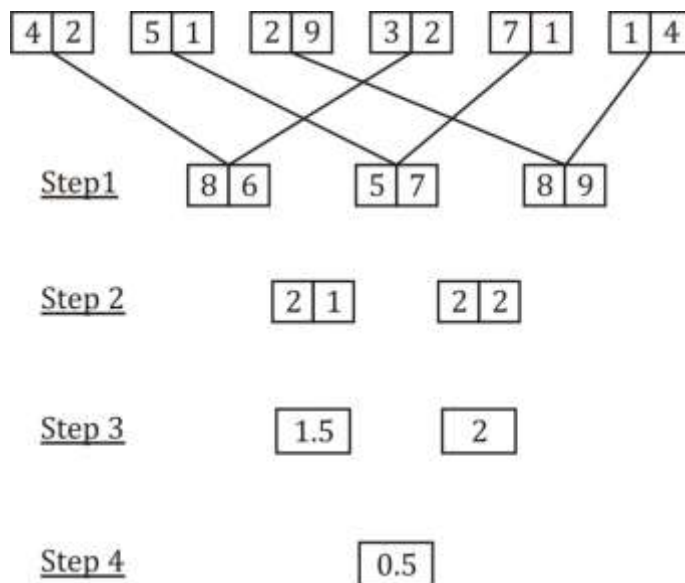
Step-3: ....1.5....2....

Step-4:.....0.5.....

19.D

20.B

21.B

**Directions (22-26):**

**Logic:** - There are six numbers and six words in the input. In the first step the numbers are arranged in ascending order from both the ends with a natural number starting from 1 at unit place in left end number and with a natural number 2 at unit place in right end number. After that in second step the words are arranged in alphabetical order from both the ends. And then again number are arranged in third step and words are arranged in forth step and so on.

**Input: peak 18 utility 76 emerge 27 beautiful 37 51 visible 86 know**

Step I: 181 peak utility 76 emerge beautiful 37 51 visible 86 know 272

Step II: beautiful 181 peak utility 76 37 51 visible 86 know 272 emerge

Step III: 373 beautiful 181 peak utility 76 visible 86 know 272 emerge 514

Step IV: know 373 beautiful 181 utility 76 visible 86 272 emerge 514 peak

Step V: 765 know 373 beautiful 181 utility visible 272 emerge 514 peak 866

Step VI: utility 765 know 373 beautiful 181 272 emerge 514 peak 866 visible

Sol.

22. Ans.(d)

23. Ans.(c)

24. Ans.(d)

25. Ans.(b)

26. Ans.(b)

**Directions (27-31):**

The logic followed here:

In Step I: All the words are arranged in reverse dictionary order from the left.

In Step II: The first and the last letter of each word is replaced with the next letter in the English Alphabetical series.

In Step III: All the letters of the word is arranged in alphabetical order within the word.

In Step IV: All the letters of the word are replaced with the next letter in the English alphabetical series.

In Step V: All the words are arranged in dictionary order from the left.

**Input: dangerous duplicate murder cannot survive triangle**



Step I: triangle survive murder duplicate dangerous cannot  
 Step II: urianglf turvivf nurdes euplicatf eangerout dannou  
 Step III: afgilnru firtuvv denrsu acefilptu aeegnortu adnnou  
 Step IV: bghjmosv gjsuvww efostv bdfgjmquv bffhopsuv beoopv  
 Step V: bdfgjmquv beoopv bffhopsuv bghjmosv efostv gjsuvww  
 27. Ans. (c)  
 28. Ans. (d)  
 29. Ans. (e)  
 30. Ans. (d)  
 31. Ans. (d)

### Directions (32-34):

Sol. In this input output question only numbers is arranged in each step. Let us understand the logic behind it- In each step the numbers are arranged

In step 1: all the even number and odd numbers (of input) are multiplied with 2.

Step 2: In this step first two numbers are subtracted, and the resultant is multiplied by 2 and again the 2<sup>nd</sup> and 3<sup>rd</sup> number is added, and the resultant is divided by 2 and so on.

Step 3: In this step all the digits are added of the numbers marked with arrows.

Step 4: The resultant of the multiplication of the digits of numbers in the previous step.

**INPUT:** 52 36 69 73 57 23 41 84

**STEP I:** 104 72 138 146 114 46 82 168

**STEP II:** 64 105 16 130 136 64 172

**STEP III:** 17 10 17 14 20

**STEP IV:** 7 0 7 4 0

32. Ans. (e)

33. Ans. (c)

34. Ans. (a)

## Topic 3- Logical Reasoning

1. **Statement-** The Indian Council of Medical Research issued a warning two years ago, based on studies conducted in hospitals that resistance to antibiotics was found in 50% of patients. A large number of infants were dying due to infections that did not respond to treatment. (IBPS PO 2018)

Courses of action-I .The revision of antibiotics classes by the World Health Organisation in its list of essential medicines is a welcome step in the global initiative to push back against antimicrobial resistance, the phenomenon of bacteria becoming resistant even to the most potent drugs.

II. Close scrutiny of these by national stewardship programmes such as those initiated by the ICMR is needed.

Which of the following will be the course of action?



- (a) Only I
- (b) Both I and II
- (c) Either I or II
- (d) Only II
- (e) None of these

2. **Statement-** India is buying over 1,000 new planes. However unprecedented expansion will place immense pressure on the aviation system. The industry currently appears to be underestimating the challenges ahead. (IBPS PO 2018)

Which of the following could be the reason for the concerns about “challenges ahead” in the above statement?

- (i) The buying frenzy, led by budget airlines like SpiceJet and IndiGo, is not without reason. Around 220 million Indians flew last year -- an annual increase of 20%.
- (ii) The country is on track to overtake the U.K. as the world's third-largest aviation market by 2026.
- (iii) Only 75 out of 400 airports are currently operational in India and even the biggest hubs like Mumbai, New Delhi and Chennai are bursting at the seams.

- (a) Only (i)
- (b) Both (i) and (ii)
- (c) Only (iii)
- (d) Both (ii) and (iii)
- (e) None of these.

3. **Statement-** More than 9 million high-school students across China are taking the biggest exam of their lives known as the gaokao, this week. For millions of teenagers, it's a big source of stress. For many businesses, it's a great chance to make money. Which of the following statements/facts substantiates the importance of this test for Chinese people? (IBPS PO 2018)

- (i) The grueling test determines where the students can go to university and what they'll study.
- (ii) Parents are willing to loosen the purse strings to try to ensure success, splashing out on private tutors, good luck charms and even luxury hotels.
- (iii) Chinese students have also begun spending more on drugs and dietary supplements that they believe will improve their memory and attention.

- (a) Only (i)
- (b) Both (i) and (ii)
- (c) Only (iii)
- (d) Both (ii) and (iii)
- (e) All (i), (ii) and (iii)

4. **Statement-** Thousands of farmers in drought-hit western Madhya Pradesh have been protesting for over a week demanding that authorities increase the minimum price for their crops and waive their bank loans. Madhya Pradesh is one of several states that have suffered droughts and crop failures in recent years. (IBPS PO 2018)

Which of the following courses of action will help to improve the current scenario?

- (i) Government should punish those involved in the protests.
- (ii) Cloud seeding should be used in such situations.
- (iii) Government should constitute a team to assess the severity of drought and convince that appropriate compensation will be paid.



- (a) Only (i)
- (b) Both (i) and (ii)
- (c) Only (iii)
- (d) Both (ii) and (iii)
- (e) None of these.

**5. Statement-** Drinking in moderation can help our health, some research has showed. Many doctors recommend a glass of wine or beer a night as part of diet plans such as the Mediterranean diet and the DASH diet, which have been proven to keep your heart and brain healthy. However, a new study suggests that even moderate drinking may not be great for your brain. **(IBPS PO 2018)**

Which of the following can be deduced from the above statement?

- (i) Scientific researches can contradict at times.
- (ii) Moderate intake of wine is less harmful than cigarette.
- (iii) Something which is not good for brain does not mean it cannot be healthy.

- (a) Only (i)
- (b) Both (i) and (ii)
- (c) Only (iii)
- (d) Both (ii) and (iii)
- (e) None of these.

**6.** From which of the following statements it can be determined that how many persons definitely attend meeting before D (starting from Monday to Saturday)? **(IBPS PO 2018)**

- (a) F attend meeting on Wednesday. Only one attend between D and F. Only two persons attend between B and C.
- (b) Only three persons attend between A and E, who attend after Wednesday. Only two persons attend between E and D. B attend just after D.
- (c) No one attend between C and F. B attend on Saturday. Only two persons attend between F and B. D attend on one of the days before C.
- (d) A attend on Thursday. Only two persons attend between C and A. Only three persons attend between B and D, who attend after A.
- (e) Cannot be determined from any of the statements.

**7. Statement-** Promos Marketing is a kind of marketing in which people used to buy those products again and again with the one they are more familiar with as compared to the newly introduced one. **(IBPS PO 2018)**

Which among the following is most similar type of Marketing?

- (a) A well-known brand has not changed its logo from past 10 years and still making profit from its product.
- (b) 'Wister' Company has launched a new product and advertised it with old theme songs so that everyone is aware of it and also making profit from it.
- (c) Arista Company used to launch its new products with the name of famous action movies so that it became popular among people.
- (d) A famous toothpaste brand used to add a new ingredient with the existing one time to time without changing its packaging so that it remains popular among people.
- (e) All are similar types of marketing.



**8. Statement-** A car company 'Aristo' was famous car manufacturing company 7 years ago but company's production has been declining from past 5 years. So, after all these mis happenings the company is forced to shut down now. (IBPS PO 2018)

Which of the following could be the most possible reason for the above-mentioned statement?

- (a) The company did not have enough funds to buy raw material which was required for the product.
- (b) The employees of the company are not satisfied in their job.
- (c) The machinery was too old and was not in proper working condition.
- (d) The demand of the product has been declining from past 5 years.
- (e) The rival company's car are fully automatic and is composed with all new features.

**9. Statement-** The reason for Trump's victory in USA elections was that the Voters believed their political apparatus was corrupt and Trump was the only one who reliably affirmed that belief and promised to fix it. While Hillary Clinton held campaign rallies with Beyoncé and Jay-Z, Trump was out talking about the "forgotten" working class, which in turn exacted a "revenge" on the political elite by voting for him. (IBPS PO 2018)

Which of the following can be inferred from the given statement?

- (a) Hillary Clinton is a corrupt leader.
- (b) Trump is the only leader who is concerned about the working class.
- (c) Only working class voted for Trump.
- (d) The reason for trump's success is the polarization of the people towards Trump as he was taking out all the issues and problems of general public.
- (e) The reason of Hillary Clinton's defeat was the campaign rallies with Beyoncé and Jay-Z, which backfired on her.

**10. Statement-** As the festive season is round the corner, the country is on high alert due to rise in the level of pollution. So, Government has given the orders to use green crackers in place of conventional crackers just few days before Diwali. These green crackers are environment friendly and cost effective fire-crackers and produces 20-30% less pollution over conventional one. (IBPS PO 2018)

Which of the following is incorrect with respect to the given statement?

- (I) Fire crackers release pollutant which in turn mixed with air and cause pollution.
  - (II) In festive season the level of pollution gets increased.
  - (III) The government is taking various steps to decline the level of pollution.
  - (IV) The green fire crackers are quite expensive, so the shopkeepers will have to bear loss.
- (a) I and II
  - (b) II and III
  - (c) I and IV
  - (d) only IV
  - (e) only III

**11.** In the following question a statement is given followed by three statements numbered as I, II and III. You have to read all three statements and decide which of them strengthens or weakens the statement. (SBI PO 2019)





Statement: Among the governments, there is a strong policy emphasis on improving living conditions in urban areas as more and more people are looking to migrate to semi-urban or rural areas. People are willing to compromise on their standard of living in order to live in a healthier/pollution free environment.

(I) Cities are economically vibrant spaces around the world and drawing a large number of rural migrants looking for better prospects. This is a sustained trend, particularly in developing countries now a day.

(II) A fresh look at urban governance is necessary as migration from rural areas picks up pace.

(III) The rate of migration has shown a consecutive decline in the last three Censuses. It was possible that this slow-down signalled the worsening conditions in urban slums, where most of the rural immigrants were concentrated.

(a) Only statement (I) strengthen but statement (II) and (III) is the neutral statement.

(b) Both statement (I) and statement (III) strengthen the given statement but statement (II) is neutral statement.

(c) Both statement (I) and statement (II) are neutral statements and statement (III) strengthen the statement.

(d) Both statement (I) and (II) weakens but statement (III) strengthen the given statement.

(e) All statement (I), (III) and statement (II) weaken the given statement.

**12.** The revenue of Company A has been decreasing from past one year while the prices of the products offered by the company have also decreased from past six months. **(SBI PO 2019)**

Which of the following cannot be the reason of downfall of the revenue of Company A?

(a) Company B is offering same product at much lower prices than Company A.

(b) The quality of the products of Company A is not upto a desirable level.

(c) The demand of the product offered by Company A has been decreasing due to the usage of an old technology in it.

(d) There is an abrupt rise in the availability of the product offered by Company A but the demand has not changed accordingly.

(e) Chinese companies offered better and cheap products than Indian Companies.

**13.** Today's children are different from the children of previous generations. They are more interested in playing video games or sitting hours on the play stations than in playing outdoor games. They are more technology oriented. These things are depriving the child from developing their personality. They lack the stamina and strength of the previous generations. **(SBI PO 2019)**

Which of the following statement weakens the given statement?

(I) The children of today are mentally active as this has made children much more organized and mature than in previous times.

(II) These gadgets are addicting. They have made the children so much addicted to PC and PS that they do not enjoy the outdoor games anymore.

(III) The children of present time are not physically active. These children are not being a team player anymore, they grow up to become shy and introvert instead of being bold and extrovert.

(a) Only I

(b) Both III and I

(c) Only II





- (d) Both II and III
- (e) All I, II and III

**14.** A survey conducted recently shows that religious people are more financially successful than atheists. This proves that following religious practices or having religious beliefs is not only important for your spiritual health but also beneficial in maintaining a healthy bank account. **(SBI PO 2019)**

Which of the following, if true, would most seriously weaken the above conclusion?

- (a) The survey does not tell us if those people became financially successful after they started practicing religion or they started practicing religion after they became successful.
- (b) Some people embrace religion and spirituality mainly because they believe that somehow being religious or spiritual can help them achieve financial success.
- (c) Most of the poor people are too busy thinking about earning their daily livelihood.
- (d) Percentage of atheists among the total population is highest in most of the developed countries.
- (e) Spiritual and religious people lead a more disciplined life.

**15:** Study the following information in which a statement is followed by five assumptions, read carefully and answer the question below- **(SBI PO 2019)**

The banking sector is facing tough times. But the sector is facing only short-term pain as the rise in non-performing assets (NPAs) is proving a key challenge for the industry at large. The regulator wanted some stringent measures to be taken, and the government is coming out with so many reforms and policies.

Which of the following can be assumed from the given statement?

- (a) NPA was 2.4% more in last two years as compared to the present one.
- (b) The steps taken by the government are not enough to revamp the banking sector.
- (c) Manufacturing sector is performing far better than the banking sector for last five years.
- (d) After the implementation of suitable expedient, the things are likely to be changed for banking sector.
- (e) The increase in NPA is the only factor responsible for the difficult time of banking industry.

**16:** Study the following information in which a statement is followed by five conclusions, read carefully and answer the question below- **(SBI PO 2019)**

Other than being an essential source of water for Indian agriculture, the monsoon plays a critical role in flushing out pollutants over Asia. However, recently increased pollution — particularly from coal burning — could potentially weaken this ability of the monsoon.

Which of the following can be deduced from the given statement?

- (a) The unusually high concentration of particulate matter in the last few days in India clearly shows that air pollution is emerging as a big problem.
- (b) As the climate gets warmer and frequency of rains reduces, such spurts in coarse particles making breathing difficult will become a new normal and the government is not waking up to the alarm.



- (c) Both the periodicity and duration of dry spells in the country were rising as total rainfall events in a year had fallen even though the average rainfall in a year has not changed much, a direct consequence of climate change.
- (d) The annual average rainfall has remained the same because the frequency of heavy downpours increased in the past two decades.
- (e) The air quality in the region deteriorated because of dust storms in western India, particularly Rajasthan.

**17.** In the following question a statement is given followed by some more statements. You have to read all the statement and decide which of them weakens the statement. The NITI Aayog released the results of a study warning that India is facing its “worst” water crisis in history and that the demand for potable water will outstrip supply by 2030, if steps are not taken. **(SBI PO 2019)**

Which of the following most weakens the above statement?

- (a) Currently 600 million Indians face high to extreme water shortage and about two lakh people die every year due to inadequate access to potable water.
- (b) People may face water scarcity and the country will suffer a loss of up to 6 per cent of the GDP.
- (c) The country's nearly 70 per cent of water is contaminated, which puts India at the 120th position among 122 countries in the water quality index.
- (d) The ranks of all states in the index on the composite water management, comprising 9 broad sectors with 28 different indicators covering various aspects of ground water, restoration of water bodies, irrigation, farm practices, drinking water, policy and governance.
- (e) The condition of availability of water currently in India is better than the water crisis which India had faced in 1960.

**18.** Study the following information in which a statement is followed by five assumptions, read carefully and answer the question below- **(SBI PO 2019)**

“If we slightly increase the price of our product then we can improve the quality of our product to increase the number of customers from our only rival company V,” -A statement by owner of company U.

Which of the following can be assumed from the given statement?

- (a) Without increasing the price, the quality of the product offered by company U can't be increase.
- (b) Quality offered by company V of the product is better than the quality offered by company U.
- (c) Improvising the quality is the only way to attract more number of customers.
- (d) The price offered by the rival company V is already higher than the price offered by company U.
- (e) Superior quality even for bit higher price will definitely increase the demand of the product in the market.

**19:** Study the following information in which a statement is followed by some statement, read carefully and answer the question below- **(SBI PO 2019)**

A company has X decided to increase the HRA allowances of its employees due to reallocation of the company to NCR region.

Which of the following can be inferred from the given statement?



- (I) The HRA allowances directly depend on the region of living of the employee.  
(II) The employees of the company X are on strike due to the reallocation of the company.  
(III) The profit amount of company X has increased so it has also increased the amount of HRA of its employees.
- (a) Both (I) and (II)  
(b) Both (II) and (III)  
(c) Only (I)  
(d) Only (III)  
(e) None of these

**20. Statement** "Beware! Recycled coloured plastic bags contain harmful colour pigments, which on coming in contact with food particles, make food unfit for consumption, resulting in severe food poison, allergies and in extreme cases even death." –A scientist. **(SBI PO 2018)**

**Assumptions**

- i. Non-biodegradability nature makes plastic bags an environmental hazard.  
ii. Use of recycled coloured plastic bags is harmful and has cascading effects on human life
- (a) Only (i)  
(b) Both (i) and (ii)  
(c) Only (ii)  
(d) Either (i) or (ii)  
(e) None of these

**21.** It has been reported in recent years that a very large number of seats in the engineering colleges in the country remain vacant at the end of the admission session. **(SBI PO 2018)**

Which of the following may be the probable cause of the above effect?

- (a) There has been a considerable decrease in hiring of engineering graduates due to economic slowdown in the recent years  
(b) Students have always preferred to complete graduation in three years time instead of four years for engineering  
(c) The Government has recently decided to provide post qualification professional training to all engineering graduates at its own cost  
(d) There has always been a very poor success rate among the engineering students  
(e) None of the above

**22.** The condition of the roads in the city has deteriorated considerably during the first two months of monsoon and most of the roads have developed big pot holes. **(SBI PO 2018)**

Which of the following can be a possible effect of the above cause?

- (a) The municipal corporation had repaired all the roads in the city before onset of monsoon with good quality material  
(b) A large number of people have developed spine related injuries after regularly commuting long distances by road within the city  
(c) The municipal corporation has been careful in choosing the contractors for repairing roads in the past



- (d) People always complain about potholed roads during the monsoon months
- (e) None of the above

**23.** Disaster management systems can safeguard India's heritage from climate changes. India is a signatory to the 2015 Sendai Framework for Disaster Risk Reduction, which recognizes that the State has the primary role in reducing disaster risk, terrorism related issues and identifies heritage as a priority area. **(SBI PO 2018)**

Which of the following negates the given statement?

- (I) The authority's report also has detailed guidelines for museums on the systems that need to be put in place to tackle different kinds of threats.
  - (II) The first-of-its-kind analysis by the National Disaster Management Authority (NDMA) of the threats shows that India's museums face lists terrorism; climate-related events such as floods, earthquakes and tsunamis; and vandalism.
  - (III) Climate-related issues such as floods, earthquakes are not a matter of concern for Indian Heritage.
- (a) Only (III)
  - (b) Only (II)
  - (c) Only (I)
  - (d) Both (II) and (III)
  - (e) None of these

**Direction (24-25):** In each of the following questions, two statements numbered I and II are given. There may be cause and effect relationship between the two statements. These two statements may be the effect of the same cause or independent causes. These statements may be independent causes without having any relationship. Read both the statements in each question and mark your answer as- **(SBI PO 2018)**

- (a) If statements I is the cause and statement II is its effect.
- (b) If statements II is the cause and statement I is its effect.
- (c) If both the statements I and II are independent causes.
- (d) If both the statements I and II are effects of independent causes.
- (e) If both the statements I and II are effects of some common cause.

**24. Statement I-**Infosys, among India's largest software services companies, said it plans to hire 10,000 American workers over the next two years.

**Statement II-**In filling these jobs, Infosys will hire experienced technology professionals and recent graduates from major universities, and local and community colleges, and the talent pools will be created in the future.

**25. Statement I-** Aadhar has become mandatory for filing income tax returns with PAN card.

**Statement II-** PAN has become more and more susceptible to duplicity and fraud.

**26. Statement-** According to the latest research- "Few people openly admit to holding racist beliefs on the basis of color but many psychologists claim most of us are nonetheless unintentionally racist. We hold, what are called "implicit biases". One the basis of the information provided in the above statement, which of the following defines the term "implicit bias" most accurately? **(SBI PO 2018)**

- (i) A slight automatic preference for white people over black people.
  - (ii) Preference for white people over black people.
  - (iii) Discriminating against a particular community on the basis of colour.
- (a) Only (i)



- (b) Both (ii) and (iii)
- (c) Only (ii)
- (d) Only (iii)
- (e) None of these.

**27. Statement:** The State Government has decided to declare 'Kala Azar' as a notifiable disease under the Epidemics Act. Family members or neighbours of the patient are liable to be punished in case they did not inform the State authorities. **(RRB PO 2018)**

**Courses of action:**

**I.** Efforts should be made to effectively implement the Act.

**II.** The cases of punishment should be propagated through mass media so that more people become aware of the stern actions.

- (a) If only I follow
- (b) If only II follow
- (c) If either I or II follow
- (d) If neither I nor II follow
- (e) If both I and II follow

**28. Statement-** Two companies A and B signed a deal in which both have agreed to not disclose any confidential details of their company to the rivals.

Which of the following could be the reason of the legal notice sent by company B to company A for breaching the contract? **(RRB PO 2018)**

**I.** Company A is unlawfully receiving more amount of profit without indulging company B in it.

**II.** Company A is sharing the private data and details of company B for its own profit.

- (a) Only I is implicit
- (b) Only II is implicit
- (c) Either I or II is implicit
- (d) Neither I nor II is implicit
- (e) Both I and II are implicit

**Directions (29-30):** In each question below is given a statement followed by two assumptions numbered I and II. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement. **(RRB PO 2018)**

Give answer-

- (a) If only assumption I is implicit.
- (b) If only assumption II is implicit.
- (c) If either I or II is implicit.
- (d) If neither I nor II is implicit.
- (e) If both I and II are implicit.

**29. Statement:** The 'M' Cooperative Housing Society has put up a notice at its gate that sales persons are not allowed inside the society. **(RRB PO 2018)**

**Assumptions:**

**I.** All the sales persons will stay away from the 'M' cooperative Housing Society.

**II.** The security guard posted at the gate may be able to stop the sales persons entering the society.





30. **Statement:** "If it does not rain throughout this month, most farmers would be in trouble this year."

**Assumptions:**

- I. Timely rain is essential for farming.
- II. Most farmers are generally dependent on rains.

31. In the following question, three statements numbered I, II and III are given. Read all the statements and determine the cause and effect relationship between them. **(IBPS PO 2017)**

- I. In urban areas, the poor bear the brunt of environmental effects such as water or air pollution.
  - II. The rapid urban development has outpaced the development of environmental infrastructure in many large cities.
  - III. Just for the own sake of profit, builders in urban areas are indulge in construction work without tendering about the environment and urban poor, who mostly dies from chronical diseases.
- (a) Statement II is the cause, I and III are its effects.
  - (b) Statement I is the cause, I and III are its effects.
  - (c) Statement III is the cause, I and II are its effects.
  - (d) Statement III is the cause and II is its effects while statement I is an effect of some independent cause.
  - (e) None of these

32. **Statement:** Prime Minister Narendra Modi launched three mega flagship schemes aimed at transforming Urban India, including the much talked about Smart Cities proposal, with a whopping Rs.4 lakh crore kitty having been lined up for the projects. He also unveiled logo of the housing mission, which has his personal touch in the finalization of its design. **(IBPS PO 2017)**

Speaking at the event, Modi said, "the decision to make cities smart will be taken not by governments but by the people of the city, the local administration. Let there be competition between cities in development so that smart cities come up."

Which of the following will be an **effect** of the initiative taken by the government?

- (a) Ensuring water supply to each household, sewer connections, sanitation and solid waste management in rural and urban governance would be the focus under the scheme.
- (b) Quality of life will improve in rural and urban areas.
- (c) Provision of roads and public transportation beside implementation of reforms in urban governance would be the focus under the scheme.
- (d) Millions of jobs will be created and scarcity of houses will be removed in urban and rural areas.
- (e) All of the above.

**Direction (33-34):** Read the following information answer the given questions.

The agitated guardians of grade IX students of a high-profile public school of North Carolina protested against the newly introduced audio-visual aid of teaching methodology. According to them, it is of benefit to a handful of students only, and majority of students will not be getting any help because of this technology.

These questions are based on the information given above and the sentences given below labeled as I, II, III, IV and V.



- I. Change is a gradual process and it takes some time for people to adjust to it.
  - II. Guardians are happy with the new teaching methodology, i.e. via the use of audio-visual techniques.
  - III. It is not the responsibility of the school to take care of the weaker students.
  - IV. This modern technology of teaching should be scrapped as soon as possible.
  - V. Guardians are unhappy with the new teaching methodology used in the school.
33. Which of the following statements above could be a possible conclusion from the above passage? **(IBPS PO 2017)**

- (a) Only I
  - (b) Only II
  - (c) Only IV
  - (d) Both IV and II
  - (e) Only V
34. Which of the following could be a possible statement that should be used by the school management to defend themselves?
- (a) Both II and V
  - (b) Only III
  - (c) Only I
  - (d) Only V
  - (e) Both IV and III

35. **Statement:** Science is a sort of news agency comparable in principle to other news agencies. But this news agency gives us information which is reliable to an extraordinary high degree due to elaborate techniques of verification and its capacity to survive centuries. So, science should be read with as much interest as we read news. **(SBI PO 2017)**

**Assumptions:**

- I. Science encourages investigative spirit.
  - II. People read news out of interest.
- (a) If only assumption I is implicit
  - (b) If only assumption II is implicit
  - (c) If either I or II is implicit
  - (d) If neither I nor II is implicit
  - (e) Both I and II are implicit

**Directions (36-37):** In each of the following questions, a question is followed by three statements numbered I, II and III. Read all the statements to find the answer to given question and then answer accordingly that which statement/s can give the answer alone/together. **(SBI PO 2017)**

36. What is the direction of point U with respect to point X?

**Statement I:** Point R is 7 m to the North of point Q. Point P is 8 m to the West of point Q. Point R is 6 m to the West of point U.

**Statement II:** Point B is 9 m to the North of point A. Point P is 5 m to the North of point Z. Point Z is 4 m to the West of point A.

**Statement III:** Point C is 7 m to the East of point A. Point X is 2 m to the East of point F. Point F is 3 m to the North of point C.

- (a) Both I and III





- (b) Both II and III
- (c) All I, II and III
- (d) II and either I or III
- (e) Even I, II and III together are also not sufficient

37. What does the code 'bp' stand for in the given code language?

**Statement I:** In the language, 'black white red' is coded as 'df dc or' and 'green blue grey' is coded as 'st hn wo'

**Statement II:** In the language, 'blue pink brown' is coded as 'er bp hn' and 'pink blue white' is coded as 'hn or bp'

**Statement III:** In the language, 'green violet orange' is coded as 'pa wo kl' and 'yellow pink brown' is coded as 'bp bi er'

- (a) Both II and III
- (b) I and either II or III
- (c) II and either I or III
- (d) Both I and III
- (e) All I, II and III

38. A very large number of technically qualified young Indians are coming out of colleges every year though there are not enough opportunities for them to get gainful employment.

Which of the following contradicts the views expressed in the above statements? **(SBI PO 2017)**

- (a) Technically qualified persons are for superior to those with standard degrees like BA/BSc/BCom etc.
- (b) The Government has not done effective perspective planning for engaging technically qualified personnel while authorizing the setting up of technical colleges.
- (c) All huge gap exists between the level of competence of technically qualified graduates and requirements of the industry.
- (d) Majority of the technically qualified persons are migrating from India to developed countries for better opportunities.
- (e) None of the above

**Directions (39-40):** In each question below are given a statement followed by two courses of action numbered I and II. You have to assume everything in the statement to be true and on the basis of the information given in the statement, decide which of the suggested courses of action logically follow(s) for pursuing. **(SBI PO 2017)**  
Give answer

- (a) If only I follows;
- (b) If only II follows,
- (c) If either I or II follows;
- (d) If neither I nor II follows and
- (e) If both I and II follow.

39. **Statement:** Every year, at the beginning or at the end of the monsoons, we have some cases of conjunctivitis, but this year, it seems to be a major epidemic, witnessed after nearly four years.

**Courses of action:**



- I. Precautionary measures should be taken after every four years to check this epidemic.
- II. People should be advised to drink boiled water during rainy season.

40. **Statement:** Researchers are feeling agitated as libraries are not equipped to provide the right information to the right users at the right time in the required format. Even the users are not aware about the various services available for them.

**Courses of action:**

- I. All the information available to the libraries should be computerized to provide faster services to the users.
- II. Library staff should be trained in computer operations.

**Directions (41-45):** Each of the questions given below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question. **(RRB PO 2017)**

- (a) If statement I alone is sufficient to answer the question, but statement II alone is not sufficient to answer the question.
- (b) If statement II alone is sufficient to answer the question, but statement I alone is not sufficient to answer the question.
- (c) If statement either I or II is sufficient to answer the question.
- (d) If both the statements I and II taken together are not sufficient to answer the question.
- (e) If both the statements I and II taken together are sufficient to answer the question.

41. What is the code for 'festival' in a code language?

- I. In that language 'lo ko ni sa' means 'Celebrate festival light bright' and 'jo to ni fa' means 'festival surprise candle shine'.
- II. In the same language 'bi ya la fa' means 'surprise high celebration delight' and 'ya la fa ni' means 'Surprise festival high delight'.

42. Six persons A, B, C, D, E and F are sitting around a circular table? Are they all facing the center?

- I. A sits second to the left of F. D sits second to the right of F. Both E and C are immediate neighbour of A. F is facing inside.
- II. B is second to the left of E. Only D is between B and E. C is to immediate left of F. B sits opposite to A. C is third to the left of D. E is second to the right of B and second to the left of C.

43. Six persons A, B, C, D, E, F have different heights. Who among the following is second tallest?

- (I) F is taller than only one person. C is taller than A but shorter than E.
- (II) A is taller than both F and B. E is not the tallest.

44. Who sits second to the left of Sparrow?

- (I) Five birds myam, parrot, bulbul, crow and sparrow are sitting in a row in north direction. Myna sits at one of the extreme end. Parrot sits in between Myna and Bulbul.
- (II) Only one person sits in between Bulbul and Sparrow. Sparrow does not sit to the left of Parrot.



45. Five persons P, Q, R, S, T live on five different floors such as bottom floor is numbered as 1 and top floor is numbered as 5. Who among the following lives on fourth floor?

- (I) Three person lives between Q and T. R lives on third floor.
- (II) Only one person lives between P and S. T does not live above R.

46. Google is trying to turn its search engine into an employment engine. Job hunters will be able to go to Google and see help-wanted listings that its search engine collects across the internet. The results will aim to streamline such listings by eliminating duplicate jobs posted on different sites. Google will also show employer ratings from current and former workers, as well as typical commute times to job locations. **(IBPS PO Mains 2020)**

- (I) Now a days Google market is not good that's why Google launched new service.
- (II) Google is no more interested in providing other services to its consumer, now Google is focused only on turning its search engine into an employment engine.
- (III) Google's search engine results will aim to well-organized employment listings by removing duplicate jobs.
- (IV) Google is not interested to show any kind of ratings in its new employment search engine.

Which of the following can be deduced from the given passage?

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

47. Statement-Highlighting his achievements in present in rooting out corruption, Prime Minister Narendra Modi said that there has been "not even one taint or blot" on his government in these past three years.

Which of the following abrogates the above statement? **(IBPS PO Mains 2020)**

- (I) Technology has brought about transparency and is being used to achieve great heights across sectors in India in Modi governance.
- (II) In several parameters, the country is moving at a rapid pace under PM Modi's government. Noting that infrastructure is essential for sustainable development. The increase in aspiration of the common people is the greatest cause of this fast track development of the country.
- (III) The billion Indians in India are still below poverty line and they are also finding the way to get rid of biggest problem of India which is corruption.
- (IV) India is now receiving record number of foreign direct investment and all credit agencies and multilateral fora are giving a positive rating about India.

- (a) Only II
- (b) Only III and IV
- (c) Only III
- (d) Only IV
- (e) Only I and III

48. Statement- "In a big relief to liquor companies which are holding their stocks worth more than Rs. 200 crore in Bihar, the Supreme Court on Monday granted them two months more time to transport liquor out of the state and directed them to dispose off their stocks by July 31." **(IBPS PO Mains 2020)**



- I. Beverages Companies, contended that it was possible even to destroy the existing stocks by the end of this month .  
II. The apex court had earlier fixed a deadline of May 31 for the companies to dispose off their stocks.  
III. Seeking more time for transporting the stocks out of state, the confederation said in its petition that delay in disposing off stocks was beyond its control as clearances were required from various agencies.

Which of the following can be the Presupposition of the given statement?

- (a) Only I
- (b) Only II and III
- (c) Only I and III
- (d) All of the above
- (e) None of the above

**49. Statement-**The government has made quoting of Aadhaar mandatory for opening of bank accounts as well as for any financial transaction of 50,000 and above. **(IBPS PO Mains 2020)**

- (I)The government in its Budget 2017 has already mandated seeding of Aadhaar number with Permanent Account Number (PAN) to avoid individuals using multiple PANs to evade taxes.  
(II)Aadhaar is more secure and reliable than PAN for bank account transactions.  
(III)Aadhaar number is issued by the Unique Identification Authority of India (UIDAI).  
Which of the following statement can be concluded from the given statement?

- (a) All except II
- (b) Both II and III
- (c) Only I
- (d) Only I and II
- (e) None of the above

**Direction (50):** In the following question a statement is given followed by two more statements numbered as I and II. You have to read both the statement and decide which of them strength which of them strengthens or weakens the statement. **(SBI PO Mains 2020)**

**50. Statement-** As an emerging economic superpower, it is quite tragic that more than one in three children in India are stunted. Stunting is associated with an underdeveloped brain, with long-lasting harmful consequences, and increased risks of nutrition-related chronic diseases, such as diabetes, hypertension, and obesity in future. Thus, stunting can be classified by itself as an illness as it leads to negatively affecting the present and future of the child.

- (I) Higher economic growth and increased spending on nutrition access programme have not resulted in proportionate decrease in child malnutrition or stunting.  
(II) Multiple researchers have proven the link between illness and malnutrition/ stunting in children.

- (a) Both I and II strengthens
- (b) I strengthen while II weakens
- (c) II strengthens while I weaken
- (d) Statement I strengthen while Statement II is neutral.
- (e) Both I and II weakens.

**Direction (51):** In the following question a statement is given followed by three assumptions numbered as I, II and III. You have to read all the statements and decide which of them follows the argument mentioned in statement. **(SBI PO Mains 2020)**



51. Rooftop solar power growth has demonstrated an overall positive trend, But this will need to be scaled up massively to achieve the national target.

**Assumption:**

- (I) With ongoing improvements to solar cell efficiency and battery technology, rooftops will only get more attractive in the future.
- (II) Major **solar** projects that connect to the grid often face the challenge of land acquisition and transmission connectivity.
- (III) A survey helps determine usable rooftops, separating them from green spaces, and analyses the quality of the solar resource.

- (a) Only II follows
- (b) Both II and III follows
- (c) Both I and III follows
- (d) Only I follows
- (e) Both I and II follows

**Answer:**

**1. Ans.(b)**

Sol. Course of action I follows because with a graded approach to the use of antibiotics, under which some medicines are reserved for the most resistant microbes, the WHO list can stop their misuse as broad-spectrum treatments. Course of action II also follows because a close inspection is also needed of the national supervisory programmes to help people to get rid out of it.

**2. Ans.(c)**

Sol. Statement (i) and (ii) states a fact that supports this buying frenzy being carried out by aviation companies. Whereas (iii) clearly mentions that lack of infrastructure will be a major challenge that aviation companies might have to face in future.

**3. Ans.(e)**

Sol. (i) states a fact that this test will determine the future career of the students and thus have a significant importance for them. The fact that parents are spending a lot of money to ensure the comfort of their children and the students spending money on supplements signifies the importance of this test, So (ii) and (iii) substantiates the statement.

**4. Ans.(c)**

Sol. (i) is not an appropriate course of action as it not known from the statement whether the protest are violent or peaceful. (ii) is preventive measure not a corrective action. As it is mentioned in the statement that the given state has faced several drought like situations over the recent years, so (iii) is an appropriate course of action.

**5. Ans.(a)**

Sol. (i) "However a new study" implies that there might have been some studies regarding this in the past and "proven to be healthy". So, (i) is definitely true. (ii) cannot be deduced as smoking is not mentioned in the statement. (iii) is vague and not in context with the statement.

**6. Ans.(d)**

Sol. Five person attend meeting before D.



Monday	C
Tuesday	B
Wednesday	
Thursday	A
Friday	
Saturday	D

**7. (E)Sol.** All the given statements are the examples of Promos Marketing as all examples clearly support the fact that people prefer those products they are more familiar with as they built a trust in it so they used to buy it again.

**8. Ans. (d)**

Sol. For (a), Raw material plays an important role in production of a product and adequate funds are also required for it but there are alternatives available for it such as loans to fulfill the requirement so (a) is not the most possible reason. Employee satisfaction and proper machinery plays a vital role in growth of the company but again both of these can be replaced or modified. So, (b) and (c) do not follow. Statement (e) is vague. So, the most possible reason is (d) as the demand has been declined from past 5 years hence the production also declined.

**9. Ans. (d)**

Sol. Only (d) can be inferred from the given statement as the given statement suggest that the victory of Trump is more a revenge against the corrupt ones and moreover Trump was more focusing on working class public's issue whereas Hillary was more concerned on fascinating people by famous personalities.

**10. Ans. (d)**

Sol. Only IV, is incorrect as it is mentioned in above statement that green crackers are cost effective whereas the (IV) statement states that green fire crackers are quite expensive.

**11. Ans. (d)**

Sol. For I- Statement I weaken the given statement as according to it large number of people migrating to urban areas for better job opportunities whereas the given statement suggests that people are willing to compromise on their standard of living in order to live in a healthier/pollution free environment

For II- Statement II weaken the given statement as according to it migration from the rural areas is increasing whereas according to the statement, more and more people are willing to migrate to rural/semi-urban areas.

For III- Statement III strengthens the statement is it states that there has been a decline in number of migrants but it is due to the poor condition of urban slum areas, mostly acquired by the migrants and because of the policies of the government.

**12. Ans. (e)**

Sol. As all options other than (e) can be the reason of the downfall of the revenue of a company but option (e) cannot be a reason as nothing regarding the Chinese/Indian





companies have been stated in the given statement and is not related with the downfall of revenue of company A.

**13. Ans.(a)**

Sol. Only I weakens the given statements as the statement suggest that the today's children are weaker than previous generation and are not as much active and also lack in developing their personality whereas the statement I states that today's children are mentally more active so it weakens the given statement.

**14. Ans.(a)**

- (a) mention a flaw in the survey which weakens the conclusion drawn from it.
- (b) supports the statement by pointing out that some people embrace religion to achieve financial success.
- (c) poor people might not have enough time to engage in religious practices but it does not eliminate the possibility of them having religious beliefs.
- (d) mentions a fact which is irrelevant as the given statement talks about the general population of financially successful people which includes both developed and developing countries.
- (e) is irrelevant to the statement.

**15. Ans. (d)**

Sol. All the statement except (d), cannot be assumed from the given statement as data provided in the statement is not enough to assume the increase or decrease in NPA from the previous year also it is not clear whether NPA is the only cause of pain to banking sector. Further we also cannot assume from the given statement that steps taken by the government are not enough or some other sector is performing better than it. But it can be clearly assumed from the given statement that after the proper implementation of the policies and reforms there will be some improvement in the condition of the banking sector.

**16. Ans. (a)**

Sol. Only statement (a) can be deduced from the given statement as by burning the coal the concentration of its particles is increased which lead to excessive amount of air pollution. But for others (b) and (e) can be assumed but cannot be deduced. While for (c) and (d) the amount of average rainfall and its consistency in not directly given in the statement.

**17. Ans. (e)**

Sol. Except (e), all the statement strengthens the given statement by pointing out the effects of water scarcity India is currently facing and problems related to it but option (e) states that the crisis was more in 1960 from now which contradicts the given statement as it states that India is facing its "worst" water crisis in history. So (e) weakens the given statement.

**18. Ans. (e)**

Sol. Statement (e), can be assumed from the given statement as better quality is always a major factor of concern for customers and for it paying a bit higher amount is convenient. All other option except (e) cannot be assumed quality and price offered by company V for the product is not mention in the given statement. And also quality is only parameter to



increase the number of customer or it is the only way also cannot be hypothesized from the given statement.

**19. Ans. (c)**

Sol. Only statement I can be inferred from the given statement as HRA allowance increase after reallocation which clearly indicates that both are directly related to each other. But II and III cannot be inferred as we cannot state that strike is the reason behind the rise in allowance. And also increase in profit cannot be a factor to increase the allowance which the statement also states that the decision has been taken after the reallocation.

**20. Ans.(c)**

Sol. Non –biodegradable nature of plastic bag can't be correlated with the statement because the statement does not say whether plastic is biodegradable nor non-biodegradable. Hence, I is not implicit. But II is obviously implicit. That is why the scientist uses the word 'Beware' in his statement before asserting the negative features of plastic.

**21. Ans.(a)**

Sol. Option (a) may be the cause of vacant seat in the engineering colleges because due to the recession, the number of jobs available are decreasing day by day, hence the unemployment is increasing in the engineering sector. So (a) is the correct option.

**22. Ans.(b)**

Sol. Option (b) may be a possible effect of big pig holes developed on the roads.

**23. Ans.(a)**

Sol. For I- This statement supports the given statement as it describes that the authority's report also has detailed guidelines for museums to tackle different kinds of threats as given in the statement that Disaster management systems can safeguard India's heritage.

For II- This statement supports the given statement as it describes that analysis of NDMA shows that India's museums face lists terrorism and climate-related events which is also mentioned in the given statement.

For III- This statement does not support or negates the given statement as it describes that Climate-related issues are not a matter of concern for Indian Heritage whereas the given statement states that India's Disaster management systems can safeguard its' heritage from climate changes.

**24. Ans.(a)**

Sol. It is clear from the above that statement I is the cause and II is it's effect as this will be the cause that Infosys is planning to hire workers and for that it will hire graduates and will create talent pools will be it's effect.

**25. Ans.(b)**

Sol. It is clear from the above statement that II is cause and I is it's effect because the PAN has become more vulnerable that is why Aadhar has become mandatory for filing Income Tax.

**26. Ans.(a)**





Sol. (i) most accurately defines term “implicit bias” as the word automatic was used which is similar to the term “unintentionally racist” used by researchers.

**27. Ans. (b)**

Sol. Only II is implicit as it is given in the statement that both the companies signed the contract for not revealing the details of their company with the rivals but company A may have done this and breached the contract, so the company B sent the legal notice to company A.

**28. Ans.(e)**

Sol. The Act is aimed at eradication of the disease and so it needs to be proclaimed and promoted. So, both the courses follow.

**Directions (29-30):**

**29. Ans.(e)**

Sol. As from the given statement we can assume that the notice on the gate of ‘M’ housing society will be followed by all the sales persons. Also it can be assumed that the security guards are not be able to stop so the requirement of notice is emerged. Since both the assumptions follow from the given statement, so both I and II are implicit.

**30. Ans.(e)**

Sol. It is mentioned that farmers will be in trouble without rain. This means that timely rain is essential. Also, it shows that farmers are dependent on rain. So, both I and II are implicit.

**31. Ans.(c)**

Sol. Just because of builders which are indulge in profit business without caring about environment and poor people which suffers most and dies due to chronical diseases. And development of environment has lack behind due to rapid urban development. Thus, statement III is the cause, I and II are its effect.

**32. Ans. (c)**

Sol. Note that we are talking about Smart Cities Mission. Thus, anything related to rural areas is beyond the scope. Whereas, in option (c), we focus only on urban development. Hence, option (c) will be an effect of the statement.

**33. Ans. (e)**

Sol. Clear from the way the agitated guardians have protested against this newly introduced audio-visual aid of teaching methodology, they are unhappy with the new teaching methodology.

**34. Ans. (c)**

Sol. Any new thing takes some time for its adjustment. So, school authority may defend themselves by saying this statement.

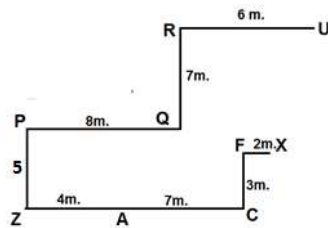
**35. Ans.(d)**

Sol. Both I and II can't be assumed from the given statement as statement I is vague and II statement is also not implicit because it is not clear from the given statement that whether people are interested in such news or not.

**Directions (36-37):**

**36. Ans.(c)**

From all the statements



Sol.

37. Ans.(a)

Sol.

38. Ans.(d)

Sol. Option (d) contradicts the views expressed in the statement.

**Directions (39-40):**

39. Ans.(b)

Sol. The disease occurs at the end of monsoons every year. So, precautionary measures every four years shall not help. The second course of action shall be a preventive measure. So, only course II follows.

40. Ans.(e)

Sol. Clearly, the library needs to be provided with the essential facilities and trained personnel for better services. So, both the courses follow.

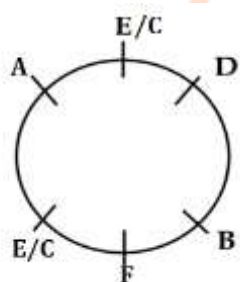
**Directions (41-45):**

41. Ans.(c)

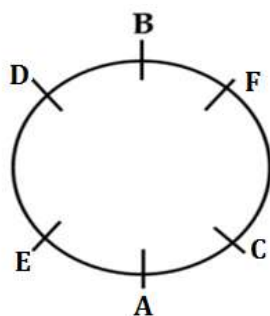
Sol. Either from I or II the code of 'Celebration' will be—'ni'.

42. Ans.(d)

Sol. From-I



From, II

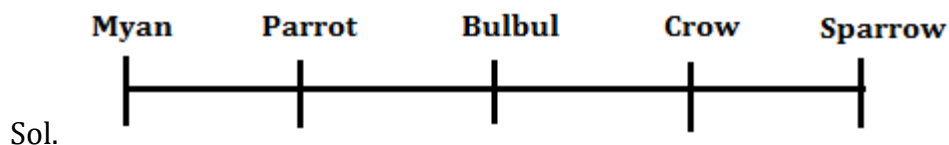




43. Ans.(e)

Sol.  $D > E > C > A > F > B$

44. Ans.(e)



45. Ans.(d)

5. Q

4. P/S

3. R

2. P/S

1. T

46. Ans.(d)

Sol. In the above question we have to find which statement can be concluded from the given passage.

For I- This is not true because it is not given in the above passage that Google's market is not good that's why Google has decided to launch new service.

For II- This statement is irrelevant. Because Google is going to launch new service it does not mean that Google is not interested to provide other services, we can't conclude this from the given passage.

For III- There is a sentence in the passage "The results will aim to streamline such listings by eliminating duplicate jobs posted on different sites." It clarifies the statement III. So we can conclude statement III from the given passage.

For IV- This is vague in the given context because Google will also show employer ratings from current and former workers, it is given in the passage.

47. Ans.(c)

Sol. In the above question we have to find which statement negates the given statement.

For I- This statement supports the given statement as it describes about the revolution that technology has bring in India which is a mark of achievement of Modi's government.

For II- This statement also supports the given statement as it describes the country's growth in Modi government's tenure which is considered as victory of his government.

For III- This negates of the given statement as it defines the problems of poverty and corruption that India is still facing which can be considered as flaw of Modi's government.

For IV- It supports the given statement as number of FDI's has increased in India in current scenario as given in the statement.

48. Ans.(b)

Sol. In the statement we have to pick the statement which can be assumed from above statement.

For Statement I. Wrong, Because it was not possible to destroy the existing stocks by the end of this month that is why the companies pleaded to the Supreme Court.

For Statement II. Right, Because it is clear from the above statement that the court had fixed the deadline 31 may earlier and there after extended it to 31 july.

For Statement III. Right, Because to dispose off stock and transporting it out of the state requires clearance.



49. Ans.(e)

Sol. In the above question we have to find which statement concludes the given statement.

For I- This statement states about compulsion of Adhaar with PAN to avoid fraud in taxation system whereas the given statement states about mandating Aadhaar in banking transactions. So this cannot be concluded from the given statement.

For II- It cannot be concluded as it is not given in the statement whether Adhaar is more secure or not.

For III-It is not related to the statement as it is general information.

50. Ans. (d)

Sol. Statement I strengthen the given statement as even the economic growth is higher the problem of stunting is keep on increasing among children. But statement II is neutral statement.

51. Ans. (d)

Sol. Only (I) can be assumed from the given statement as it is mentioned in the given statement that rooftop solar power technology is showing growth.

## Topic 4- Direction Sense

**Direction (1-2):** Study the following information carefully and answer the questions given below: (SBI PO 2019)

A & B means A is 15 m to the north of B

A @ B means A is 23 m to the east of B

A # B means A is 20 m to the south of B

A % B means A is 12 m to the west of B

1. If P % Q # R & S @ T # U is true and Point X is 5m to the south of T, then what is the shortest distance between point X and point P?

- (a) 6m
- (b) 8m
- (c) 10m
- (d) 11m
- (e) None of these

2. What is the shortest distance between Point P and Point S?

- (a) 11m
- (b) 12m
- (c) 13m
- (d) 14m
- (e) None of these

**Direction (3-4):** Study the following information carefully and answer the questions (SBI PO 2019)

Clubs (♣), diamonds (♦), hearts (♥) and spades (♠)

A ♠ B means A is to the East of B

A ♦ B means A is to the West of B

A ♥ B means A is to the North of B

A ♣ B means A is to the South of B

There are 3 buses travelling from Z to Y.



Bus 1: K 15 ♦ Z, J 10 ♣ K, M 10 ♦ J, D 18 ♥ M, C 29 ♠ D, P 9 ♥ C, Y 4 ♦ P

Bus 2: E 36 ♠ Z, F 6 ♦ E, G 14 ♥ F, H 19 ♦ G, L 39 ♥ H, Y 25 ♠ L

Bus 3: N 33 ♠ Z, Q 4 ♥ N, S 9 ♦ Q, T 4 ♥ S, C 20 ♦ T, U 4 ♦ C, U 4 ♣ V, Y 5 ♥ V

3. What is the distance between L and P?

- (a) 29m
- (b) 39m
- (c) 30m
- (d) 40m
- (e) None of these

4. What is the shortest distance and direction of Y with respect to E?

- (a) 49m, South
- (b) 55m, West
- (c) 53m, North
- (d) 45m, East
- (e) None of these

**Direction (5-9):** In the following questions, the symbols #, &, @ and \$ are used with the following meanings as illustrated below. Study the following information and answer the given questions: **(SBI PO 2018)**

Note: The directions which are given indicates exact directions.

P#Q - P is in the south direction of Q.

P@Q - P is in the north direction of Q.

P&Q - P is in the east direction of Q.

P\$Q - P is in the west direction of Q.

P£QS- P is the mid-point of QS vertically.

Note- For southeast direction it used to be written as P#&Q and so on...

When it is given that the Car honks once then it will be considered as the car taken a left turn and if it is given as the car honks twice then it will be considered as the car takes a right turn.

Point S is &15m of point B. Point J is @33m of point S. Point K is @25m of point B. Point L is \$20m of point K. Point Q is #40m of point L. Point F is &40m point Q. Point E£DF. Point D is @30m of Point F.

5. What distance the car has to travel from point D to reach the airplane which is parked at point J?

- (a) 22m
- (b) 50 m
- (c) 43 m
- (d) 23m
- (e) 35m

6. What could the possible shortest route to reach point K from point J?

- (a) Started in east till 15km, honks once, cover 8km
- (b) Started in west till 15km, honks twice, cover 8km
- (c) Started in south till 25km, honks once, cover 8km
- (d) Started in north till 5km, honks once, cover 8km
- (e) Started in west till 15km, honks once, cover 8km



7. Point D is in which direction from point Q?

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

8. If Point U is #15m of point B then which of the following is the position of U with respect to F?

- (a) @, 24m
- (b) \$, 25 m
- (c) #, 15 m
- (d) \$, 20m
- (e) None of these

9. Point E is in which direction from point B?

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

**Directions (10-13):** Study the information carefully and answer the questions given below.

A person starts walking from A towards to reach B, which is 15m east to A. He then takes a right turn and walks 20 m to reach point C. From C, he takes left turn and walks 15m to point D, then again he takes a left turn and walks 10m to point E. From E, he takes a left turn and walks 20m to reach point F. He then takes a right turn and walks 5m to reach G and finally takes a left turn to reach point H, which is 10 m away from G.

**(RRB PO 2018)**

Q10. If J is 5m north to G, then what is the distance between A and J?

- (a) 5m
- (b) 10m
- (c) 15m
- (d) 20m
- (e) none of these

Q11. Four of the following five belongs to a group based on their directions find the one that does not belong to that group?

- (a) A, G
- (b) F, C
- (c) B, D
- (d) H, F
- (e) D, E

Q12. How far is point A from point H?

- (a) 5m
- (b) 10m
- (c) 15m



- (d) 20m
- (e) none of these

Q13. Which of the following is the nearest point to X, which is the mid-point of BC?

- (a) E
- (b) F
- (c) C
- (d) B
- (e) H

**Direction (14-18):** In the following questions, the symbols #, &, @ and \$ are used with the following meanings as illustrated below. Study the following information and answer the given questions: **(IBPS PO 2017)**

Note: The directions which are given indicates exact directions.

P#Q - Q is in the south direction of P.

P@Q - Q is in the north direction of P

P&Q - Q is in the east direction of P at distance of either 12m or 6m

P\$Q - Q is in the west direction of P at distance of either 15m or 3m.

P#&Q - Q or P is in the southeast direction of P or Q.

P@@Q - P or Q is in the northeast direction of Q or P.

14. If A&B#&C\$D&E@F are related to each other such that F is placed exactly between A and B on line AB. Similarly D and A are vertically inline then what is the possible shortest distance between F and B when DE (length of segment DE) < DC/2 and EC < 10m?

- (a) 12m
- (b) 5 m
- (c) 4 m
- (d) 6m
- (e) None of these

15. If A&B#&C\$D&E@F are related to each other such that D@&B then what is the probable direction of A with respect to F?

- (a) North-west
- (b) West
- (c) South-west
- (d) east
- (e) Can't be determined

16. K#&T\$M#&S&K&Z are related to each other such that K is in north of M then what is the probable direction of Z with respect to M?

- (a) North-east
- (b) West
- (c) South-west
- (d) east
- (e) Can't be determined

17. K#&T\$M#&S&K&Z are related to each other such that K is in north of M . M and K are inline vertically when MT > SK then what is the distance between S and Z When KZ = 12 m?

- (a) 24m
- (b) 18m
- (c) 15m
- (d) Either (a) or (b)





(e) None of these

18. K#&T\$M#&S&K&Z are related to each other such that K is in north of M. M and K are inline vertically when  $MT > SK$  then what is the sum of SK and MT?

(a) 27m

(b) 21m

(c) 15m

(d) Either (a) or (b)

(e) Either (b) or (c)

**Directions (19-21):** Study the information carefully answers the questions given below. **(SBI PO 2017)**

@ means either hour hand or minute hand is at 8

# means either hour hand or minute hand is at 5

\$ means either hour hand or minute hand is at 4

% means either hour hand or minute hand is at 12

& means either hour hand or minute hand is at 2

£ means either hour hand or minute hand is at 3

**Note:** if two symbols are given than by default first symbol is consider as hour hand and second one is consider as minute hand. And all time are consider at PM.

For eg. @# → 8:25 pm.

19. If A takes 25 min to reach railway station and his train is scheduled at #& then at what time should he leave to reach the station 5 minute earlier?

(a) \$%

(b) \$&

(c) &S

(d) \$@

(e) £\$

20. If a train departed from a station at &£ and it takes 2 hours to reach the destination then when it will reach to the destination?

(a) \$£

(b) \$%

(c) # \$

(d) \$ #

(e) £\$

21. A person has to catch a train that is scheduled to depart at '@%'. It takes the person 4 hours and 15 minutes to reach the railway station from his home. At what time should he leave from his home for the railway station to arrive at the station at least 25 minutes before the departure of the train?

(a) %@

(b) £\$

(c) %+

(d) +@

(e) None of these

**Directions (22-25):** Read the following information and answer the questions that follow:



'A' walks 10 km north from point Q to reach point H. He takes a left turn and walks 9 km to reach point S. On the other side, 'B' walks 5 km north from point Y to reach point J. Point Y is 9 km either east or west from point Q. Next 'B' turns to his right and walks 4 km to reach point D. Also 'A' turned left from point S and reached point M after walking 5 km. M is in west direction from J. **(RRB PO 2017)**

22. What is the shortest distance between points M and J?

- (a) 10 km
- (b) 26 km
- (c) 18 km
- (d) 12 km
- (e) Cannot be Determined

23. If 'B' walks 4 km east from point Y, then he is in which direction with respect to point D?

- (a) South
- (b) North-west
- (c) North-east
- (d) North
- (e) South-west

24. What is the shortest distance between points Q and D?

- (a)  $\sqrt{194}$  km
- (b)  $\sqrt{198}$  km
- (c)  $\sqrt{197}$  km
- (d)  $\sqrt{196}$  km
- (e)  $\sqrt{195}$  km

25. What is the direction of J with respect to Q?

- (a) South
- (b) North-west
- (c) North-east
- (d) North
- (e) South-west

**Directions (26):** Read the following information carefully and answer the following questions.

If **(IBPS PO Mains 2020)**

- (i) A & B means A is 5m west of B.
- (ii) A % B means A is 4m South of B.
- (iii) A \* B means A is 6m North of B.
- (iv) A @ B means A is 4m East of B.

26. In expression F&G, B&A%C&D&E\*F@H, the Point A is in which direction of Point G?

- (a) West
- (b) North-West
- (c) East



- (d) North-East  
(e) South

**Direction (27-29):** Study the following information carefully and answer the questions:

Clubs (♣), diamonds (♦), hearts (♥) and spades (♠) **(SBI PO Mains 2020)**

A ♥ B means A is to the North of B

A ♣ B means A is to the South of B

A ♠ B means A is to the East of B

A ♦ B means A is to the West of B

There are 3 buses travelling from P to Q.

Bus 1: A 14 ♠ P, B 6 ♥ A, C 10 ♦ B, D 6 ♥ C, Q 4 ♦ D

Bus 2: M 10 ♣ P, N 10 ♦ M, O 6 ♥ N, R 5 ♠ O, S 10 ♥ R, T 5 ♠ S, Q 6 ♥ T

Bus 3: J 12 ♦ P, K 10 ♥ J, L 2 ♠ K, U 5 ♥ L, V 10 ♠ U, Q 3 ♠ V

27. What is the distance between U and N?

- (a) 20  
(b) 15  
(c) 14  
(d) 25  
(e) None of these

28. S is in which direction and distance from B?

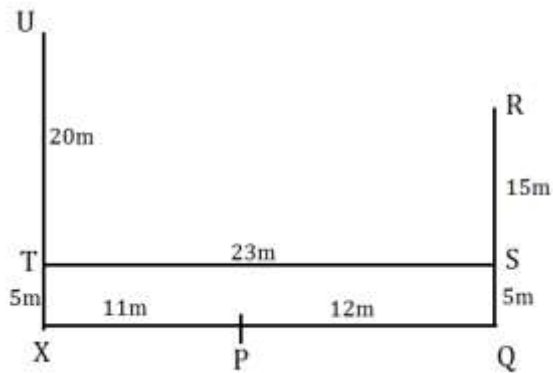
- (a) 19, East  
(b) 19, West  
(c) 20, East  
(d) 20, West  
(e) None of these

29. Which of the following lie in a straight line?

- (a) SRU  
(b) VQT  
(c) ONJ  
(d) LQD  
(e) None of these

**Answer:**

**Direction (1-2):**

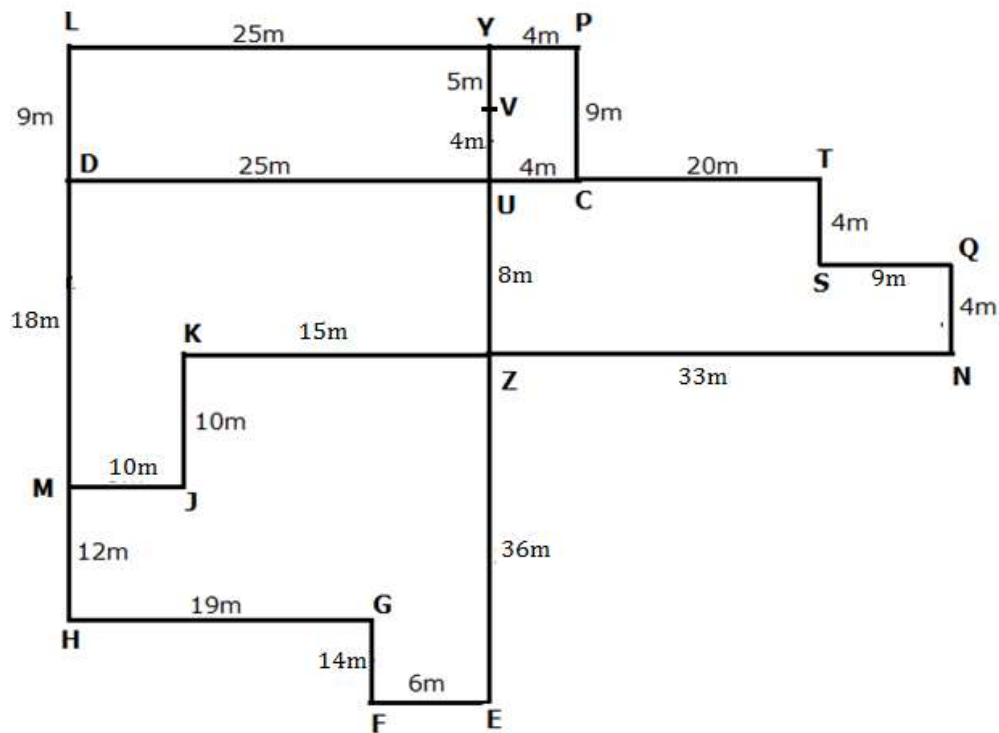


Sol.

1. Ans. (d)

2. Ans. (c)

**Direction (3-4):**

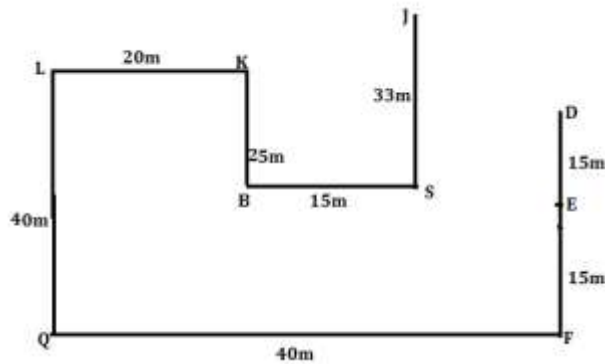


Sol.

3. Ans. (a)

4. Ans. (c)

**Direction (5-9):**



5. Ans. (d)

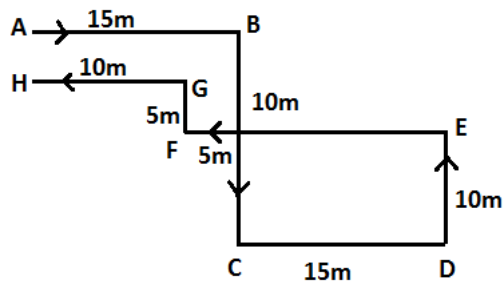
6. Ans. (e)

7. Ans. (d)

8. Ans. (d)

9. Ans. (d)

**Directions (10-13):**



11. Ans(b)

12. Ans(e)

13. Ans(a)

14. Ans(b)

**Directions (14-18):**

**14. Ans. (d)**

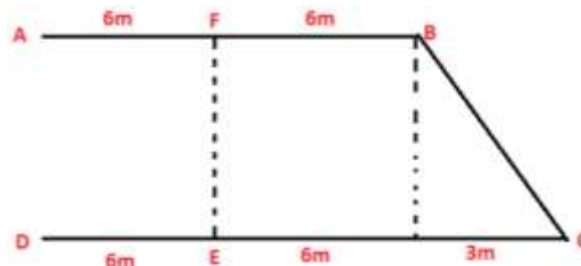
Sol. It is given that  $DE < DC/2$  so the value of  $DC = 15m$  and  $AB = 12m$  or  $6m$

D and A are vertically inline so  $DE = AF$ ,

$DE = 6m$ ,  $EC = 15 - 6 = 9m$

It is given that  $EC < 10$  so  $DE = 6m$  and  $AB = 12m$

Hence  $FB = 6m$



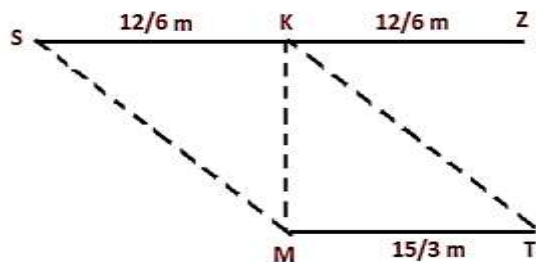
**15. Ans. (e)**

Sol. The direction of A with respect to F can't be determined.

**16. Ans. (a)**

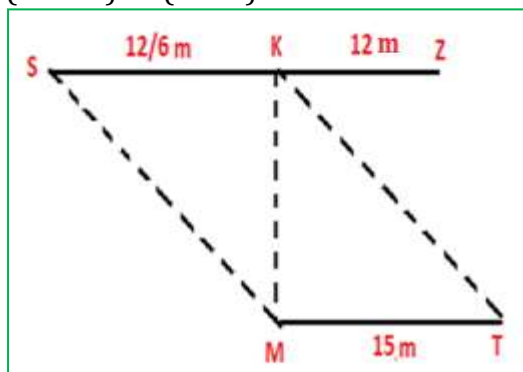


Sol. There are four possible possibilities but two will cancel out by the condition that K is in east of S and K is in north of M so the final figure is given below.  
It is clear that Z is in north east from M.



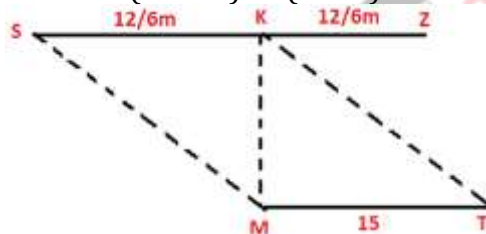
**17. Ans.(d)**

Sol: It is given that  $MT > SK$  so  $MT = 15m$   $KZ = 12m$  and  $SK = 12m$  or  $6m$  so the value of  $SZ = (12+12)$  or  $(12+6) = 24m$  or  $18m$



**18. Ans. (d)**

Sol. It is given that  $MT > SK$  so  $MT = 15m$  and  $SK = 12m$  or  $6m$   
 $SK + MT = (12+15)$  or  $(15+6) = 27m$  or  $21m$



**Directions (19-21):**

19. Ans.(d)

Sol. train is scheduled at = 5 hour 10 minute = #&

Time should he leave to reach the station 5 minute earlier = 5 hour 10 minute - (25+5) minute = 4 hour 40 minute

20. Ans.(a)

Sol. 4 hour 15 minute

21. Ans.(b)

Sol. Scheduled time of departure of train = @% = 8:00 PM

Time for travel + early arrival = 4 hour 15 minutes + 25 minutes = 4 hour 40 minutes

8:00 PM - 4 hour 40 minutes = 3:20 PM = £\$

104





## Topic 5- Coding & Decoding

**Direction (1-3):** Study the following information carefully and answer the questions  
The following words are coded in this manner: **(SBI PO 2019)**

'World make sense meaningful' is coded as '8\$A, 2!R, 2#N, 14\$F'

'Rain starts every week' is coded as '8^A, 10#R, 2+E, 8!E'

'Easily mind **(a)** is coded as '12%R, 8\$I, 10+I'

'Reputation prestige turns food' is coded as '12%I, 2~R, **(b)**, 8@O'

1. What will come in the blank '(a)'?

- (a) Prepares
- (b) Ready
- (c) Turn
- (d) Funny
- (e) Early

2. What will come in the blank '(b)'?

- (a) 3\$F
- (b) 8\*D
- (c) 10+E
- (d) 10#D
- (e) 14^I

3. What is the code of "every person"?

- (a) 2%E 10+S
- (b) 9+E 2%S
- (c) 2+E 10%S
- (d) 9%E 2+S
- (e) None of these

**Direction (4-8):** Study the information carefully and answer the questions given below.

There is 3\*5 matrix which can produce signals which in turn help in the illumination of some bulbs. The row of the matrix are denoted by @, % and # from bottom to top and the columns are denoted by the alphabets A, B, C D and E from left to right. : **(SBI PO 2019)**

@ row contains number which are consecutive multiple of 7, starting from 28 (from left to right).

% row contains number which are consecutive multiple of 11, starting from 11 (from left to right).

# row contains number which are consecutive multiple of 13, starting from 13 (from left to right).

The matrix helps in producing signals which can be either a single string of number X- or two-line string X and Y.

There are 4 lights P, Q, R and S. Based on the outcome of the strings mentioned above one of the light blinks.

**Condition for blink:**

1. If the outcome is below 85, then P will blink
2. If outcome range is 85-110, then Q blinks
3. If outcome range is 111-210, then R blinks
4. If outcome is greater than 210, then S blinks

**For outcome of the string:**

1. If the string has all even numbers, then outcome of the string is obtained by adding all the numbers.
2. If an odd number is followed by an even number then the one's places of all the two-digit numbers are deleted and, tenth place are multiplied to get the outcome
3. If the string contains 2 prime number, then the tenth's place is deleted from each of the two-digit number and remaining number are multiplied.
4. If no above logic is followed, then simple outcome is addition of the numbers.

4. If  $x = \#C \%D \#A \#E$ , then which bulb blink?

- (a) S
- (b) Q
- (c) P
- (d) R
- (e) Either R or S

5. If  $X = @A @C \#D \%B$ , then which bulb blink?

- (a) S
- (b) Q
- (c) P
- (d) R
- (e) Either P or Q

6. If  $X = \#A\%E \%A @B$ , then which bulb blink?

- (a) S
- (b) Q
- (c) P
- (d) R
- (e) Either P or Q

7. If  $X = @A\#B@D\%C$ , then which bulb blink?

- (a) S
- (b) Q
- (c) P
- (d) R
- (e) Either R or S

8. If  $X = @E\#D@D\#E$ , then which bulb blink?

- (a) S
- (b) Q
- (c) P
- (d) R



(e) Either R or S

**Direction (9-13):** Study the following information carefully and answer the given questions: **(SBI PO 2018)**

In coded language

“tradition festival iconic” is coded as – ‘8X 9J 6XJ’

“aesthetic recreate vibe” is coded as – ‘8E 9VJ 4W’

“creative emerging shine” is coded as – ‘8NO 5K 8C’

9. What can be the code of ‘during autumn’?

- (a) 6M 7FN
- (b) 6M 6FN
- (c) 6K 6FN
- (d) 6K 6EM
- (e) None of these

10. What can be the code of ‘Impulse Response’?

- (a) 7NT 7F
- (b) 8T 7NR
- (c) 8F 7MT
- (d) 7NT 8F
- (e) None of these

11. What can be the code of ‘Vibrant Ocean’?

- (a) 5XB 7J
- (b) 5XB 7K
- (c) 5XZ 7M
- (d) 5YB 7K
- (e) None of these

12. What can be the code of ‘Ideal Journey’?

- (a) 5WC 7T
- (b) 5FB 7T
- (c) 5WC 7V
- (d) 5FB 7V
- (e) 5WB 7T

13. What can be the code of ‘Enough Rise’?

- (a) 6NF 4F
- (b) 6MH 4F
- (c) 6MF 4D
- (d) 6MH 4H
- (e) None of these

**Direction (14-17):** Study the following information and answer the given questions:

In alphabetical series A-Z each letter except vowels is assigned a different number from 1-8 (for ex- B is coded as 1, C-2.....K-8) and again those numbers get repeated (for ex- L-1, M-2.....so on). **(IBPS PO 2017)**

Also each vowel is assigned a different symbol viz. #, \$, %, @, &.



In coded language-

"She is girl" is coded as - 76% #7 5#61

"What did you like" is coded as - 26\$8 3#3 4@& 1#8%

"It is famous" is coded as - #8 #7 4\$2@&7

(i) If both first and last letter of a word is vowel then the codes of both the vowels are interchanged.

(ii) If first letter of a word is vowel and last letter is consonant then both are to be coded as \*.

(If the word does not satisfy the conditions given above then the letters of that word are to be coded as per the directions given above)

14. What can be the code of 'Nothing perfect'?

(a) 3@86#53 4%64%28

(b) 3@68#35 4%64%28

(c) 3@86#35 4%64%38

(d) 3@86#35 4%64%28

(e) None of these

15. What can be the code of 'Exam was easy'?

(a) \*3\$\* 2\$7 \*\$7\*

(b) \*3\$\* 2\$7 %\$74

(c) %3\$2 2\$7 \*\$7\*

(d) \*3\$\* 2\$7 \$74%

(e) None of these

16. What can be the code of 'Create style'?

(a) 2#6\$8% 7841%

(b) 26%\$8% 7814%

(c) 26%\$8% 7841%

(d) 26%\$6% 7841%

(e) None of these

17. What can be the code of 'Strength of god'?

(a) 768%3586 4@ 5@3

(b) 786%3586 \*\* 5@3

(c) 786%3586 @\* 5@3

(d) 786%3856 4@ 5@3

(e) None of these

### Answer:

Direction (1-3):

Sol. Alphabets- third letter from the right end of the given word.

Number- If the number of letters in the given word is odd then subtract three from the number and If the number of letters in the given word is Even then add four from the number.

First letter of each word represents specific symbols as below-



words	W	M	S	R	E	P	T	F
code	!	\$	#	^	+	%	~	@

Example: World – 2 ! R

1. Ans. (a)

2. Ans. (e)

3. Ans. (c)

**Direction (4-8):**

Sol. From the above given conditions the matrix will be---

Rows↓/Column→	A	B	C	D	E
#	13	26	39	52	65
%	11	22	33	44	55
@	28	35	42	49	56

**4. Ans. (c)**

Sol.  $x = \#C \%D \#A \#E$

So,  $x = 39 \ 44 \ 13 \ 65$

As it is clear that condition (2) is applicable in the above ques so the outcome will be—

Outcome =  $3 \times 4 \times 1 \times 6 = 72$

As the outcome is below 85, so clearly P will blink.

**5. Ans. (d)**

Sol.  $X = @A @C \#D \%B$

So,  $X = 28 \ 42 \ 52 \ 22$

As it is clear that condition (1) is applicable in the above ques so the outcome will be—

Outcome =  $28 + 42 + 52 + 22 = 144$

As the outcome is 111-210, so clearly R will blink.

**6. Ans. (c)**

Sol.  $X = \#A \%E \%A @B$

So,  $X = 13 \ 55 \ 11 \ 35$

As it is clear that condition (3) is applicable in the above ques so the outcome will be—

Outcome =  $3 \times 5 \times 1 \times 5 = 75$

As the outcome is below 85, so clearly P will blink.

**7. Ans. (d)**

Sol.  $X = @A \#B @D \%C$

So,  $X = 28 \ 26 \ 49 \ 33$

As it is clear that condition (4) is applicable in the above ques so the outcome will be—

Outcome =  $28 + 26 + 49 + 33 = 136$

As the outcome is 111-210, so clearly R will blink.

**8. Ans. (a)**

Sol.  $X = @E \#D @D \#E$

So,  $X = 56 \ 52 \ 49 \ 65$

As it is clear that condition (4) is applicable in the above ques so the outcome will be—

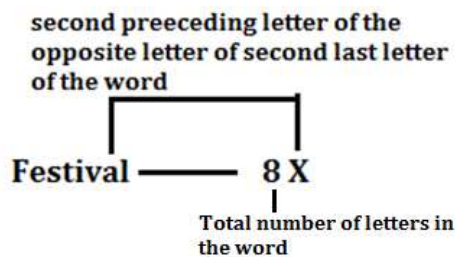
Outcome =  $56 + 52 + 49 + 65 = 222$

As the outcome is greater than 210, then S blink.

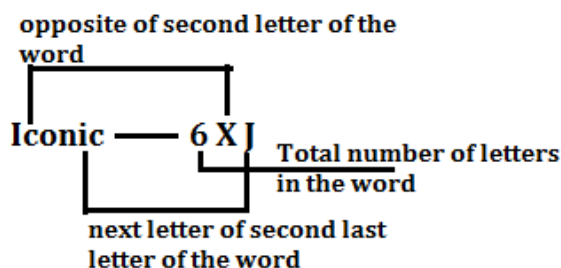
**Direction (9-13):**

Let us understand the logic behind the given coding decoding

Case-1: If the first letter of the code is consonant-



Case-2: If the first letter of the code is vowel-



9. Ans.(c)

10. Ans.(d)

11. Ans.(b)

12. Ans.(e)

13. Ans.(b)

**Direction (14-17):**

Sol. In this new pattern coding decoding each letter, except vowel, is assigned a number from 1-8 So, B-1, C-2, D-3, F-4, G-5, H-6, J-7, K-8, L-1, M-2, N-3, P-4, Q-5, R-6, S-7, T-8, V-1, W-2, X-3, Y-4, Z-5.

Each vowel is assigned a different symbol as-%, #, \$, @, &. So, for vowels the symbols are - A-\$, E-%, I-#, O- @, U-&.

14. Ans.(d)

15. Ans.(a)

Sol. The code will be- \*3\$\* 2\$7 \*\$7\*

16. Ans.(c)

17. Ans.(b)

Sol. The code will be- '786%3586 \*\* 5@3'

## Topic 6- Blood Relation



**Direction (1-2):** In the following questions, the symbols #, &, @, \*, \$, % and © are used with the following meanings as illustrated below. Study the following information and answer the given questions: **(IBPS PO 2017)**

P#Q - P is the son of Q.

P@Q - Q is the child of P.

P©Q - P is the parent of Q.

P\$Q - P is elder than Q.

P\*Q - P is the husband of Q.

P&Q - Q is the daughter-in-law of P.

P%Q - P is the wife of Q.

1. If A@B\*D&G%E\$F#D then how is F related to A?

- (a) Grandfather
- (b) Grandson
- (c) Daughter
- (d) Wife
- (e) None of these

2. If H\*M©O\$N#M, the age of N is 20 years and age of H, is 40 years then what is the probable age of O?

- (a) 17 years
- (b) 15 years
- (c) 23 years
- (d) 45 years
- (e) 12 years

**Directions (3-4):** Study the information carefully and answer the questions given below.

P is the husband of Q. R is the grandchild of P. P has only one child (son) who is married to T's child. T has only two children one son and one daughter. X is grandson of T. S is brother in law of son of T. U and V are children of T. W is married to the son of T. X is son of U's brother. **(SBI PO 2017)**

3. If T is married to Y then how is T related to R?

- (a) Grandfather
- (b) Grandmother
- (c) Maternal Grandfather
- (d) Maternal Grandmother
- (e) Either (c) or (d)

4. How is X related to V?

- (a) Son
- (b) Daughter
- (c) Son in law
- (d) Daughter in law
- (e) Husband





**Directions (5-6):** Read the following information carefully and answer the following questions.

If **(IBPS PO Mains 2020)**

- (i) P & Q means P is the brother Q.
- (ii) P % Q means P is the father of Q.
- (iii) P \* Q means P is the sister of Q.
- (iv) P @ Q means P is the Son of Q.
- (v) P \$ Q means P is the daughter Q.
- (vi) P ? Q means P is the mother of Q.

5. In expression Q&G, G&A%C&D?E\*F@H@R, then, how is F related to A?

- (a) Son
- (b) Grandson
- (c) Granddaughter
- (d) Either (b) or (c)
- (e) Either (a) or (b)

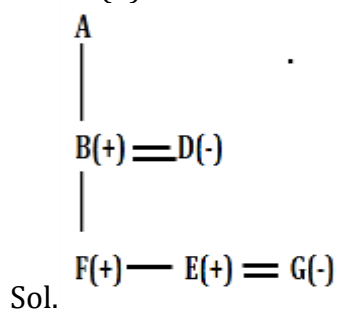
6. In expression Q?P, P&A%W&D?E\*F@H@R, then, how is Q related to the E's mother?

- (a) Maternal Grandfather
- (b) Paternal Grandfather
- (c) Paternal Grandmother
- (d) Maternal Grandmother
- (e) Either (a) or (c)

**Answer:**

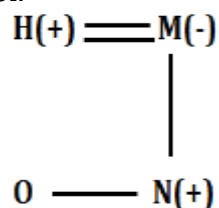
**Direction (1-2):**

1. Ans.(b)



2. Ans.(c)

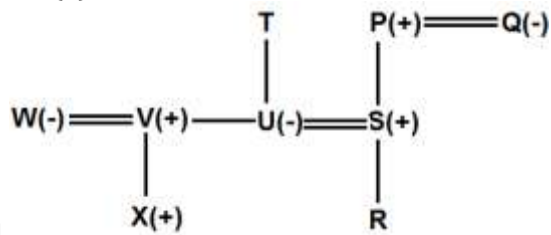
Sol.



**Directions (3-4):**



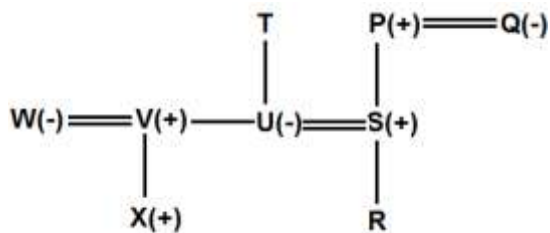
3. Ans.(e)



Sol.

4. Ans.(a)

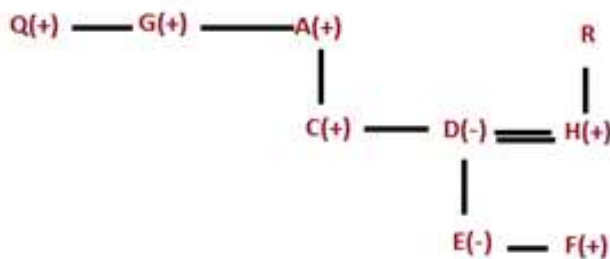
Sol.



**Directions (5-6):**

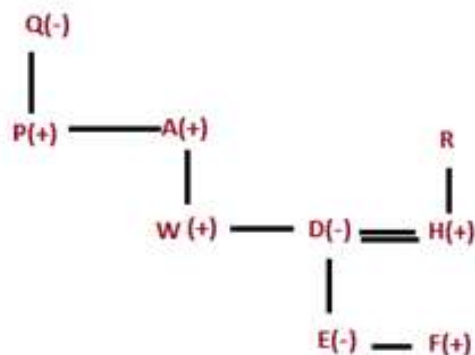
5. Ans. (b)

Sol. F is the Grandson of A.



6. Ans. (c)

Sol. Q is the Paternal Grandmother of the E's mother.



## Topic 7- Alphabetical and Numerical Series



**Directions (1-3):** Study the following information carefully and answer the questions given below: (IBPS PO 2018)

**\$ F 3 6 N @ 9 K T Q 5 C % 8 B # 7 D S \* H 4 W L**

**STEP I-** The numbers which are immediately preceded by symbol and immediately followed by an alphabet are arranged in the end of the series in increasing order.  
(Arranged immediate after L)

**STEP II-** The odd numbers which are immediately preceded by an alphabet interchange their position with respect to the alphabet just before it.

**STEP III-** The alphabets which are immediately followed by a symbol are arranged in alphabetical order between H and 4 of step II.

**Note:** (STEP II is applied after STEP I and STEP III is applied after STEP II)

1. What is the sum of number which is sixth from right end in step I and eight from left end in step III?

- (a) 8
- (b) 7
- (c) 9
- (d) 11
- (e) 13

2. How many alphabets are immediately preceded and immediately followed by numbers in step II?

- (a) one
- (b) two
- (c) three
- (d) four
- (e) five

3. How many symbols are immediately preceded by alphabets in Step III ?

- (a) one
- (b) two
- (c) three
- (d) four
- (e) five

**Directions (4-5):** First 12 even numbers are written from top to bottom. The letters of word 'SACRED' are written in alphabetical order against each multiple of 4 (One letter against one number). There are 2 letters between N and S. There are as many letters between E and N as between P and D. P is not against number 14. There are 5 letters between U and T. U is above T. I is written against number 6. (No letter is repeated against any number) (SBI PO 2017)

4. Which is the second letter in word formed by letters against numbers 6, 12, 14, and 20?



- (a) T
- (b) D
- (c) N
- (d) I
- (e) R

5. If there are 3 alphabets in English alphabetical series between alphabets written against numbers 10 and 22. Then how many alphabets in English alphabetical series are there between the alphabets written against numbers 18 and 22?

- (a) Three
- (b) Five
- (c) One
- (d) Four
- (e) Cannot be determined

**Answer:**

Directions (1-3):

Input: \$ F 3 6 N @ 9 K T Q 5 C % 8 B # 7 D S \* H 4 W L

Step I: \$ F 3 6 N @ K T Q 5 C % B # D S \* H 4 W L 7 8 9

Step II: \$ 3 F 6 N @ K T 5 Q C % B # D S \* H 4 W 7 L 8 9

Step III: \$ 3 F 6 @ K T 5 Q % # D \* H B C N S 4 W 7 L 8 9

- 1. Ans.(c)
- 2. Ans.(c)
- 3. Ans.(b)

Directions (4-5):

4. Ans.(d)

Sol. 6, 12, 14, 20 – I, D, T, R

Word formed is DIRT. So second letter – I

- 2 - U
- 4 - A
- 6 - I
- 8 - C
- 10 - P
- 12 - D
- 14 - T
- 16 - E
- 18 - N
- 20 - R
- 22 -
- 24 - S

5. Ans.(c)



Sol. 10 is P. So 3 letters between 10 and 22.  $P + 3 = T$ , but T is already written. We cannot repeat any letter. So  $P - 3 = L$

So against 22 is L

Now 18 is N. 22 is L. So between them is only 1 letter in English alphabetical series i.e. M

2 - U  
4 - A  
6 - I  
8 - C  
10 - P  
12 - D  
14 - T  
16 - E  
18 - N  
20 - R  
22 - L  
24 - S

## Topic 8- DS

**Directions (1-3):** Each of the questions below consists of a question and two statements numbered I, and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and answer the following questions. **(IBPS PO Mains 2020)**

- (a) If the data in statement I alone are sufficient
- (b) If the data in statement II alone are sufficient
- (c) If the data either in statement I alone or statement II alone are sufficient to answer
- (d) If the data given in both I and II together are not sufficient
- (e) If the data in both the statements I and II together are necessary to answer

1. Eight boxes P, Q, R, S, T, U, V and W are arranged one above the other but not necessarily in the same order. Which of the following box is placed just below the box U?

Statements I. More than three boxes are placed between S and T, which is placed below the box S. Box Q and S are placed adjacent to each other. Two boxes are placed between U and Q. Only one box is placed between P and T.

Statements II. One box is placed between Q and R. Two boxes are placed between P and Q. One box is placed between T and R. Box P does not adjacent to box T. Box U is placed exactly in between the boxes P and the box which is placed just above the box R.

2. Eight members A, B, M, N, O, P, Q and R are living in the family. In which only two married couples. How is N related to P?

Statements I. A is the sister-in-law of P, who is the mother-in-law Q. R is the parent of A, who is unmarried. B is the father of N. Q is not the wife of N. N, who is married is not sibling of A.

Statements II. A is married to B. N is the father of O. A is the father of M. M is the sibling of N.



3. In a certain code language. How is "Utility" coded in the given code language?  
Statements I. "man power required" is coded as "N12 E23 G15" and "power sector source" is coded as "N12 D21 Q17" and "man utility source" is coded as "E23 L14 Q17" and "global sector required" is coded as "T34 D21 G15"  
Statements II. "Indian capital income" is coded as "W21 B14 S31" and "source of capital" is coded as "Q17 M29 B14" and "income utility source" is coded as "S31 L14 Q17" and "capital income surplus" is coded as "B14 S31 F18" `

**Directions (4-7):** Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statement are sufficient to answer the question. Read both the statements and Give answer: **(SBI PO Mains 2020)**

- (a) If the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
- (b) If the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
- (c) If the data either in statement I alone or in statement II alone are sufficient to answer the question.
- (d) If the data even in both statements I and II together are not sufficient to answer the question.
- (e) If the data in both statements I and II together are necessary to answer the question.

4. On which of the following day of the week starting from Monday to Sunday Riya leaves for Puducherry?

- I. Riya's sister correctly remembers that Riya left for Puducherry one of the day after Wednesday.
- II. Riya's mother correctly remembers that Riya left for Puducherry after Tuesday but before Saturday.

5. How is N related to M?

- I. M is Father of J. R is the son of K. R is the son-in-law of N. J is the sister of R. O is the only daughter of N.
- II. R is the son of N and is the father-in-law of M. O is the brother M. K is married to M. K is the only son of R.

6. Who among the following Ashu, Ravi, Neha, Nitin and Riya got the highest marks in the examination (out of 100)?

- I. The one who got 75 marks is the person who got second highest marks in the examination. Ashu scored more marks than Neha and Riya. Ashu does not got the highest marks.
- II. Riya get more marks than only one person. Neha got more marks than Riya but not the second highest marks.



7. Some persons are sitting in a row facing in the same direction. How many persons are sitting in the row?

I. A sits third to the left of G, and second to the right of M. Both M and G does not sit at the end of the row. B sits at the end of the row.

II. L sits fourth to the left of E and sits at the end of the row. B sits fourth to the right of K, who sits second to the right of A. E, sits between M and A.

### Answer:

Directions (1-3):

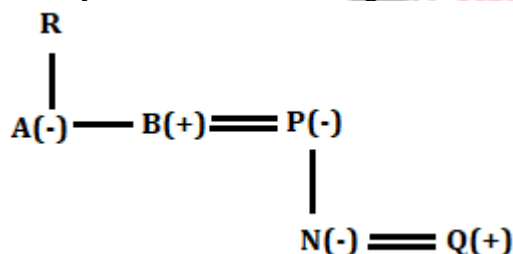
1. Ans. (b)

Sol. Only from II, we get to know box Q is placed just below the box U.

Boxes
P
U
Q
R
T

2. Ans. (a)

Sol. Only from I, N is the daughter of P.



3. Ans. (c)

Sol. Either I or II we get the code of “utility” as “L14”.

From I.

Word	Code
Man	E23
Power	N12
Required	G15
Sector	D21
Source	Q17
Utility	L14
Global	T34

From II.

Word	Code
------	------





Source	Q17
Utility	L14
Indian	W21
Capital	B14
Income	S31
Of	M29
Surplus	F18

Directions (4-7):

4. Ans. (d)

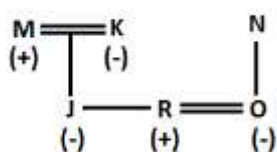
Sol. From statement I, Riya leave for Puducherry after Wednesday which may be either on Thursday, Friday, Saturday or on Sunday.

From statement II, Riya leave for Puducherry either on Wednesday, Thursday or on Friday.

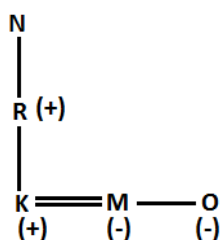
And even after combining these two statement we don't get the confirm day on which Riya leave for Puducherry as it may be on Thursday or on Friday.

5. Ans. (d)

Sol. From Statement 1,

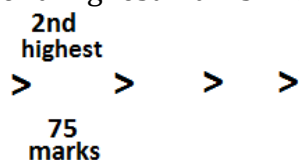


From Statement II,



6. Ans. (d)

Sol. From statement I, it is cleared that the one who got 75 marks is the person who got second highest marks in the examination.



As it is also given that Ashu scored more marks than Neha and Riya. Ashu does not got the highest marks.

From Statement II, Riya get more marks than only one person. Neha got more marks than Riya but not the second highest marks.

Neha > Riya >



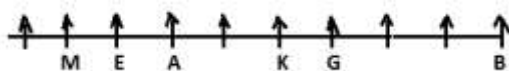
After combining these two we get that Ashu gets the second highest marks (75 marks) in the examination.

2nd  
highest  
Nitin/Ravi > Ashu > Neha > Riya > Nitin/Ravi  
75  
marks

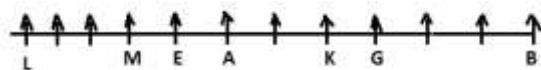
7.Ans.(e)

Sol. As from statement I alone and from statement II alone we can't say that how many persons are sitting in the row.

Step I : Combining statements, I and II, when all are facing north. A, sits third to the left of G, and second to the right of M. Both M and A does not sit at the end of the row. B sits at the end of the row. B sits fourth to the right of K, who sits second to the right of A. E, sits between M and A.



Step 2 : Using the remaining conditions, L sits fourth to the left of E and sits at the end of the row.



Hence, there are 12 persons are sitting in the row.

**Aatma Nirbhar Reasoning Topic Wise Online Test Series**

[Click here to Join Telegram Group](#)



[Click here to Buy BANK MAHACOMBO](#)