

SBI PO 2018 - Reasoning Ability Question Paper

Direction (1-5): Study the following information carefully 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.

Input : 30 69 20 96 50 56 76 19

Step I : 20 30 69 96 50 56 76 21

Step II : 31 20 69 96 56 76 21 51

Step III : 57 31 20 96 76 21 51 70

Step IV : 77 57 31 20 21 51 70 97

and Step IV is the last step of the rearrangement the above input.

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

Input: 50 17 85 34 88 55 11 92 10 78

Q 1. How many steps will be needed to complete the arrangement?

1. Five
2. Six
3. Four
4. Seven
5. None of these

Answer: 1

Q 2. Which of the following would be Step IV?

1. 79 50 18 11 88 92 12 35 56 86
2. 79 51 18 10 88 92 12 35 56 86
3. 79 51 18 11 88 92 12 35 56 86
4. 79 51 18 11 87 92 12 35 56 86
5. None of these

Answer: 3

Q 3. In Step V, which of the following number would be at 6th position from the right?

1. 88
2. 92
3. 11
4. 12
5. 17

Answer: 3

Q 4. Which of the following would be the final arrangement?

1. 89 79 51 18 11 12 35 55 86 93
2. 89 79 51 18 11 12 35 56 86 93
3. 89 79 51 18 10 12 34 56 86 93
4. 89 79 51 18 10 12 35 56 86 93
5. None of these

Answer: 2

Q 5. What will be the position of '92' in step IV?

1. Fifth from the left
2. Eight from the left
3. Fifth from the right
4. Sixth from the right
5. None of these

Answer: 3

Solution (1-5):

Input: 50 17 85 34 88 55 11 92 10 78

Step I: 11 50 17 85 34 88 55 92 10 78

Step II: 18 11 50 85 98 55 92 78 12 35

Step III: 51 18 11 85 88 92 78 12 35 56

Step IV: 79 51 18 11 88 92 12 35 56 86

Step V: 89 79 51 18 11 12 35 56 86 93

Directions (6-10): Study the following information carefully to answer the given questions.

Ten students namely viz A, B, C, D, E, F, G, H, I and J of ten different colleges but not necessarily in the same order have match on five different days starting from Monday to Friday of the same week. Each student have match at two different time slots, i.e 09.00 AM and 5 P.M. Each student like different states namely viz - UP, MP, AP, HP, Gujarat, TN, Kerala, Karnataka, West Bengal and J&K. Persons who like Karnataka, UP, HP, TN and J&K have match at 9.00 AM. Persons who like Kerala, MP, AP, Gujarat and West Bengal have match at 5:00 P.M. I has a match on Tuesday at 9.00 AM. The number of people who have match between G and D is same as the number of people who have match between C and H. Persons who like Karnataka and Gujarat have match on Monday and the persons who like J&K and West Bengal have match on Friday. B has a match immediately before I. I does not have match on any of the days before G. The one who has match at 9.00 AM immediately before J. H does not has match at 5 P.M D has a match immediately after the day of one who has match on Monday. F does not have match at 5 P.M. D does not has match on any one of the days after E. Only three people have match between G and E. Persons who like HP and AP went to match neither on Tuesday nor Thursday. Neither E nor G does not have match on Friday. Only two people have match between F and J. F does not has match on any of the days after H. Persons who like UP and MP does not have match on Thursday.

Q 6. How many persons have match at 5.P.M between G and H?

1. 5
2. 6
3. 2
4. 4
5. None of these.

Answer: 4

Q 7. Who among the following person has match at 09 A.M?

1. C
2. B
3. D
4. A
5. E

Answer: 5

Q 8. Four among the following form a group in a certain way. Which of the following does not belong to Group?

1. G – Tuesday
2. I – Wednesday
3. F - Friday
4. G – Wednesday
5. E – Thursday

Answer: 4

Q 9. Who among the following likes West Bengal state?

1. I
2. J
3. F
4. D
5. C

Answer: 2

Q 10. Who among the following has match on Thursday?

1. I, E
2. H, J
3. F, A
4. D, E
5. E, C

Answer: 3

Solution (6-10):

Monday	9:00 am	G	Karnataka
Monday	5:00 pm	B	Gujarat
Tuesday	9:00 am	I	UP
Tuesday	5:00 pm	D	MP
Wednesday	9:00 am	E	HP
Wednesday	5:00 pm	C	AP
Thursday	9:00 am	F	TN
Thursday	5:00 pm	A	Kerala
Friday	9:00 am	H	J&K
Friday	5:00 pm	J	WB

Directions (11-15): Study the following information carefully to answer the questions.

In a certain code language,
'business is easy to do' is written as 'pa ro se yo ze',
'business arise difficulty in life' is written as 'lo fe pa so te',
'life is easy' is written as 'so ro yo',
'difficulty to do work' is written as 'se lo ze me' and
'easy business life' is written as 'pa yo so'.

Q 11. What may be the possible code for 'difficulty arise in business'?

1. lo, te, fe, pa
2. lo, te, so, pa
3. lo, so, pa, yo
4. te, lo, me, so
5. lo, fe, pa, ro

Answer: 1

Solution 1 :

Business = pa

Is = ro

Easy = yo

To = se/ze

Do = se/ze

Arise = te/fe

Difficulty = lo

In = te/fe

Life = so

Work = me

Q 12. What may be the possible code for 'life is complicated' in the given code language?

1. so ro fe
2. so pa ro
3. ze pa ro
4. so fa ro
5. None of these

Answer: 4

Solution 2:

Business = pa

Is = ro

Easy = yo

To = se/ze

Do = se/ze

Arise = te/fe

Difficulty = lo

In = te/fe

Life = so

Work = me

Since 'fa' is code for no word in the above-coded language. Hence, 'fa' will be the code for complicated.

Q 13. What is the code for 'arise' in the given code language?

1. fe
2. te
3. lo
4. pa
5. Either 'fe' or 'te'

Answer: 5

Solution 13:

Business = pa

Is = ro

Easy = yo

To = se/ze

Do = se/ze

Arise = te/fe

Difficulty = lo

In = te/fe

Life = so

Work = me

Q 14. What is the code for 'difficulty' in the given code language?

1. pa
2. lo
3. so
4. te
5. yo

Answer: 2

Solution 14:

Business = pa

Is = ro

Easy = yo

To = se/ze

Do = se/ze

Arise = te/fe

Difficulty = lo

In = te/fe

Life = so

Work = me

Q 15. What is the code for 'do' in the given code language?

1. Se
2. ze
3. ro
4. pa
5. Either 'se' or 'ze'

Answer: 5

Solution 15:

Business = pa

Is = ro

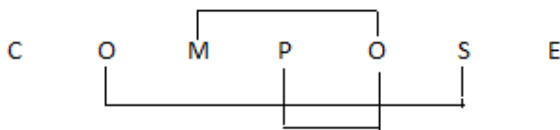
Easy = yo
To = se/ze
Do = se/ze
Arise = te/fe
Difficulty = lo
In = te/fe
Life = so
Work = me

Q 16. How many such pairs of letters are written in the word COMPOSE each of which has many letters between them in the word as they have between them in the English alphabetical series?

1. None
2. One
3. Two
4. Three
5. None of these

Answer: 4

Solution 16:



Directions (17-18): Study the given question carefully and answer the given question.

C is the daughter of the one who is the son of B. There is only one married couple in the group. F is the brother of E, who is the daughter of D and granddaughter of B. A is the mother of C, who is married couple in the group.

Q 17. What is true with respect to F?

1. F is the son of B and A
2. F is the daughter of C and E
3. F is the son of D and A
4. F is the daughter of B
5. None of these

Answer: 3

Solution 17:

B
 ↓
 D(+) ~ A(-)
 ↓
 C(-) ↔ E (-) ↔ F (+)

Where

- Denotes male
- Denotes female

↑ denotes son/daughter of

↔ denotes siblings
~ denoted married couple

- Q 18.** How is B related to E?
1. B is the uncle of E
 2. B is the grandfather of E
 3. B is Grandmother of E
 4. B is the brother of E
 5. Can't be determined

Answer: 5

Solution 18:

B
↑
D(+) ~ A(-)
↑
C(-) ↔ E (-) ↔ F (+)

Where

- Denotes male
- Denotes female

↑ denotes son/daughter of
↔ denotes siblings
~ denoted married couple

Since the gender of B is not specified, the answer cannot be determined.

Direction (19-23): Study the following information to answer the given questions.

Fourteen people are sitting in two parallel rows containing seven people each, in such a way that there is an equal distance between adjacent persons.
In row 1, P, Q, R, S, T, U and V are seated and all of them are facing south. In row 2, A, B, C, D, E, F and G are seated and all of them are facing north. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. U sits opposite to G and are in middle of the rows. A sits fourth to right of D. Neither A nor D sits at extreme ends. T faces D. V does not face A and V does not sit at any of the extreme ends. V is not an immediate neighbour of T. B sits at one of the extreme ends. Only three people sit between B and E. E does not face V. Three persons sit between R and Q. R is not an immediate neighbour of T. C does not face V. P is not an immediate neighbour of R.

- Q 19.** Who amongst the following sit at the extreme left ends of the parallel rows?
1. R, B
 2. F, T
 3. P, C
 4. B, F
 5. None of these

Answer: 3

- Q 20.** Who amongst the following faces A?
1. R

2. T
3. P
4. Q
5. S

Answer: 5

Q 21. How many persons are seated between T and S?

1. One
2. Two
3. Three
4. Four
5. None of these

Answer: 3

Q 22. P is related to V in the same way as C is related to F. Which of the following is E related to, following the same pattern?

1. B
2. D
3. C
4. A
5. None of the above

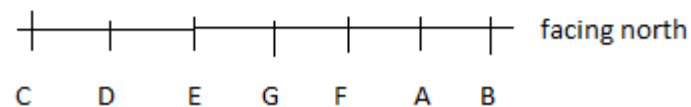
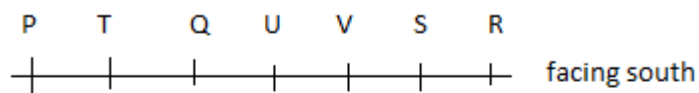
Answer: 1

Q 23. Which of the following is true regarding F?

1. F sits second to right of C.
2. F is not an immediate neighbour of A
3. F sits third to left of D
4. F sits at one of the extreme ends of the line
5. F faces V

Answer: 5

Solution (19-23):



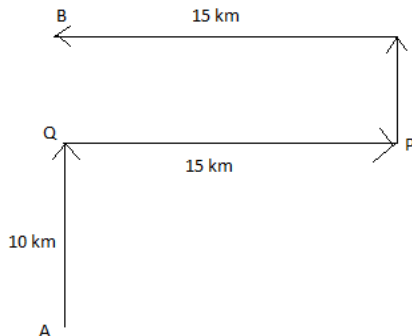
Q 24. A car starts from point A and travels 10 km towards North. It takes a right turn and travels 15 km to point P. Now it travels 6 km after taking a left turn. Finally, it takes a left turn, travels 15 km and stops at point B. If Point Q is 10m North from Point A. In which direction is point A with respect to point P?

1. South west
2. North east

3. South east
4. North west
5. None of the above

Answer: 1

Solution 24:



Q 25. In a certain code language “SERIES” is written as “QCGTGU”. How is EXPERT written in that code language?

1. VTGRZG
2. RPCRZG
3. GZRCPR
4. RPCGZR
5. None of these

Answer: 2

Solution 25:

SERIES

Written in backward direction,

S(-2) E(-2) I(-2) R(+2) E(+2) S(+2)

Q C G T G U

Now for the word EXPERT, when written in backward direction,

T(-2) R(-2) E(-2) P(+2) X(+2) E(+2)

R P C R Z G

Direction (26-30): Study the given information carefully and answer the following question.

A, B, C, D, E, F and G are seven different boxes packed with different numbers written on top of them viz. 1, 2, 3, 4, 5, 6 and 7 but not necessarily in the same order. Box D is immediately above the box packed with number 5. More than three boxes are there between box packed with number 4 and box packed with number 2. There are two boxes between the box B and box E. There is only one box between box E and box G. There are three boxes between box G and box A, which is packed with number 1. There are only two boxes between box A and box C, which is packed with number 6. The box packed with number 2 is immediately above the box G. More than three boxes are there between box packed with number 5 and box packed with number 4. Box E is packed with number 3.

Q 26. Which of the following box is packed with a number which is a perfect square?

1. D
2. B

3. F
4. G
5. Cannot be determined

Answer: 2

Q 27. How many boxes are there between box A and box which is packed with number 5?

1. None
2. One
3. Two
4. Three
5. Four

Answer: 4

Q 28. What is the sum of the numbers of box D and box F?

1. Five
2. Six
3. Seven
4. Eight
5. Nine

Answer: 5

Q 29. Which of the following box is packed with even number?

1. A
2. G
3. D
4. E
5. F

Answer: 3

Q 30. Which box is packed with number 7?

1. D
2. F
3. B
4. G
5. C

Answer: 2

Solution (26-30):

D	2
G	5
C	6
E	3
F	7
A	1

Directions (31-33): The following questions are based on the five three-digit number given below:

674, 522, 427, 386, 286

Q 31. If 2 is added to the first digit of each of the numbers how many numbers thus formed will be divisible by three?

1. None
2. One
3. Two
4. Three
5. None of these

Answer: 3

Solution 31:

6 (+2) 74 = 874 ,not divisible by 3
5 (+2) 22 = 722, not divisible by 3
4 (+2) 27 = 627, divisible by 3
3 (+2) 86 = 586, not divisible by 3
2 (+2) 86 = 486, divisible by 3

Q 32. If all the digits in each of the numbers are arranged in descending order within the number, which of the following will be the highest number in the new arrangement of numbers?

1. 674
2. 386
3. 286
4. 427
5. None of these

Answer: 2

Solution 32:

After the digits are arranged in descending order within the number, the new number formed are:

674 = 764

522 = 522

427 = 742

386 = 863

286 = 862

Highest number is 863

Q 33. What will be the resultant number if the second digit of the second-lowest number is divided by the third digit of the highest number?

1. 2
2. 3
3. 0
4. 1
5. 4

Answer: 5

Solution 33:

Second lowest number = 386

Highest number = 674

Resultant number if the second digit of the second-lowest number is divided by the third digit of the highest number = $8 \div 4 = 2$

Directions (34-35): Study the following information carefully to answer the given questions:

Among five friends P, Q, R, S and T each bought a saree of a different price. P paid more than both T and R. Only Q paid more than S. R did not pay the minimum amount. R paid Rs 2000 for the saree.

Q 34. Who among the following paid the second-highest amount?

1. Q
2. S
3. R
4. T
5. None of these

Answer: 2

Q 35. Who among the following possibly paid Rs 1500?

1. Q
2. S
3. R
4. T
5. None of these

Answer: T

Solution (34-35):

$Q > S > P > R(\text{Rs.}2000) > R > T$