Direction (1-5): 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:

1) Six persons- $A, B, C, D, E$, and $F$ are sitting in a row but not necessarily in the same order. Who among the following person sits third from the left end of the row? ( all are facing south)

Statement1:E sits second to the right of D. F sits immediate left of D. Neither E nor F sits at end of the table. Only two persons are seated between A and C. C does not sit adjacent to E .

Statement2: Only three persons are seated between B and F. Only one person sits between A and F. C sits immediate left of F. D sits second to the left of E .
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 given in both statements I and II together are not sufficient to answer the question and.
E) If the data in both statements I and II together are necessary to answer the question.
2) There are six boxes- $L, M, N, O, P$, and $Q$ kept one above another but not necessarily in the same order. How many boxes are kept below $\mathbf{Q}$ ?

Statement1: The number of boxes that are kept above Box $O$ is the same as below box P . Only one box is kept between P and Q . Box Q is kept below Box M . Box O is kept above Box Q.

Statement2: Box $L$ is kept two boxes above the box which is kept three boxes below Q . Only one box is kept between M and Q. Neither Box M nor Box O is kept below Box L.
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 given in both statements I and II together are not sufficient to answer the question and.
E) If the data in both statements I and II together are necessary to answer the question.

## 3) What is the direction of point $\mathbf{G}$ with respect to point $Y$ ?

Statement1:Point $L$ is north of Point $M$ which is west of Point G. Point $Q$ is east of Point Y. Point $Y$ is neither north nor northeast of Point $L$. Point $Q$ is north-east of Point $L$ and north of G .

Statement2: Point G is north of Point Q which is west of Point R. Point M is north of Point $Y$ and east of Point $N$. Point $N$ is north of Point R. Point $G$ is south-west of Point $N$. Point $Y$ is south-east of Point R.
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 given in both statements I and II together are not sufficient to answer the question and.
E) If the data in both statements I and II together are necessary to answer the question.

## 4)What is the code for "Lily Orchid Daisy Poppy"?

Statement1: In the code language 'Rose Lily Tulip Poppy' is coded as 'al bh cd vo', 'Orchid Iris Lily Tulip' is coded as 'mt nh bh cd'. 'Iris Rose Orchid Mimosa' is coded as 'nh al mt je'

Statement2: In the code language 'Orchid Bluebell Camellia Violet' is coded as 'mt Ik re et', 'violet orchid Lily Pansy' is coded as 'et mt bh vs'. 'Camellia Lily Pansy Daisy' is coded as 're bh vs wx'
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 given in both statements I and II together are not sufficient to answer the question and.
E) If the data in both statements I and II together are necessary to answer the question.
5) Six persons-A, B, C, D, E, and F are born in different months- January, March, April, June, July, and September in the same year but not necessarily in the same order. In which of the following month does $F$ is born?

Statement1:Only two persons are born between F and B. B is elder than D. The number of persons born before $D$ is the same as after $E$. $D$ is elder than $E$.
Statement2: A is born two persons before the one who is born immediately before C. F is elder than C and is born in a month having an even number of days. Only one person is born between $F$ and $D$.
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 given 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.

## Direction (1-5):

## 1) Answer: a

## Statement 1



From statement 1 we can find the answer.

## Statement 2



From the above condition, there are two possibilities.
2) Answer: b

## Statement 1

| $O$ | $M$ |  |  |
| :--- | :--- | :--- | :--- |
| $M$ | $O$ |  |  |
|  | $Q$ | $P$ | $O$ |
| $Q$ |  | $O$ | $P$ |
|  | $P$ | $Q$ |  |
| $P$ |  |  | $Q$ |

From statement1, there are three possibilities.

## Statement 2



From statement 2 we can find the answer.
3) Answer: $c$

## Statement 1



From statement 1 we can find the direction.

## Statement 2



From statement 2 we can find the direction.
4) Answer: e

From statement 1 we get $\rightarrow$ Poppy-vo;
From statement 2 we get $\rightarrow$ Daisy-wx;
From both statement we get $\rightarrow$ Lily-bh; Orchid-mt
5) Answer: e

Statement 1

| Month | Person |
| :--- | :--- |
| January | B |
| March | D |
| April | A |
| June | F |
| July | E |
| September | C |

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

Number arrangement machines when given an input line of numbers rearrange them following a particular rule in each step. The following is an illustration of input and rearrangement.

## Input:3689 45321902643129765431

Step I: 368923450129134626791345
Step II: 359275039176249175
Step III: 959475039176449175
Step IV: 597939774476
Step V: 426001
Step V is the last step.
Input: 437258193876245178109382
6) What is the final output of "9382"?
a) 2
b) 4
c) 6
d) 0
e) 1
7) How many zeros are there in the final output?
a) One
b) None
c) Three
d) Two
e) None of the above
8) What is the sum of the number which is third from the left end in step III and second from the right end in step IV?
a) 215
b) 206
c) 1036
d) 989
e) 501
9) What is the difference between the number which is second from the left end and third from the right end in step IV?
a) 38
b) 36
c) 40
d) 25
e) 20
10) What is the sum of all the numbers in the final output?
a) 13
b) 16
C) 15
d) 14
e) 20

Directions (6-10):
6) Answer: a
7) Answer: d
8) Answer: c
9) Answer: d
10) Answer: d

Step1: All digits are arranged in ascending order within the number.
Step2: Middle two digits are added, if the result is a two-digit number again added within the number to make it a single digit. For example $3689 \rightarrow 3(6+8=14 \rightarrow 1+4=5) 9 \rightarrow 359$

Step3: The first digit is changed to its square value $\rightarrow 359 \rightarrow 959$
Step4: First and third digits are added, if the result is a two-digit number again added within the number to make it a single-digit and placed it at last. Example $\rightarrow 959 \rightarrow(9+9=18 \rightarrow 1+8=9)=59$

Step5: The difference between both digits $\rightarrow 5-9=4$

## Input: 437258193876245178109382

Step I: 234715893678124501782389
Step II: 277149348165088229
Step III: 477149948165088429
Step IV: 724148668824
Step V: 534002
11. If the third letter from the left of all the words are taken and changed to the second preceding letter in the English alphabet series, then which of the following word thus formed will have atleast one vowel letter?
I. Hand, Sure, Male, Gift
II. Wise, Rock, Fair, Side
III. Bomb, Like, Dawn, Copy
a) Only III
b) Only II
c) Both I and II
d) Both II and III
e) All of these

## Answer: D

## Explanation:

I. Hand, Sure, Male, Gift -> n, r, I, f -> I, p, j, d
II. Wise, Rock, Fair, Side -> s, c, i, d -> q, a, g, b
III. Bomb, Like, Dawn, Copy -> m, k, w, p -> k, i, u, n

Hence, option D is correct.
12. Which of the following word has the maximum number of pairs of letters between them as there are in the English alphabets series (both forward and backward)?
I. Alternative
II. Responsible
III. Exterminate
a) Only II
b) Only I
c) Both I and III
d) Both II and III
e) Only III

## Explanation:



Hence, option A is correct.
13. If all the letters are arranged in alphabetical order within the word and the second letter from the left are taken and changed to its immediate previous letter in the English alphabets series, then which of the following has only one vowel letter thus formed?
I. Story, Nurse, Board
II. Chest, Power, Lucky
III. Thick, Grace, Rival
a) Only II
b) Only I
c) Both II and III
d) Only III
e) Both I and II

Answer: B

## Explanation:

I. Story, Nurse, Board
orsty, enrsu, abdor -> r, n, b -> q, m, a
II. Chest, Power, Lucky
cehst, eoprw, ckluy -> e, o, k-> d, n, j
III. Thick, Grace, Rival
chikt, acegr, air -> h, c, i -> g, b, h
Hence, option B is correct.
14. If a four letter meaningful word can be formed using all the letters only once, then which of the following forms more than two meaningful words?
I. N, C, I, H
II. H, S, I, P
III. T, E, A, P
a) Only III
b) Only II
c) Both II and III
d) Both I and III
e) All of these

Answer: C

## Explanation:

I. Chin, inch
II. Hips, Ship, Pish, phis
III. Tape, Pate, Peat

Hence, option C is correct.
15. If all the numbers are changed to its corresponding letters (as in the English alphabetical series) and are arranged in alphabetical order from left to right, then how many words thus formed will be meaningful?
I. 145254
II. 1852116
III. 16839
a) Only I
b) Only III
c) Both I and II
d) Both II and III
e) Both I and III

Answer: E

## Explanation:

I. 145254 -> N E Y D -> DENY
II. 1852116 -> R E U P -> EPRU
III. 1683 -> P H C I -> CHIP

Hence, option E is correct.

