# 60 Reasoning Questions with Solutions for RBI Grade B Exam

**Q1. In each question below some statements are given followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusion definitely follows from the given statements, disregarding commonly known facts. Give answer of the questions given below –**

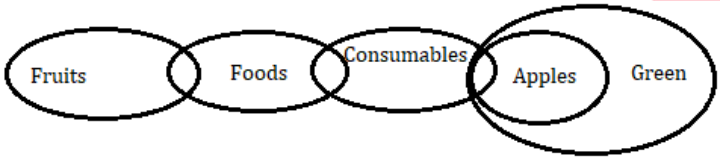
**Statements:** Few fruits are foods.
Only a few foods are consumables.
Some consumables are apples.
All apples are green.

**Conclusions:**
**I.** All fruits are consumables.
**II.** Some fruits are not consumables.

(a) Only conclusion I follows
(b) Only conclusion II follows
(c) Either conclusion I or II follows
(d) Neither conclusion I nor II follows
(e) Both conclusions I and II follow

**Ans.(c)**

**Sol. Individually both conclusions do not follow but satisfy either or condition.**




**Q2. Climate scientists have observed that global sea levels have been rising at an increasing rate over the past century. This is primarily due to the melting of polar ice caps and glaciers, as well as the expansion of seawater as it warms. Many coastal cities are implementing flood prevention measures to adapt to this change.**
**Which of the following is an inference from the passage?**

(a) Rising sea levels will eventually submerge all coastal cities.
(b) Human activities have no role in climate change.
(c) Coastal cities are already experiencing the effects of rising sea levels.
(d) Ice caps are melting faster than ever before due to volcanic eruptions.
(e) Governments are not taking any action to address rising sea levels.

**Ans.(c)**

**Sol. Explanation:** The passage states that "coastal cities are implementing flood prevention measures," which suggests they are already affected.

**Q3. With the rapid shift towards digital education, there have been concerns regarding its accessibility for all students. Many students in rural areas lack the necessary technological tools and internet connectivity, leading to a widening educational divide.**
**What could be a viable solution to address this issue?**

(a) Providing free internet to urban areas
(b) Increasing the number of physical schools
(c) Distributing electronic devices and ensuring internet access in rural schools
(d) Encouraging traditional classroom learning
(e) None of these

**Ans.(c)**

**Sol.** Ensuring that students in rural areas have access to electronic devices and reliable internet is crucial for bridging the digital divide in education, thus making option (c) the most appropriate solution.

**Q4.** A question is given, followed by two statements labelled I and II. Identify which of the statements is/are sufficient to answer the question.
Five people, A, B, C, D and E, have different weights each. Who is the heaviest?
**(I)** A is heavier than C but lighter than D.
**(II)** B is not the heaviest and E is not the lightest.
(a) Both Statements I and II put together (and not independently) are sufficient to answer the question
(b) Data in Statement II alone is sufficient to answer the question, while data in Statement I is not.
(c) Data in Statement I alone is sufficient to answer the question, while data in Statement II is not
(d) Both Statements I and II put together are not sufficient to answer the question.
(e) Data in either Statement I or Statement II is sufficient to answer
**Ans.(d)**
**Sol. Given:**
**(I)** A is heavier than C but lighter than D.
**(II)** B is not the heaviest and E is not the lightest.
**Analyzing Statement I**:
(I) A is heavier than C but lighter than D.
C<A<D
However, B and E are not mentioned, so we cannot determine the heaviest person from this statement alone
**Statement I alone is NOT sufficient.**
**Analyzing Statement II:**
(II) B is not the heaviest and E is not the lightest.
This tells us B is not the heaviest but does not say who is.
It also tells us E is not the lightest, but that does not help in finding the heaviest person.
**Statement II alone is NOT sufficient.**
Combining Both Statements
**From Statement I:**
C<A<D
**From Statement II:**
B is not the heaviest → So, D or E could be the heaviest.
E is not the lightest, but we still do not know where E fits in the ranking.
Since we cannot definitively determine who is the heaviest, **both statements together are also NOT sufficient.**
Thus, the correct option is **(d) Both Statements I and II put together are not sufficient to answer the question.**

**Directions (5-9): Read the given information carefully and answer the questions based on it:**
Sixteen cubes named A - P are placed in the form of a 4x4 matrix. The cubes placed at four corners are of different colors i.e., green, blue, white and red. The information in not necessarily used in the same sequence as given.
**Condition:** Consecutive alphabetical named cubes are neither placed in same row nor in same column. Ex – A and C are not placed in the row and column of B.
· A is placed in north of F which is placed in the row of white cube.
· P is placed in immediate east of F and both are not painted with any color.
· Number of cubes placed above A is same as below K in same column.
· Green cube is placed in north-west of red cube.
· B is neither placed in the column of green cube nor in the row of K.
· B and N are placed in adjacent rows.
· N is not placed in the row of A.
· Number of cubes placed west of N is same as east of O which is placed immediate left of G.
· I is placed just south-west of O.
· H and B are placed in same column.
· M is placed below C in same column but not in adjacent rows.
· G is not placed in column of D.

**Q5. Four of the following five are similar in a certain pattern and forms a group, which of the following is dissimilar to the group?**

(a) L
(b) B
(c) M
(d) J
(e) C



**Ans.(a)**

**Sol.** Final Arrangement is here:

[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green C | O | G | Blue J |
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

[endif]

**Clues:** A is placed in north of F which is placed in the row of white cube. P is placed in immediate east of F and both are not painted with any color. Number of cubes placed above A is same as below K in same column. Green cube is placed in north-west of red cube.

**Inference:** Here we get two possible cases:

[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | A | | |
| | K | | |
| White | F | P | Red |

Case 1

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | K | | |
| | A | | |
| White | F | P | Red |

Case 2

[endif]

**Clues:** B is neither placed in the column of green cube nor in the row of K. B and N are placed in adjacent rows. N is not placed in the row of A. Number of cubes placed west of N is same as east of O which is placed immediate left of G. I is placed just south-west of O.

**Inference:**

[if gte vml 1]> <![endif][if !vml]

| Green | O | G | Blue |
|---|---|---|---|
| I | A | | |
| | K | N | |
| White | F | P | B Red |

Case 1

| Green | O | G | Blue |
|---|---|---|---|
| I | K | | |
| | A | N | |
| White | F | P | B Red |

Case 2

[endif]

**Clues:** H and B are placed in same column. M is placed below C in same column but not in adjacent rows. G is not placed in column of D.

**Inference:** Case 2 gets cancelled here as there is no place for L:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

Case 1

| Green C | O | G | Blue J |
|---|---|---|---|
| I | K | | D |
| E | A | N | H |
| M White | F | P | B Red |

Case 2

[endif]

**Inference:** Final Arrangement is here:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

Except L, all the other options are at the four corners.

[endif]

**Q6. Which of the following cube is placed just below of blue cube?**

(a) Cube which is placed east of L

(b) Cube which is placed south of E

(c) Cube which is placed 3rd to the right of C

(d) Cube which is placed in the row of M

(e) Cube which is placed south-west of H

**Ans.(a)**

**Sol.** Final Arrangement is here:

[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green<br>C | O | G | Blue<br>J |
| I | A | L | D |
| E | K | N | H |
| M<br>White | F | P | B<br>Red |

[endif]

**Clues:** A is placed in north of F which is placed in the row of white cube. P is placed in immediate east of F and both are not painted with any color. Number of cubes placed above A is same as below K in same column. Green cube is placed in north-west of red cube.

**Inference:** Here we get two possible cases:

[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | A | | |
| | K | | |
| White | F | P | Red |

Case 1

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | K | | |
| | A | | |
| White | F | P | Red |

Case 2

[endif]

**Clues:** B is neither placed in the column of green cube nor in the row of K. B and N are placed in adjacent rows. N is not placed in the row of A. Number of cubes placed west of N is same as east of O which is placed immediate left of G. I is placed just south-west of O.

**Inference:**

[if gte vml 1]> <![endif][if !vml]

| Green | O | G | Blue |
|---|---|---|---|
| I | A | | |
| | K | N | |
| White | F | P | B Red |

Case 1

| Green | O | G | Blue |
|---|---|---|---|
| I | K | | |
| | A | N | |
| White | F | P | B Red |

Case 2

[endif]

**Clues:** H and B are placed in same column. M is placed below C in same column but not in adjacent rows. G is not placed in column of D.

**Inference:** Case 2 gets cancelled here as there is no place for L:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

Case 1

| Green C | O | G | Blue J |
|---|---|---|---|
| I | K | | D |
| E | A | N | H |
| M White | F | P | B Red |

Case 2

[endif]

**Inference:** Final Arrangement is here:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

[endif]

**Q7. Which of the following statement(s) is/are true?**
(a) H is placed below B
(b) L and O are in same row
(c) M and blue cube are in same column
(d) B is painted with red color
(e) All are true
**Ans.(d)**
**Sol.** Final Arrangement is here:
[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green C | O | G | Blue J |
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

[endif]
**Clues:** A is placed in north of F which is placed in the row of white cube. P is placed in immediate east of F and both are not painted with any color. Number of cubes placed above A is same as below K in same column. Green cube is placed in north-west of red cube.
**Inference:** Here we get two possible cases:
[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | A | | |
| | K | | |
| White | F | P | Red |

Case 1

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | K | | |
| | A | | |
| White | F | P | Red |

Case 2

[endif]
**Clues:** B is neither placed in the column of green cube nor in the row of K. B and N are placed in adjacent rows. N is not placed in the row of A. Number of cubes placed west of N is same as east of O which is placed immediate left of G. I is placed just south-west of O.
**Inference:**
[if gte vml 1]> <![endif][if !vml]

| Green | O | G | Blue |
|---|---|---|---|
| I | A | | |
| | K | N | |
| White | F | P | B Red |

Case 1

| Green | O | G | Blue |
|---|---|---|---|
| I | K | | |
| | A | N | |
| White | F | P | B Red |

Case 2

[endif]

**Clues:** H and B are placed in same column. M is placed below C in same column but not in adjacent rows. G is not placed in column of D.

**Inference:** Case 2 gets cancelled here as there is no place for L:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

Case 1

| Green C | O | G | Blue J |
|---|---|---|---|
| I | K | | D |
| E | A | N | H |
| M White | F | P | B Red |

Case 2

[endif]

**Inference:** Final Arrangement is here:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

[endif]

**Q8. If C is related to E, D is related to B, in the same manner, __ is related to ___.**

(a) O-M

(b) J-P

(c) A-F

(d) G-L

(e) N-P

**Ans.(c)**

**Sol.** Final Arrangement is here:

[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green<br>C | O | G | Blue<br>J |
| I | A | L | D |
| E | K | N | H |
| M<br>White | F | P | B<br>Red |

[endif]

**Clues:** A is placed in north of F which is placed in the row of white cube. P is placed in immediate east of F and both are not painted with any color. Number of cubes placed above A is same as below K in same column. Green cube is placed in north-west of red cube.

**Inference:** Here we get two possible cases:

[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | A | | |
| | K | | |
| White | F | P | Red |

Case 1

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | K | | |
| | A | | |
| White | F | P | Red |

Case 2

[endif]

**Clues:** B is neither placed in the column of green cube nor in the row of K. B and N are placed in adjacent rows. N is not placed in the row of A. Number of cubes placed west of N is same as east of O which is placed immediate left of G. I is placed just south-west of O.

**Inference:**

[if gte vml 1]> <![endif][if !vml]

| Green | O | G | Blue |
|---|---|---|---|
| I | A | | |
| | K | N | |
| White | F | P | B Red |

Case 1

| Green | O | G | Blue |
|---|---|---|---|
| I | K | | |
| | A | N | |
| White | F | P | B Red |

Case 2

[endif]

**Clues:** H and B are placed in same column. M is placed below C in same column but not in adjacent rows. G is not placed in column of D.

**Inference:** Case 2 gets cancelled here as there is no place for L:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

Case 1

| Green C | O | G | Blue J |
|---|---|---|---|
| I | K | | D |
| E | A | N | H |
| M White | F | P | B Red |

Case 2

[endif]

**Inference:** Final Arrangement is here:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

Logic here is first cube is placed two rows above the second cube in the same column.

[endif]

**Q9. Which cube is placed south-west of J?**
(a) L
(b) E
(c) M
(d) N
(e) All of the given
**Ans.(e)**
**Sol.** Final Arrangement is here:
[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green<br>C | O | G | Blue<br>J |
| I | A | L | D |
| E | K | N | H |
| M<br>White | F | P | B<br>Red |

[endif]
**Clues:** A is placed in north of F which is placed in the row of white cube. P is placed in immediate east of F and both are not painted with any color. Number of cubes placed above A is same as below K in same column. Green cube is placed in north-west of red cube.
**Inference:** Here we get two possible cases:
[if gte vml 1]> <![endif][if !vml]

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | A | | |
| | K | | |
| White | F | P | Red |

Case 1

| | | | |
|---|---|---|---|
| Green | | | Blue |
| | K | | |
| | A | | |
| White | F | P | Red |

Case 2

[endif]
**Clues:** B is neither placed in the column of green cube nor in the row of K. B and N are placed in adjacent rows. N is not placed in the row of A. Number of cubes placed west of N is same as east of O which is placed immediate left of G. I is placed just south-west of O.
**Inference:**
[if gte vml 1]> <![endif][if !vml]

| Green | O | G | Blue |
|---|---|---|---|
| I | A | | |
| | K | N | |
| White | F | P | B Red |

Case 1

| Green | O | G | Blue |
|---|---|---|---|
| I | K | | |
| | A | N | |
| White | F | P | B Red |

Case 2

[endif]

**Clues:** H and B are placed in same column. M is placed below C in same column but not in adjacent rows. G is not placed in column of D.

**Inference:** Case 2 gets cancelled here as there is no place for L:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

Case 1

| Green C | O | G | Blue J |
|---|---|---|---|
| I | K | | D |
| E | A | N | H |
| M White | F | P | B Red |

Case 2

[endif]

**Inference:** Final Arrangement is here:

[if gte vml 1]> <![endif][if !vml]

| Green C | O | G | Blue J |
|---|---|---|---|
| I | A | L | D |
| E | K | N | H |
| M White | F | P | B Red |

[endif]

**Directions (10-14): Study the following information carefully and answer the questions given below.**
Six persons – N, O, P, Q, R and S are working in a company. They are working in different designations – President, Vice President (VP), Secretary, Assistant Manager (AM), Operations Manager (OM) and Clerk where President is the senior most designation and Clerk is the junior-most designation. Each of them has account in different banks viz. BOB, SBI, PNB, UBI, IDFC and RBL. Except designations none of the information is necessarily in the same order. N is senior to Secretary and has account in SBI. R is three persons junior to N. Q is either immediately senior or immediately junior to R. Only two persons are designated between Q and P who is not Clerk. Operations Manager (OM) has account in BOB. Only three persons are designated between the one who has account in IDFC and Vice President (VP). S is immediately senior to the one who has account in PNB. Only three persons are junior to the one who has account in UBI. Vice President (VP) has no account in RBL.

**Q10. Assistant Manager (AM) has account in which of the following bank?**
(a) RBL
(b) None of these
(c) PNB
(d) UBI
(e) IDFC
**Ans.(c)**
**Sol. Final arrangement:**

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

**Clues:** N is senior to Secretary and has account in SBI. R is three persons junior to N. Q is either immediately senior or immediately junior to R. Only two persons are designated between Q and P who is not Clerk.
**Inference:** From above condition we get three possibilities.

| Designations | Persons | Banks | Persons | Banks | Persons | Banks |
|---|---|---|---|---|---|---|
| | Case 1 | | Case 2 | | Case 2a | |
| President | N | SBI | P | | | |
| Vice President (VP) | P | | N | SBI | N | SBI |
| Secretary | | | | | P | |
| Assistant Manager (AM) | R | | Q | | | |
| Operations Manager (OM) | Q | | R | | R | |
| Clerk | | | | | Q | |

**Clues:** Operations Manager (OM) has account in BOB. Only three persons are designated between the one who has account in IDFC and Vice President (VP). S is immediately senior to the one who has account in PNB. Only three persons are junior to the one who has account in UBI. Vice President (VP) has no account in RBL.
**Inference:** From above condition case 1 and case 2a are cancelled here.

| Designations | ~~Persons~~ | ~~Banks~~ | Persons | Banks | ~~Persons~~ | ~~Banks~~ |
|---|---|---|---|---|---|---|
| | ~~Case 1~~ | | Case 2 | | ~~Case 2a~~ | |
| President | ~~N~~ | ~~SBI~~ | P | RBL | | |
| Vice President (VP) | ~~P~~ | ~~RBL~~ | N | SBI | ~~N~~ | ~~SBI~~ |
| Secretary | ~~S~~ | ~~UBI~~ | S | UBI | ~~P~~ | ~~UBI~~ |
| Assistant Manager (AM) | ~~R~~ | ~~PNB~~ | Q | PNB | | |
| Operations Manager (OM) | ~~Q~~ | ~~BOB~~ | R | BOB | ~~R~~ | ~~BOB~~ |
| Clerk | ~~O~~ | ~~IDFC~~ | | IDFC | ~~Q~~ | ~~IDFC~~ |

**Inference:** O is one of the persons so the final arrangement.

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

Assistant manager (AM) has PNB bank account.

**Q11. Who among the following person works as a Vice President (VP)?**
(a) Q
(b) N
(c) S
(d) R
(e) O
**Ans.(b)**
**Sol. Final arrangement:**

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

**Clues:** N is senior to Secretary and has account in SBI. R is three persons junior to N. Q is either immediately senior or immediately junior to R. Only two persons are designated between Q and P who is not Clerk.
**Inference:** From above condition we get three possibilities.

| Designations | Persons | Banks | Persons | Banks | Persons | Banks |
|---|---|---|---|---|---|---|
| | Case 1 | | Case 2 | | Case 2a | |
| President | N | SBI | P | | | |
| Vice President (VP) | P | | N | SBI | N | SBI |
| Secretary | | | | | P | |
| Assistant Manager (AM) | R | | Q | | | |
| Operations Manager (OM) | Q | | R | | R | |
| Clerk | | | | | Q | |

**Clues:** Operations Manager (OM) has account in BOB. Only three persons are designated between the one who has account in IDFC and Vice President (VP). S is immediately senior to the one who has account in PNB. Only three persons are junior to the one who has account in UBI. Vice President (VP) has no account in RBL.
**Inference:** From above condition case 1 and case 2a are cancelled here.

| Designations | ~~Persons~~ | ~~Banks~~ | Persons | Banks | ~~Persons~~ | ~~Banks~~ |
|---|---|---|---|---|---|---|
| | ~~Case 1~~ | | Case 2 | | ~~Case 2a~~ | |
| President | ~~N~~ | ~~SBI~~ | P | RBL | | |
| Vice President (VP) | ~~P~~ | ~~RBL~~ | N | SBI | ~~N~~ | ~~SBI~~ |
| Secretary | ~~S~~ | ~~UBI~~ | S | UBI | ~~P~~ | ~~UBI~~ |
| Assistant Manager (AM) | ~~R~~ | ~~PNB~~ | Q | PNB | | |
| Operations Manager (OM) | ~~Q~~ | ~~BOB~~ | R | BOB | ~~R~~ | ~~BOB~~ |
| Clerk | ~~O~~ | ~~IDFC~~ | | IDFC | ~~Q~~ | ~~IDFC~~ |

**Inference:** O is one of the persons so the final arrangement.

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

N works as a Vice President (VP).

**Q12. What is the designation of Q?**
(a) Secretary
(b) Assistant Manager (AM)
(c) President
(d) Clerk
(e) Operations Manager (OM)
**Ans.(b)**
**Sol. Final arrangement:**

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

**Clues:** N is senior to Secretary and has account in SBI. R is three persons junior to N. Q is either immediately senior or immediately junior to R. Only two persons are designated between Q and P who is not Clerk.
**Inference:** From above condition we get three possibilities.

| Designations | Persons | Banks | Persons | Banks | Persons | Banks |
|---|---|---|---|---|---|---|
| | Case 1 | | Case 2 | | Case 2a | |
| President | N | SBI | P | | | |
| Vice President (VP) | P | | N | SBI | N | SBI |
| Secretary | | | | | P | |
| Assistant Manager (AM) | R | | Q | | | |
| Operations Manager (OM) | Q | | R | | R | |
| Clerk | | | | | Q | |

**Clues:** Operations Manager (OM) has account in BOB. Only three persons are designated between the one who has account in IDFC and Vice President (VP). S is immediately senior to the one who has account in PNB. Only three persons are junior to the one who has account in UBI. Vice President (VP) has no account in RBL.
**Inference:** From above condition case 1 and case 2a are cancelled here.

| Designations | ~~Persons~~ | ~~Banks~~ | Persons | Banks | ~~Persons~~ | ~~Banks~~ |
|---|---|---|---|---|---|---|
| | ~~Case 1~~ | | Case 2 | | ~~Case 2a~~ | |
| President | ~~N~~ | ~~SBI~~ | P | RBL | | |
| Vice President (VP) | ~~P~~ | ~~RBL~~ | N | SBI | ~~N~~ | ~~SBI~~ |
| Secretary | ~~S~~ | ~~UBI~~ | S | UBI | ~~P~~ | ~~UBI~~ |
| Assistant Manager (AM) | ~~R~~ | ~~PNB~~ | Q | PNB | | |
| Operations Manager (OM) | ~~Q~~ | ~~BOB~~ | R | BOB | ~~R~~ | ~~BOB~~ |
| Clerk | ~~O~~ | ~~IDFC~~ | | IDFC | ~~Q~~ | ~~IDFC~~ |

**Inference:** O is one of the persons so the final arrangement.

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

The designation of Q is Assistant Manager (AM).

**Q13. Which of the following statement is true with respect to the final arrangement?**
(a) P has account in RBL
(b) N is junior to Q
(c) Only one person is designated between S and O
(d) S is immediately senior to R
(e) Secretary has account in PNB
**Ans.(a)**
**Sol. Final arrangement:**

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

**Clues:** N is senior to Secretary and has account in SBI. R is three persons junior to N. Q is either immediately senior or immediately junior to R. Only two persons are designated between Q and P who is not Clerk.
**Inference:** From above condition we get three possibilities.

| Designations | Persons | Banks | Persons | Banks | Persons | Banks |
|---|---|---|---|---|---|---|
| | Case 1 | | Case 2 | | Case 2a | |
| President | N | SBI | P | | | |
| Vice President (VP) | P | | N | SBI | N | SBI |
| Secretary | | | | | P | |
| Assistant Manager (AM) | R | | Q | | | |
| Operations Manager (OM) | Q | | R | | R | |
| Clerk | | | | | Q | |

**Clues:** Operations Manager (OM) has account in BOB. Only three persons are designated between the one who has account in IDFC and Vice President (VP). S is immediately senior to the one who has account in PNB. Only three persons are junior to the one who has account in UBI. Vice President (VP) has no account in RBL.
**Inference:** From above condition case 1 and case 2a are cancelled here.

| Designations | ~~Persons~~ | ~~Banks~~ | Persons | Banks | ~~Persons~~ | ~~Banks~~ |
|---|---|---|---|---|---|---|
| | ~~Case 1~~ | | Case 2 | | ~~Case 2a~~ | |
| President | ~~N~~ | ~~SBI~~ | P | RBL | | |
| Vice President (VP) | ~~P~~ | ~~RBL~~ | N | SBI | ~~N~~ | ~~SBI~~ |
| Secretary | ~~S~~ | ~~UBI~~ | S | UBI | ~~P~~ | ~~UBI~~ |
| Assistant Manager (AM) | ~~R~~ | ~~PNB~~ | Q | PNB | | |
| Operations Manager (OM) | ~~Q~~ | ~~BOB~~ | R | BOB | ~~R~~ | ~~BOB~~ |
| Clerk | ~~O~~ | ~~IDFC~~ | | IDFC | ~~Q~~ | ~~IDFC~~ |

**Inference:** O is one of the persons so the final arrangement.

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

Only option (a) is true with respect to the final arrangement.

**Q14. . How many persons are junior to S?**
(a) One
(b) Two
(c) Three
(d) Four
(e) None of these
**Ans.(c)**
**Sol. Final arrangement:**

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

**Clues:** N is senior to Secretary and has account in SBI. R is three persons junior to N. Q is either immediately senior or immediately junior to R. Only two persons are designated between Q and P who is not Clerk.
**Inference:** From above condition we get three possibilities.

| Designations | Persons | Banks | Persons | Banks | Persons | Banks |
|---|---|---|---|---|---|---|
| | Case 1 | | Case 2 | | Case 2a | |
| President | N | SBI | P | | | |
| Vice President (VP) | P | | N | SBI | N | SBI |
| Secretary | | | | | P | |
| Assistant Manager (AM) | R | | Q | | | |
| Operations Manager (OM) | Q | | R | | R | |
| Clerk | | | | | Q | |

**Clues:** Operations Manager (OM) has account in BOB. Only three persons are designated between the one who has account in IDFC and Vice President (VP). S is immediately senior to the one who has account in PNB. Only three persons are junior to the one who has account in UBI. Vice President (VP) has no account in RBL.
**Inference:** From above condition case 1 and case 2a are cancelled here.

| Designations | ~~Persons~~ | ~~Banks~~ | Persons | Banks | ~~Persons~~ | ~~Banks~~ |
|---|---|---|---|---|---|---|
| | ~~Case 1~~ | | Case 2 | | ~~Case 2a~~ | |
| President | ~~N~~ | ~~SBI~~ | P | RBL | | |
| Vice President (VP) | ~~P~~ | ~~RBL~~ | N | SBI | ~~N~~ | ~~SBI~~ |
| Secretary | ~~S~~ | ~~UBI~~ | S | UBI | ~~P~~ | ~~UBI~~ |
| Assistant Manager (AM) | ~~R~~ | ~~PNB~~ | Q | PNB | | |
| Operations Manager (OM) | ~~Q~~ | ~~BOB~~ | R | BOB | ~~R~~ | ~~BOB~~ |
| Clerk | ~~O~~ | ~~IDFC~~ | | IDFC | ~~Q~~ | ~~IDFC~~ |

**Inference:** O is one of the persons so the final arrangement.

| Designations | Persons | Banks |
|---|---|---|
| President | P | RBL |
| Vice President (VP) | N | SBI |
| Secretary | S | UBI |
| Assistant Manager (AM) | Q | PNB |
| Operations Manager (OM) | R | BOB |
| Clerk | O | IDFC |

Three persons are junior to S.

**Q15. Statement:** Health experts argue that skipping breakfast significantly reduces a person's daily productivity, claiming that the brain needs morning nutrients to focus properly. However, some professionals argue that skipping breakfast saves time and helps them start work earlier.
**Which of the following, if true, most strengthens the health experts' argument?**
(a) Employees who eat a balanced breakfast make 30% fewer errors in their complex morning tasks than those who skip it.
(b) Starting work earlier allows employees to avoid rush hour traffic and leave the office earlier in the evening.
(c) Breakfast foods are often high in refined sugars and carbohydrates, which can lead to quick energy crashes.
(d) Many successful CEOs practice intermittent fasting and skip breakfast entirely to save time.
(e) Productivity is largely determined by the number of hours slept the previous night, rather than morning food intake.
**Ans.(a)**
**Sol.** Solution:
The health experts argue that breakfast is necessary for focus and productivity. Option (a) directly strengthens this by providing concrete evidence that eating breakfast leads to fewer errors (higher productivity/focus) compared to skipping it. The other options either weaken the experts' argument or support the opposing view.

**Q16. In the following questions assuming the given statement to be true, find which of the conclusion(s) among given conclusions is/are definitely true and then give your answers accordingly.**
**Statement**: H = J ≥ M; D ≤ C = V; G < B = N ≤ H; V > F = G
**Conclusion**: I. C > N
II. J > F
(a) Only I is true
(b) Only II is true
(c) Either I or II is true
(d) Neither I nor II is true
(e) Both I and II are true
**Ans.(b)**
**Sol.** I. C > N - False
II. J > F - True

**Q17. This question below, consist 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 the statements and give answer.**
**Seven professionals — A, B, C, D, E, F, and G — work in seven different departments of a company: Legal, Audit, HR, IT, Marketing, Finance and Research (not necessarily in the same order). Each of them prefers to work on a different day of the week- Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday Who works in the HR department?**
I. A and B work in Finance and Audit respectively. The person who works in the Research department prefers working on Friday. C neither works in HR nor prefers Monday. D prefers Wednesday but does not work in Legal. The one who works in IT prefers Thursday.
II. G prefers Saturday and works in Legal. H works in Marketing but doesn't prefer Friday or Sunday. F and E prefer Monday and Tuesday respectively.
(a) Only statement I is sufficient
(b) Both statements I and II together are sufficient
(c) Either statement I or statement II is sufficient
(d) Only statement II is sufficient
(e) Both statements I and II, even together are not sufficient

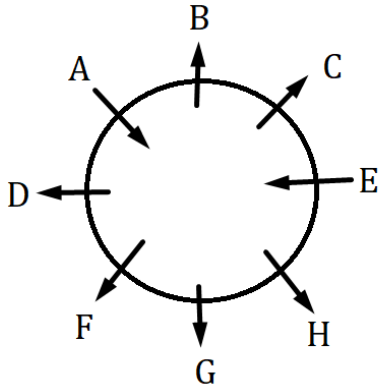
**Ans.(e)**
**Sol.** Both statements I and II, even together are not sufficient

**Q18. Statement:** Animal shelters reported that households adopting stray dogs experience a significant decrease in loneliness and an increase in daily physical activity due to required dog walking.
**Conclusions:**
I. Adopting a pet forces individuals to adopt healthier physical routines.
II. Stray dogs are inherently more affectionate than purebred dogs.
III. Pet ownership can provide psychological benefits such as companionship.
IV. People without pets are destined to be miserable and unhealthy.
**Which of the following can be concluded from the above given statements?**
(a) Only I and II follow
(b) Only II and IV follow
(c) Only III and IV follow
(d) Only I and III follow
(e) Only I and IV follow
**Ans.(d)**
**Sol.** Sol. Explanation:
Conclusion I follows because adopting a dog led to increased physical activity (dog walking).
Conclusion II is not supported; purebreds are not mentioned.
Conclusion III follows as the statement notes a decrease in loneliness.
Conclusion IV is an extreme and unsupported generalization.

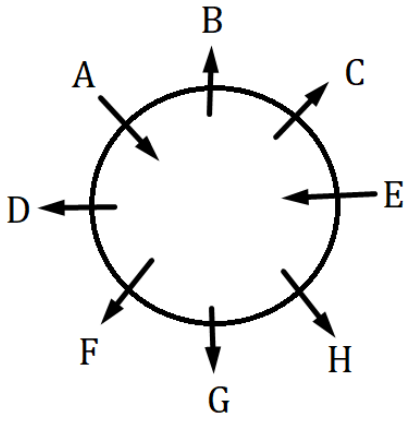
**Q19. In the following questions assuming the given statement to be true, find which of the conclusion(s) among given conclusions is/are definitely true and then give your answers accordingly.**
**Statements**: G < Q = C ≤ N = X, S > N = E > M, Z = J = S > L
**Conclusions**: I. Z > G
II. L > C
(a) Only conclusion I is true
(b) Only conclusion II is true
(c) Either conclusion I or II is true
(d) Both conclusions I and II are true
(e) Neither conclusion I nor II is true
**Ans.(a)**
**Sol.** I. Z > G – True.
II. L > C - False

**Directions (20-24): Read the following information carefully and answer the questions given below:**
Eight persons – A, B, C, D, E, F, G and H – sit around a circular shaped table, but not necessarily in the given order. Some of them face the centre, while others face outside. Less than five persons face inside.
C sits third to the left of G. One person sit between G and D and both G and D faces the same direction. F sits immediate left of D. A sits second to the right of F and is not G's immediate neighbour. Immediate neighbours of A face the direction opposite to A. Two persons sit between A and E. C and F face the same direction. Both the immediate neighbours of E face the same direction. H sits immediate left of E.

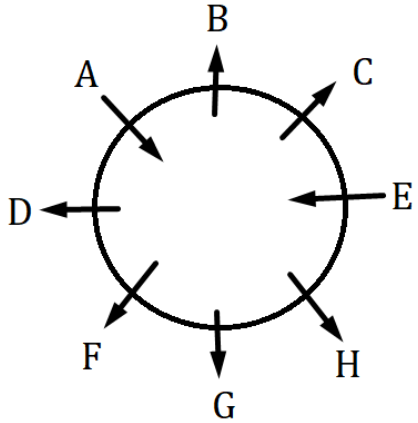
**Q20. Who among the following sits third to the left of B?**
(a) H
(b) D
(c) E
(d) F
(e) C
**Ans.(d)**
**Sol.** Final Arrangement:



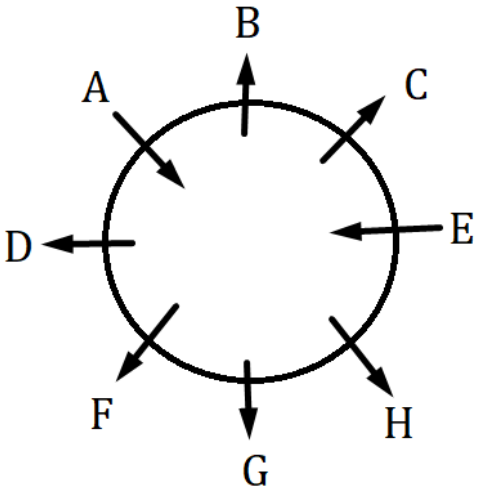

**Q21. How many persons sit between A and C when counted from the left of C?**
(a) Five
(b) Two
(c) Three
(d) Four
(e) One
**Ans.(e)**
**Sol.** Final Arrangement:



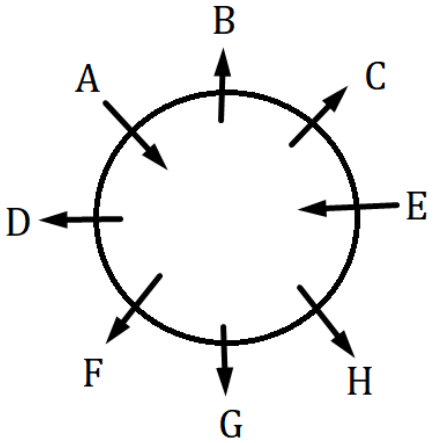

**Q22. What is the position of D with respect to H?**
(a) Third to the right
(b) Second to the left
(c) Fourth to the right
(d) Immediate left
(e) Third to the left
**Ans.(a)**
**Sol.** Final Arrangement:



**Q23. Four of the following five are alike in a certain manner and form a group. Which of the following is not related to the group?**
(a) B
(b) G
(c) H
(d) C
(e) E
**Ans.(e)**
**Sol.** Final Arrangement:




**Q24. If all the persons are made to sit in alphabetical order in anti-clockwise direction starting from A, then the position of how many persons remain unchanged (except A)?**
(a) None
(b) One
(c) Two
(d) Three
(e) Four
**Ans.(a)**
**Sol.** Final Arrangement:

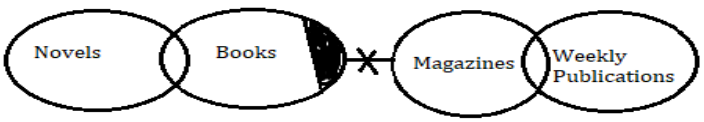



**Q25. Statement:** TechCorp announced a permanent "work from home only" policy, concluding it will massively increase overall employee satisfaction and retention over the next five years. The HR department noted that an internal survey showed 90% of employees heavily preferred avoiding the daily two-hour traffic commute.
**In order for the conclusion about increased employee satisfaction to be logically drawn, which of the following must be assumed?**

(a) Employees do not value in-person social interactions with colleagues more than they value avoiding the daily commute.
(b) TechCorp will save millions of dollars in downtown real estate and utility costs.
(c) The employees who preferred avoiding the commute were the highest performing executives in the company.
(d) Other rival tech companies are also rapidly adopting permanent work-from-home policies.
(e) Employees will voluntarily work more hours from home than they did in the office.
**Ans.(a)**
**Sol.** Sol. The company equates "hating the commute" with "loving work from home forever." However, working from home also means losing office social life. If employees value social interaction more than avoiding traffic, the policy will actually decrease satisfaction. Therefore, assumption (a) is necessary for the conclusion to hold.

**Q26. In the following questions assuming the given statement to be true, find which of the conclusion(s) among given conclusions is/are definitely true and then give your answers accordingly.**
**Statements**: V ≤ P = C ≤ H, N ≥ C < E = Y, P = L ≤ S = T
**Conclusions**: I. L > Y
II. N ≥ V
(a) Only conclusion I is true
(b) Only conclusion II is true
(c) Either conclusion I or II is true
(d) Both conclusions I and II are true
(e) Neither conclusion I nor II is true
**Ans.(b)**
**Sol.** I. L > Y - False
II. N ≥ V – True.

**Q27. In each question below some statements are given followed by some conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusion definitely follows from the given statements, disregarding commonly known facts. Give answer of the questions given below –**
**Statements:**
Some novels are books.
Some books are not magazines.
Only a few magazines are weekly publications.
**Conclusions:**
**I.** Some novels are not magazines.
**II.** Some weekly publications are not novels.
(a) Only conclusion I follows
(b) Only conclusion II follows
(c) Either conclusion I or II follows
(d) Neither conclusion I nor II follows
(e) Both conclusions I and II follow
**Ans.(d)**
**Sol. I.** Not Follow - There is no direct relation between novels and magazines. So, definite relation does not follow.
**II.** Not Follow - There is no direct relation between weekly publications and novels. So, definite relation does not follow.




**Directions (28-30): Study the following arrangement carefully and answer the questions given below:**
Nine persons – A, B, C, D, E, F, G, H and I bought books one after another on different occasions. No person bought a thing other than given person. Only two persons bought between A and D. I bought immediately before A. B bought three persons after I. As many persons bought between D and B as between A and H. Only three persons bought between H and C who bought before H. Only one person bought between C and E. F bought after G who doesn't buy immediately after E.

**Q28. The number of persons bought a book after E is __ than the number of persons bought before C.**
(a) Two more
(b) Two less
(c) Three more
(d) Three less
(e) None of these
**Ans.(b)**
**Sol.** Final arrangement:

| Persons |
|---|
| D |
| G |
| I |
| A |
| C |
| B |
| E |
| F |
| H |

**Clues:** Only two persons bought between A and D. I bought immediately before A.
**Inference:** We have two possible cases:

| Case 1 | Case 2 |
|---|---|
| Persons | Persons |
| D | I |
| | A |
| I | |
| A | |
| | D |

**Clues:** B bought three persons after I. As many persons bought between D and B as between A and H. Only three persons bought between H and C who bought before H.
**Inference:**

| Case 1 | Case 2 |
|---|---|
| Persons | Persons |
| D | C |
| | |
| I | I |
| A | A |
| C | H |
| B | B |
| | D |
| | |
| H | |

**Clues:** Only one person bought between C and E. F bought after G who doesn't buy immediately after E.
**Inference:** Case 2 gets eliminated

| Case 1 | ~~Case 2~~ |
|---|---|
| Persons | ~~Persons~~ |
| D | ~~E~~ |
| G | ~~G~~ |
| I | ~~C~~ |
| A | ~~F~~ |
| C | ~~I~~ |
| B | ~~A~~ |
| E | ~~H~~ |
| F | ~~B~~ |
| H | ~~D~~ |

**Inference:** The final arrangement is:

| Persons |
|---|
| D |
| G |
| I |
| A |
| C |
| B |
| E |
| F |
| H |

Two less

**Q29. If all the persons bought a book in alphabetical order from first to last, then who among the following person remains unchanged in their position?**
(a) A
(b) C
(c) G
(d) H
(e) None
**Ans.(e)**
**Sol.** Final arrangement:

| Persons |
|---|
| D |
| G |
| I |
| A |
| C |
| B |
| E |
| F |
| H |

**Clues:**Only two persons bought between A and D. I bought immediately before A.
**Inference:**We have two possible cases:

| Case 1 | Case 2 |
|---|---|
| Persons | Persons |
| D | I |
| | A |
| I | |
| A | |
| | D |

**Clues:**B bought three persons after I. As many persons bought between D and B as between A and H. Only three persons bought between H and C who bought before H.
**Inference:**

| Case 1 | Case 2 |
|---|---|
| Persons | Persons |
| D | C |
| | |
| I | I |
| A | A |
| C | H |
| B | B |
| | D |
| | |
| H | |

**Clues:**Only one person bought between C and E. F bought after G who doesn't buy immediately after E.
**Inference:**Case 2 gets eliminated

| **Case 1** | ~~**Case 2**~~ |
|---|---|
| **Persons** | ~~**Persons**~~ |
| D | ~~E~~ |
| G | ~~G~~ |
| I | ~~C~~ |
| A | ~~F~~ |
| C | ~~I~~ |
| B | ~~A~~ |
| E | ~~H~~ |
| F | ~~B~~ |
| H | ~~D~~ |

**Inference:**The final arrangement is:

| Persons |
|---|
| D |
| G |
| I |
| A |
| C |
| B |
| E |
| F |
| H |

None

**Q30. Who among the following bought a book two persons before H?**
(a) E
(b) B
(c) C
(d) D
(e) I
**Ans.(a)**
**Sol.** Final arrangement:

| Persons |
|---|
| D |
| G |
| I |
| A |
| C |
| B |
| E |
| F |
| H |

**Clues:**Only two persons bought between A and D. I bought immediately before A.
**Inference:**We have two possible cases:

| Case 1 | Case 2 |
|---|---|
| Persons | Persons |
| D | I |
| | A |
| I | |
| A | |
| | D |

**Clues:**B bought three persons after I. As many persons bought between D and B as between A and H. Only three persons bought between H and C who bought before H.

**Inference:**

| Case 1 | Case 2 |
|---|---|
| Persons | Persons |
| D | C |
| | |
| I | I |
| A | A |
| C | H |
| B | B |
| | D |
| | |
| H | |

**Clues:**Only one person bought between C and E. F bought after G who doesn't buy immediately after E.

**Inference:**Case 2 gets eliminated

| Case 1 | ~~Case 2~~ |
|---|---|
| Persons | ~~Persons~~ |
| D | ~~E~~ |
| G | ~~G~~ |
| I | ~~C~~ |
| A | ~~F~~ |
| C | ~~I~~ |
| B | ~~A~~ |
| E | ~~H~~ |
| F | ~~B~~ |
| H | ~~D~~ |

**Inference:**The final arrangement is:

| Persons |
|---|
| D |
| G |
| I |
| A |
| C |
| B |
| E |
| F |
| H |

**Q31. In the following questions assuming the given statement to be true, find which of the conclusion(s) among given conclusions is/are definitely true and then give your answers accordingly.**

**Statements:** O = T < H< J > M < P, P > U = D > B = N < K

**Conclusions:** I. M < N II. H> N

(a) Only I is true

(b) Only II is true

(c) Either I or II is true

(d) Neither I nor II is true

(e) Both I and II are true

**Ans.(d)**
**Sol.** I. M < N (False) II. H> N (False)

**Q32. Statement:** The local municipality has decided to replace all human traffic police officers at major intersections with automated AI-driven traffic lights equipped with advanced vehicular flow sensors. The mayor stated this will finally eliminate the massive traffic jams that plague the city during peak rush hours.
**Which of the following is an assumption implicit in the mayor's statement?**
(a) The AI-driven traffic lights are impervious to hacking or electrical failures.
(b) Human traffic police officers were intentionally causing traffic jams to protest low wages.
(c) The AI system can analyze and respond to complex traffic patterns more efficiently than human officers.
(d) The city budget has enough surplus funds to easily cover the installation of these advanced sensors.
(e) None of the above.
**Ans.(c)**
**Sol.** Sol. Replacing humans with AI to "finally eliminate" traffic jams assumes that the AI technology is functionally superior to human judgment in managing the flow of vehicles at busy intersections.

**Directions (33-37): Study the following information carefully and answer the questions given below. A number arrangement machine, when given a particular input, rearranges it following a particular rule. The example of input and its rearrangement is given below:**
**Input:** 86 47 35 92 64 18 73 29
**Step I:** 68 74 53 29 46 81 37 92
**Step II:** 66 72 55 31 44 83 39 90
**Step III:** 71 77 60 36 39 78 34 85
**Step IV:** 8 14 6 9 12 15 7 13
**Step V:** 64 196 36 81 144 225 49 169
**Step V** is the last step of the given example. Illustrate the steps for the following input and answer the questions:
**Input:** 57 84 39 61 28 95 42 73

**Q33. What is the sum of all the numbers in Step V?**
(a) 610
(b) 605
(c) 615
(d) 620
(e) 625
**Ans.(c)**
**Sol. Logic here is:**
**Step I:** Swap the digits of the two-digit number.
**Step II:** Even numbers are subtracted by 2 and odd numbers are added by 2.
**Step III:** First four numbers are added by 5 and last four numbers are subtracted by 5.
**Step IV:** Digit sum of the given numbers.
**Step V:** Square of the number.
**Input:** 57 84 39 61 28 95 42 73
**Step I**: 75 48 93 16 82 59 24 37
**Step II:** 77 46 95 14 80 61 22 39
**Step III:** 82 51 100 19 75 56 17 34
**Step IV:** 10 6 1 10 12 11 8 7
**Step V:** 100 36 1 100 144 121 64 49
**Step V:**
100 + 36 + 1 + 100 + 144 + 121 + 64 + 49 = 615



**Q34. How many even numbers are there in Step III?**
(a) Five
(b) Four
(c) Six
(d) Three
(e) Two

**Ans.(b)**
**Sol. Logic here is:**
**Step I:** Swap the digits of the two-digit number.
**Step II:** Even numbers are subtracted by 2 and odd numbers are added by 2.
**Step III:** First four numbers are added by 5 and last four numbers are subtracted by 5.
**Step IV:** Digit sum of the given numbers.
**Step V:** Square of the number.
**Input:** 57 84 39 61 28 95 42 73
**Step I**: 75 48 93 16 82 59 24 37
**Step II:** 77 46 95 14 80 61 22 39
**Step III:** 82 51 100 19 75 56 17 34
**Step IV:** 10 6 1 10 12 11 8 7
**Step V:** 100 36 1 100 144 121 64 49
**Step III:** 82 51 100 19 75 56 17 34
Even numbers: 82, 100, 56, 34
Total = 4

**Q35. Which of the following is fourth from the left end in Step II?**
(a) 95
(b) 14
(c) 80
(d) 46
(e) 39
**Ans.(b)**
**Sol. Logic here is:**
**Step I:** Swap the digits of the two-digit number.
**Step II:** Even numbers are subtracted by 2 and odd numbers are added by 2.
**Step III:** First four numbers are added by 5 and last four numbers are subtracted by 5.
**Step IV:** Digit sum of the given numbers.
**Step V:** Square of the number.
**Input:** 57 84 39 61 28 95 42 73
**Step I**: 75 48 93 16 82 59 24 37
**Step II:** 77 46 95 14 80 61 22 39
**Step III:** 82 51 100 19 75 56 17 34
**Step IV:** 10 6 1 10 12 11 8 7
**Step V:** 100 36 1 100 144 121 64 49
**Step II:** 77 46 95 14 80 61 22 39
**Fourth from left =** 14

**Q36. What is the difference between the highest and lowest number in Step IV?**
(a) 9
(b) 10
(c) 12
(d) 11
(e) 8
**Ans.(d)**
**Sol. Logic here is:**
**Step I:** Swap the digits of the two-digit number.
**Step II:** Even numbers are subtracted by 2 and odd numbers are added by 2.
**Step III:** First four numbers are added by 5 and last four numbers are subtracted by 5.
**Step IV:** Digit sum of the given numbers.
**Step V:** Square of the number.
**Input:** 57 84 39 61 28 95 42 73
**Step I**: 75 48 93 16 82 59 24 37
**Step II:** 77 46 95 14 80 61 22 39
**Step III:** 82 51 100 19 75 56 17 34

**Step IV:** 10 6 1 10 12 11 8 7
**Step V:** 100 36 1 100 144 121 64 49
**Step IV:** 10 6 1 10 12 11 8 7
**Highest** = 12
**Lowest** = 1
**Difference** = 11

**Q37. Which of the following is Step III?**
(a) 82 51 100 19 75 56 17 34
(b) 82 1 100 19 75 5 17 34
(c) 75 48 93 16 82 59 24 37
(d) 10 6 12 10 12 11 8 7
(e) 82 51 10 19 75 56 17 34
**Ans.(a)**
**Sol. Logic here is:**
**Step I:** Swap the digits of the two-digit number.
**Step II:** Even numbers are subtracted by 2 and odd numbers are added by 2.
**Step III:** First four numbers are added by 5 and last four numbers are subtracted by 5.
**Step IV:** Digit sum of the given numbers.
**Step V:** Square of the number.
**Input:** 57 84 39 61 28 95 42 73
**Step I**: 75 48 93 16 82 59 24 37
**Step II:** 77 46 95 14 80 61 22 39
**Step III:** 82 51 100 19 75 56 17 34
**Step IV:** 10 6 1 10 12 11 8 7
**Step V:** 100 36 1 100 144 121 64 49
**Step III is:**
82 51 100 19 75 56 17 34

**Q38.** In the number '**68314729**', if the digits which are less than five are increased by 2 and the digits which are more than five are decreased by 1, then all the digits are arranged in ascending order from right to left. Find the square of the number which comes after the addition of third and seventh digit from right end in the new number formed after the arrangement?
(a) 121
(b) 100
(c) 144
(d) 81
(e) None of these
**Ans.(c)**
**Sol.** Original number= 68314729
Final number= 8 **7**665 **5**43
Square of addition of third and seventh number from right= 5+7= 12= 12*12= 144

**Directions (39-43): Study the following information carefully and answer the questions given below.**
Ten boxes- M, N, O, P, Q, R, S, T, U and V- are arranged in different shelves of a stack, one above the other, but not necessarily in the same order. The lowermost shelf is numbered as 1 and the topmost shelf is numbered as 10.
Box O is not placed on the prime numbered shelf and is placed above Box S. Box Q is placed above Box M, which is placed immediately above Box P. Four boxes are placed between Box Q and Box R, which is placed immediately above Box T. Box Q is placed above Box R. The number of boxes placed below Box N is one more than the number of boxes placed above Box Q. Three boxes are placed between Box P and Box T, which is placed immediately above Box U. Box S is placed on the shelf that is a multiple of 3. Box S is placed above Box V.

**Q39. Which among the following box is placed five boxes below Box M?**
(a) Box U
(b) Box N
(c) Box T
(d) Box V
(e) None of these

**Ans.(c)**

**Sol.** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| **10** | O |
| **9** | S |
| **8** | Q |
| **7** | M |
| **6** | P |
| **5** | V |
| **4** | N |
| **3** | R |
| **2** | T |
| **1** | U |

**Clues:** Four boxes are placed between Box Q and Box R which is placed immediately above Box T. Box Q is placed above Box R. The number of boxes placed below Box N is one more than the number of boxes placed above Box Q.

**Inference:**

| Stacks | Boxes | Boxes | Boxes |
|---|---|---|---|
| | **Case 1** | **Case 2** | **Case 3** |
| 10 | Q | | |
| 9 | | | |
| 8 | | Q | |
| 7 | | | Q |
| 6 | | | |
| 5 | R | | N |
| 4 | T | N | |
| 3 | | R | |
| 2 | N | T | R |
| 1 | | | T |

**Clues:** Three boxes are placed between Box P and Box T which is placed immediately above Box U. Box Q is placed above Box M which is placed immediately above Box P. Box S is placed on the stack which is a multiple of 3. Box S is placed above Box V.

**Inference:** Case 3 gets cancelled here as there is no place for U.

| Stacks | Boxes | Boxes | ~~Boxes~~ |
|---|---|---|---|
| | **Case 1** | **Case 2** | ~~**Case 3**~~ |
| 10 | Q | | |
| 9 | M | S | |
| 8 | P | Q | |
| 7 | | M | ~~Q~~ |
| 6 | S | P | |
| 5 | R | V | ~~N~~ |
| 4 | T | N | |
| 3 | U | R | |
| 2 | N | T | ~~R~~ |
| 1 | V | U | ~~T~~ |

**Clues:** Box O is not placed on the prime number stack and is placed above Box S.

**Inference:** Case 1 gets cancelled here as there is no place for O.

| Stacks | ~~Boxes~~ | Boxes |
|---|---|---|
| | ~~Case 1~~ | Case 2 |
| 10 | ~~Q~~ | O |
| 9 | ~~M~~ | S |
| 8 | ~~P~~ | Q |
| 7 | | M |
| 6 | ~~S~~ | P |
| 5 | ~~R~~ | V |
| 4 | ~~T~~ | N |
| 3 | ~~U~~ | R |
| 2 | ~~N~~ | T |
| 1 | ~~V~~ | U |

**Inference:** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| **10** | O |
| **9** | S |
| **8** | Q |
| **7** | M |
| **6** | P |
| **5** | V |
| **4** | N |
| **3** | R |
| **2** | T |
| **1** | U |

Box T is placed five boxes below Box M.

**Q40. Four of the following five are alike in a certain way and thus form a group. Which is the one that does not belong to that group?**

(a) Box S

(b) Box M

(c) Box R

(d) Box V

(e) Box P

**Ans.(e)**

**Sol.** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| 10 | O |
| 9 | S |
| 8 | Q |
| 7 | M |
| 6 | P |
| 5 | V |
| 4 | N |
| 3 | R |
| 2 | T |
| 1 | U |

**Clues:** Four boxes are placed between Box Q and Box R which is placed immediately above Box T. Box Q is placed above Box R. The number of boxes placed below Box N is one more than the number of boxes placed above Box Q.

**Inference:**

| Stacks | Boxes | Boxes | Boxes |
|---|---|---|---|
| | Case 1 | Case 2 | Case 3 |
| 10 | Q | | |
| 9 | | | |
| 8 | | Q | |
| 7 | | | Q |
| 6 | | | |
| 5 | R | | N |
| 4 | T | N | |
| 3 | | R | |
| 2 | N | T | R |
| 1 | | | T |

**Clues:** Three boxes are placed between Box P and Box T which is placed immediately above Box U. Box Q is placed above Box M which is placed immediately above Box P. Box S is placed on the stack which is a multiple of 3. Box S is placed above Box V.

**Inference:** Case 3 gets cancelled here as there is no place for U.

| Stacks | Boxes | Boxes | ~~Boxes~~ |
|---|---|---|---|
| | Case 1 | Case 2 | ~~Case 3~~ |
| 10 | Q | | |
| 9 | M | S | |
| 8 | P | Q | |
| 7 | | M | ~~Q~~ |
| 6 | S | P | |
| 5 | R | V | ~~N~~ |
| 4 | T | N | |
| 3 | U | R | |
| 2 | N | T | ~~R~~ |
| 1 | V | U | ~~T~~ |

**Clues:** Box O is not placed on the prime number stack and is placed above Box S.
**Inference:** Case 1 gets cancelled here as there is no place for O.

| Stacks | ~~Boxes~~ | Boxes |
|---|---|---|
| | ~~Case 1~~ | Case 2 |
| 10 | ~~Q~~ | O |
| 9 | ~~M~~ | S |
| 8 | ~~P~~ | Q |
| 7 | | M |
| 6 | ~~S~~ | P |
| 5 | ~~R~~ | V |
| 4 | ~~T~~ | N |
| 3 | ~~U~~ | R |
| 2 | ~~N~~ | T |
| 1 | ~~V~~ | U |

**Inference:** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| **10** | O |
| **9** | S |
| **8** | Q |
| **7** | M |
| **6** | P |
| **5** | V |
| **4** | N |
| **3** | R |
| **2** | T |
| **1** | U |

Except Box P, all the other boxes are kept in an odd numbered self.

**Q41. If Box Q is related to Box V and in the same way Box P is related to Box R then which among the following box is related to Box U?**
(a) Box V
(b) Box N
(c) Box P
(d) Box M
(e) Box S
**Ans.(b)**
**Sol.** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| 10 | O |
| 9 | S |
| 8 | Q |
| 7 | M |
| 6 | P |
| 5 | V |
| 4 | N |
| 3 | R |
| 2 | T |
| 1 | U |

**Clues:** Four boxes are placed between Box Q and Box R which is placed immediately above Box T. Box Q is placed above Box R. The number of boxes placed below Box N is one more than the number of boxes placed above Box Q.

**Inference:**

| Stacks | Boxes | Boxes | Boxes |
|---|---|---|---|
| | Case 1 | Case 2 | Case 3 |
| 10 | Q | | |
| 9 | | | |
| 8 | | Q | |
| 7 | | | Q |
| 6 | | | |
| 5 | R | | N |
| 4 | T | N | |
| 3 | | R | |
| 2 | N | T | R |
| 1 | | | T |

**Clues:** Three boxes are placed between Box P and Box T which is placed immediately above Box U. Box Q is placed above Box M which is placed immediately above Box P. Box S is placed on the stack which is a multiple of 3. Box S is placed above Box V.

**Inference:** Case 3 gets cancelled here as there is no place for U.

| Stacks | Boxes | Boxes | ~~Boxes~~ |
|---|---|---|---|
| | Case 1 | Case 2 | ~~Case 3~~ |
| 10 | Q | | |
| 9 | M | S | |
| 8 | P | Q | |
| 7 | | M | ~~Q~~ |
| 6 | S | P | |
| 5 | R | V | ~~N~~ |
| 4 | T | N | |
| 3 | U | R | |
| 2 | N | T | ~~R~~ |
| 1 | V | U | ~~T~~ |

**Clues:** Box O is not placed on the prime number stack and is placed above Box S.

**Inference:** Case 1 gets cancelled here as there is no place for O.

| Stacks | ~~Boxes~~ ~~Case 1~~ | Boxes Case 2 |
|---|---|---|
| 10 | ~~Q~~ | O |
| 9 | ~~M~~ | S |
| 8 | ~~P~~ | Q |
| 7 | | M |
| 6 | ~~S~~ | P |
| 5 | ~~R~~ | V |
| 4 | ~~T~~ | N |
| 3 | ~~U~~ | R |
| 2 | ~~N~~ | T |
| 1 | ~~V~~ | U |

**Inference:** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| **10** | O |
| **9** | S |
| **8** | Q |
| **7** | M |
| **6** | P |
| **5** | V |
| **4** | N |
| **3** | R |
| **2** | T |
| **1** | U |

Box Q is related to Box V and in the same way Box N is related to Box U.

**Q42. The number of boxes placed above box P is two less than the number of boxes placed below box ____.**

(a) M

(b) N

(c) V

(d) T

(e) S

**Ans.(a)**

**Sol.** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| 10 | O |
| 9 | S |
| 8 | Q |
| 7 | M |
| 6 | P |
| 5 | V |
| 4 | N |
| 3 | R |
| 2 | T |
| 1 | U |

**Clues:** Four boxes are placed between Box Q and Box R which is placed immediately above Box T. Box Q is placed above Box R. The number of boxes placed below Box N is one more than the number of boxes placed above Box Q.

**Inference:**

| Stacks | Boxes | Boxes | Boxes |
|---|---|---|---|
| | Case 1 | Case 2 | Case 3 |
| 10 | Q | | |
| 9 | | | |
| 8 | | Q | |
| 7 | | | Q |
| 6 | | | |
| 5 | R | | N |
| 4 | T | N | |
| 3 | | R | |
| 2 | N | T | R |
| 1 | | | T |

**Clues:** Three boxes are placed between Box P and Box T which is placed immediately above Box U. Box Q is placed above Box M which is placed immediately above Box P. Box S is placed on the stack which is a multiple of 3. Box S is placed above Box V.

**Inference:** Case 3 gets cancelled here as there is no place for U.

| Stacks | Boxes | Boxes | ~~Boxes~~ |
|---|---|---|---|
| | Case 1 | Case 2 | ~~Case 3~~ |
| 10 | Q | | |
| 9 | M | S | |
| 8 | P | Q | |
| 7 | | M | ~~Q~~ |
| 6 | S | P | |
| 5 | R | V | ~~N~~ |
| 4 | T | N | |
| 3 | U | R | |
| 2 | N | T | ~~R~~ |
| 1 | V | U | ~~T~~ |

**Clues:** Box O is not placed on the prime number stack and is placed above Box S.
**Inference:** Case 1 gets cancelled here as there is no place for O.

| Stacks | ~~Boxes~~ | Boxes |
|---|---|---|
| | ~~Case 1~~ | Case 2 |
| 10 | ~~Q~~ | O |
| 9 | ~~M~~ | S |
| 8 | ~~P~~ | Q |
| 7 | | M |
| 6 | ~~S~~ | P |
| 5 | ~~R~~ | V |
| 4 | ~~T~~ | N |
| 3 | ~~U~~ | R |
| 2 | ~~N~~ | T |
| 1 | ~~V~~ | U |

**Inference:** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| **10** | O |
| **9** | S |
| **8** | Q |
| **7** | M |
| **6** | P |
| **5** | V |
| **4** | N |
| **3** | R |
| **2** | T |
| **1** | U |

Four boxes are placed above box P and six boxes are placed below box M.

**Q43. How many boxes are there between Box M and Box V?**
(a) Three
(b) Four
(c) One
(d) Two
(e) None of these
**Ans.(c)**
**Sol.** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| 10 | O |
| 9 | S |
| 8 | Q |
| 7 | M |
| 6 | P |
| 5 | V |
| 4 | N |
| 3 | R |
| 2 | T |
| 1 | U |

**Clues:** Four boxes are placed between Box Q and Box R which is placed immediately above Box T. Box Q is placed above Box R. The number of boxes placed below Box N is one more than the number of boxes placed above Box Q.

**Inference:**

| Stacks | Boxes | Boxes | Boxes |
|---|---|---|---|
| | Case 1 | Case 2 | Case 3 |
| 10 | Q | | |
| 9 | | | |
| 8 | | Q | |
| 7 | | | Q |
| 6 | | | |
| 5 | R | | N |
| 4 | T | N | |
| 3 | | R | |
| 2 | N | T | R |
| 1 | | | T |

**Clues:** Three boxes are placed between Box P and Box T which is placed immediately above Box U. Box Q is placed above Box M which is placed immediately above Box P. Box S is placed on the stack which is a multiple of 3. Box S is placed above Box V.

**Inference:** Case 3 gets cancelled here as there is no place for U.

| Stacks | Boxes | Boxes | ~~Boxes~~ |
|---|---|---|---|
| | Case 1 | Case 2 | ~~Case 3~~ |
| 10 | Q | | |
| 9 | M | S | |
| 8 | P | Q | |
| 7 | | M | ~~Q~~ |
| 6 | S | P | |
| 5 | R | V | ~~N~~ |
| 4 | T | N | |
| 3 | U | R | |
| 2 | N | T | ~~R~~ |
| 1 | V | U | ~~T~~ |

**Clues:** Box O is not placed on the prime number stack and is placed above Box S.

**Inference:** Case 1 gets cancelled here as there is no place for O.

| Stacks | ~~Boxes~~ ~~Case 1~~ | Boxes Case 2 |
|---|---|---|
| 10 | ~~Q~~ | O |
| 9 | ~~M~~ | S |
| 8 | ~~P~~ | Q |
| 7 | | M |
| 6 | ~~S~~ | P |
| 5 | ~~R~~ | V |
| 4 | ~~T~~ | N |
| 3 | ~~U~~ | R |
| 2 | ~~N~~ | T |
| 1 | ~~V~~ | U |

**Inference:** Final Arrangement is here:

| Stacks | Boxes |
|---|---|
| **10** | O |
| **9** | S |
| **8** | Q |
| **7** | M |
| **6** | P |
| **5** | V |
| **4** | N |
| **3** | R |
| **2** | T |
| **1** | U |

Only one box is placed between Box M and Box V.

**Q44. The question consists of two statements numbered I and II given below it. You have to decide whether the data provided in the statement is sufficient to answer the question.**

**Six persons A, B, C, D, E and F sit around a circular table. Some face inside and some face outside the centre. Find how many persons sit between A and E when counted from the right of A?**

**Statement I**: A sits second to the right of B. B faces D. One person sits between D and the one who sits immediate left of A. E sits immediate left of B.

**Statement II**: Two persons sit between A and F who sits immediate right of C. B sits second to the right of C and faces D.

(a) Data given in both statements I and II together are sufficient to answer.

(b) Data given in statement I alone is sufficient to answer.

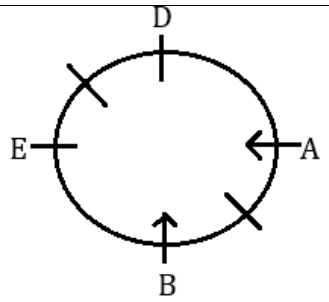
(c) Data given in statement II alone is sufficient to answer.

(d) Data given in both statements I and II together are not sufficient to answer.

(e) Data given in either statement I or statement II alone is sufficient to answer the question.

**Ans.(b)**

**Sol.** From statement I, Two persons sit between A and E




**Q45. In the question below are given some statements followed by some conclusions. You have to take the given statements to be true even if they seem to be in variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.**

**Statements:**

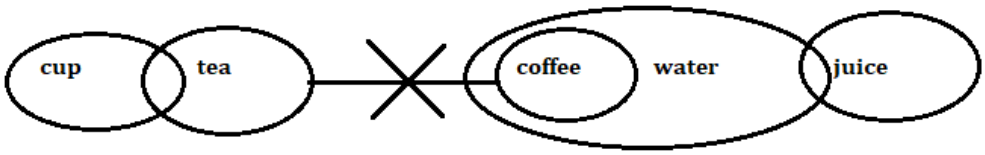
Some cup is tea.
No tea is coffee.
All coffee is water.
Only a few water is juice.

**Conclusions:**

**I.** Some water is not tea.
**II.** Some cup is not coffee.
(a) Only conclusion I follows.
(b) Both conclusion I and II follow.
(c) Only conclusion II follows.
(d) Either conclusion I and II follow
(e) None of the above

**Ans.(b)**

**Sol.** I. Follow- some part of water which is coffee can not be tea so it follows
II. Follow- some cup which is tea will not be coffee so it follow.




**Q46. Statement:** Personal invisibility cloaks have become affordable and widely available, leading to an unprecedented wave of espionage, theft, and public panic. Retail stores are reporting up to 80% inventory loss due to invisible shoplifters within a single week.

**Courses of Action:**

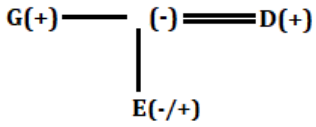
I. Retailers should completely abandon physical storefronts and only sell items via mail order to prevent theft.
II. Law enforcement and store security must rapidly equip themselves with thermal imaging and infrared surveillance to detect cloaked individuals.
III. The use of invisibility cloaks in public spaces, retail stores, and financial institutions should be strictly criminalized.
What is the most practical course of action for authorities and businesses?
(a) Only I and II follow
(b) Only I and III follow
(c) Only I follows
(d) All I, II, and III follow
(e) Only II and III follow

**Ans.(e)**

**Sol.** Sol. Only II and III follow.
Explanation:
Shutting down all retail (I) is a massive economic overreaction. Adapting security technology (II) and establishing clear legal boundaries for the technology's use in public (III) are the necessary steps to restore public order.

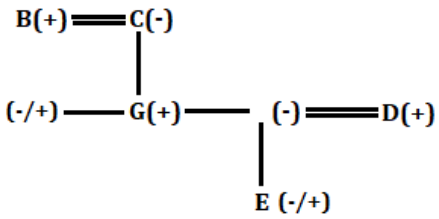
**Directions (47-50): Study the following information and answer the related questions:**
In a family of seven persons - A, B, C, D, E, F and G there are three generations. All of them are arranged from left to right in descending order based on their weight. Equal number of persons is heavier and lighter to E who is the youngest person in the family. Mother of E is just lighter than E. G is maternal uncle of E who is only child of D. The one who is third lightest is married to D. Mother of G is the lightest person among all and has three children. Four persons are there between G's mother and G's father. B is second heaviest person and married to C who is just lighter to D. F is heavier than B and he has one niece.

**Q47. Who among the following is brother-in-law of F?**
(a) A
(b) D
(c) C
(d) E
(e) None of these
**Ans.(b)**
**Sol.** Equal number of persons is heavier and lighter to E who is the youngest person in the family. Mother of E is just lighter than E. G is maternal uncle of E who is only child of D. The one who is third lightest is married to D.



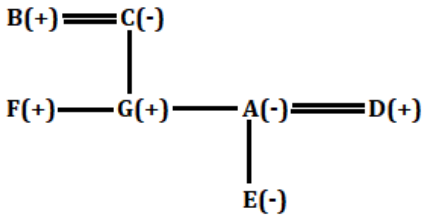

Weight- > > > E > > >
E's mother

Mother of G is the lightest person among all and has three children. Four persons are there between G's mother and G's father. B is second heaviest person and married to C who is just lighter to D. It means B is the father of G and C is mother of G.




Weight- > B > > E > > D > C
E's mother

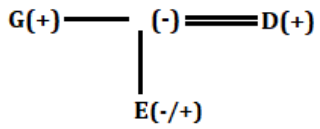
F is heavier than B and he has one niece. After combining all the relations, the final family chart with their weight is:

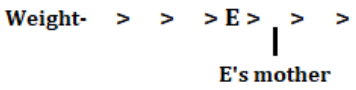



Weight- F > B > G > E > A > D > C

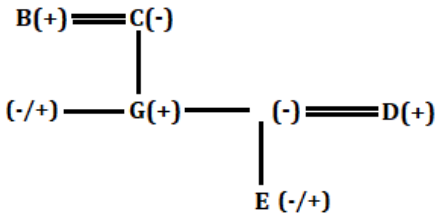
D is brother-in-law of F.

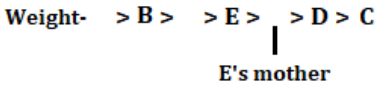
**Q48. How many persons are there between F's brother and B's son-in-law?**
(a) One
(b) Two
(c) Three
(d) Five
(e) None of these
**Ans.(b)**
**Sol.** Equal number of persons is heavier and lighter to E who is the youngest person in the family. Mother of E is just lighter than E. G is maternal uncle of E who is only child of D. The one who is third lightest is married to D.



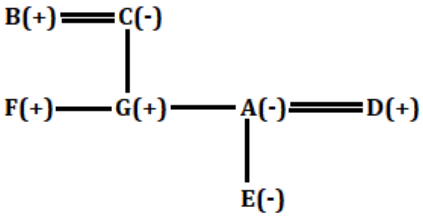




Mother of G is the lightest person among all and has three children. Four persons are there between G's mother and G's father. B is second heaviest person and married to C who is just lighter to D. It means B is the father of G and C is mother of G.




F is heavier than B and he has one niece. After combining all the relations, the final family chart with their weight is:



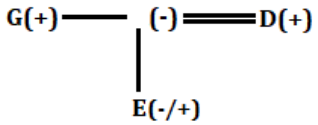

Weight- F > B > G > E > A > D > C

G is F's brother and D is B's son-in-law. Two persons are there between G and D.

**Q49. If the weight of B is 72 kg and the weight of A's child is 8/9 of B. Then, what would be the possible weight of G?**
(a) 62 Kg
(b) 50 Kg
(c) 68 Kg
(d) 74 Kg
(e) 63 Kg

**Ans.(c)**

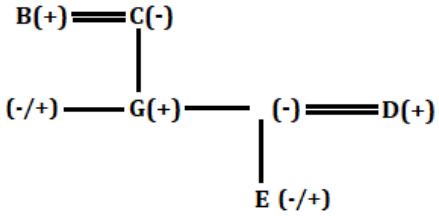
**Sol.** Equal number of persons is heavier and lighter to E who is the youngest person in the family. Mother of E is just lighter than E. G is maternal uncle of E who is only child of D. The one who is third lightest is married to D.




Weight- > > > E > > >

E's mother

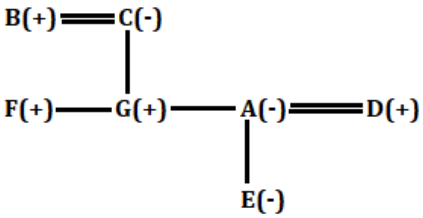
Mother of G is the lightest person among all and has three children. Four persons are there between G's mother and G's father. B is second heaviest person and married to C who is just lighter to D. It means B is the father of G and C is mother of G.




Weight- > B > > E > > D > C

E's mother

F is heavier than B and he has one niece. After combining all the relations, the final family chart with their weight is:




Weight- F > B > G > E > A > D > C

B= 72kg, A's child i.e., E=64kg; So, possible weight of G = 68kg

**Q50. Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to that group?**

(a) B

(b) G

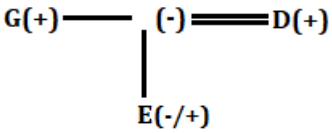
(c) E

(d) F

(e) D

**Ans.(c)**

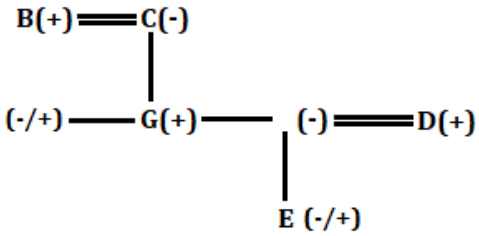
**Sol.** Equal number of persons is heavier and lighter to E who is the youngest person in the family. Mother of E is just lighter than E. G is maternal uncle of E who is only child of D. The one who is third lightest is married to D.




Weight- > > > E > > >

E's mother

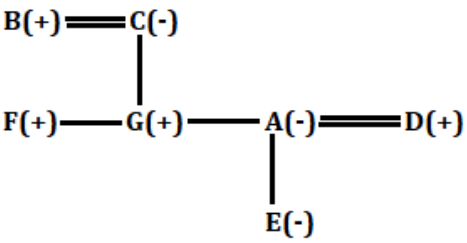
Mother of G is the lightest person among all and has three children. Four persons are there between G's mother and G's father. B is second heaviest person and married to C who is just lighter to D. It means B is the father of G and C is mother of G.




Weight- > B > > E > > D > C

E's mother

F is heavier than B and he has one niece. After combining all the relations, the final family chart with their weight is:




Weight- F > B > G > E > A > D > C

E is female

**Q51. If in the word "ADVANCEMENT", first five letters are changed to the next letter; middle letter remains same; Last five letters are changed to the previous and then remove all the repeating letters in the word. How many letters are between 3rd letter from left and 3rd letter from the right as per the English alphabetical order?**

(a) 5
(b) 6
(c) 2
(d) 4
(e) None of these

**Ans.(c)**

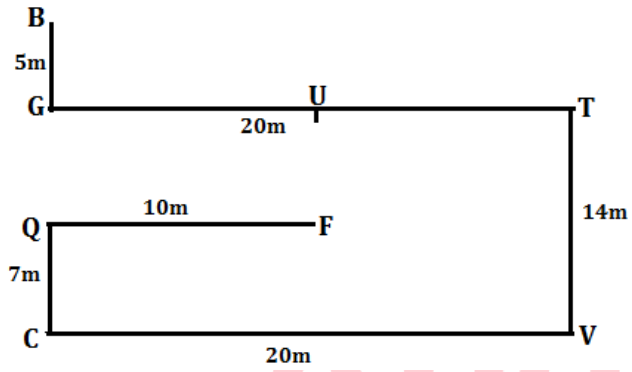
**Sol.** Given word: ADVANCEMENT

Applied given condition: EWOCLMS

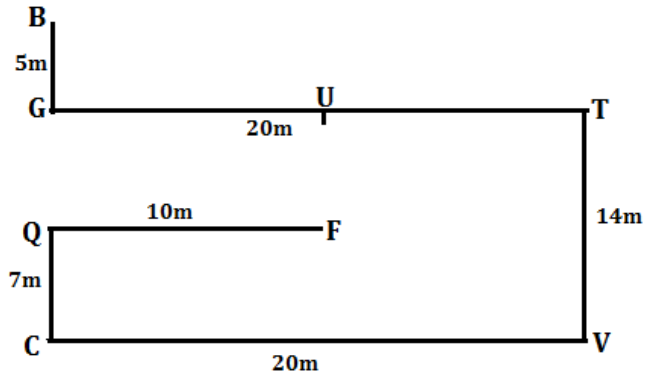
Number of letters between O and L is – 2 (M, N)

**Directions (52-56): 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:**
**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.
**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 G is #5m of point B. Point T is &20m of point G. Point T is @14m of point V. Point C is $20m of point V. Point Q is @7m of point C. Point F is &10m of point Q. Point U£GT.

**Q52. What distance the car has to travel from point F to reach the airplane which is parked at point U?**
(a) 12m
(b) 7 m
(c) 4 m
(d) 20m
(e) 5m
**Ans.(b)**
**Sol.**




**Q53. What could be the possible shortest route to reach point T from point F?**
(a) Started in east till 10m, honks twice, cover 7m
(b) Started in west till 10m, honks twice, cover 7m, honks twice and cover 20m
(c) Started in south till 7m, honks once, cover 10m, honks once and cover 14m
(d) Started in north till 5m, honks twice, cover 10m, honks twice and cover 2m
(e) Started in east till 10m, honks once, cover 7m
**Ans.(e)**
**Sol.**



**Q54. Point B is in which direction from point V?**

(a) #

(b) @$

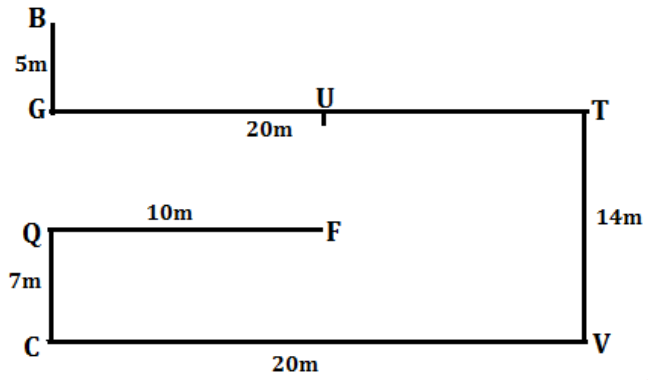
(c) #$

(d) @&

(e) #&

**Ans.(b)**

**Sol.**




**Q55. If Point K is #7m of point T then which of the following is the position of K with respect to F?**

(a) @, 24m

(b) &, 10 m

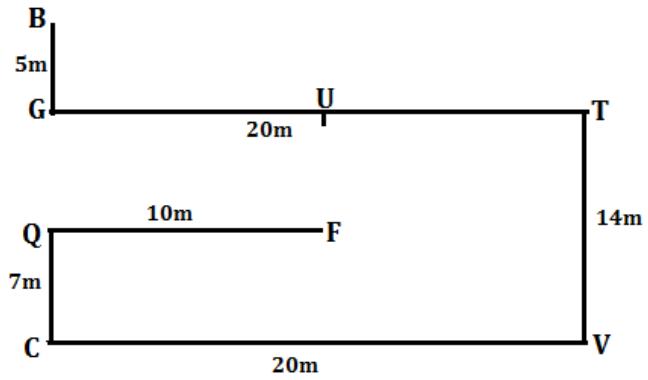
(c) #, 15 m

(d) $, 10m

(e) None of these

**Ans.(b)**

**Sol.**




**Q56. Point C is in which direction from point G?**

(a) #

(b) @

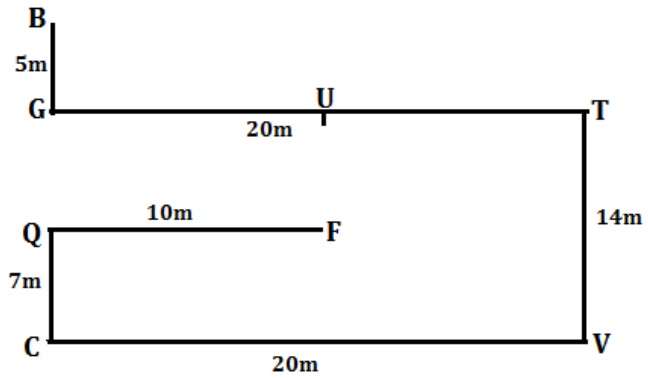
(c) $

(d) &

(e) #&

**Ans.(a)**

**Sol.**




**Directions (57-60): Read the following information carefully and answer the questions given below.**
Eight persons—P, Q, R, S, T, U, V, and W—were born in different years- 1968, 1973, 1979, 1985, 1990, 1998, 2001 and 2004, but not necessarily in the same order. Each person uses a different brand of laptop: Apple, Dell, HP, Lenovo, Asus, Acer, Microsoft and Samsung. Their ages are calculated based on 2025 taking as base year.
The person who uses Samsung laptop is five years elder than V. Two persons were born between V and the person who uses HP laptop. P is six years younger than the person who uses Dell laptop. The number of persons born after the one who uses Dell laptop is one more than the number of persons born before Q. Three persons were born between Q and W. As many persons were born before W as after the person who uses Apple laptop. P was not born before 1985. The person who uses Asus laptop is six years older than the R. Only one person was born between R and the person who uses Lenovo laptop. S and T doesn't use Acer laptop. U is not the eldest person. T was born after U.

**Q57. Which among the following combination is correct?**
(a) W - Samsung
(b) V - Asus
(c) P - HP
(d) R - Apple
(e) Both (c) and (d)
**Ans.(e)**
**Sol.** Final Arrangement:

| Years | Ages | Persons/Laptop |
|---|---|---|
| 1968 | 57 | S- Lenovo |
| 1973 | 52 | Q - Asus |
| 1979 | 46 | R - Apple |
| 1985 | 40 | U - Samsung |
| 1990 | 35 | V - Acer |
| 1998 | 27 | W- Dell |
| 2001 | 24 | T - Microsoft |
| 2004 | 21 | P - HP |

**Clues:** The person who uses Samsung laptop is five years elder than V. Two persons were born between V and the person who uses HP laptop. P is six years younger than the person who uses Dell laptop. P was not born before 1985.
**Inference:** We will get three possible cases from the above given information:

| Years | Ages | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|
| | | Persons/Laptop | Persons/Laptop | Persons/Laptop |
| 1968 | 57 | Samsung | | |
| 1973 | 52 | V | | HP |
| 1979 | 46 | Dell/ | Dell/ | Dell/ |
| 1985 | 40 | P/ | P/- Samsung | P/- Samsung |
| 1990 | 35 | HP | V | V |
| 1998 | 27 | Dell/ | Dell/ | Dell/ |
| 2001 | 24 | | | |
| 2004 | 21 | P/ | P/ - HP | P/ |

**Clues:** The number of persons born after the one who uses Dell laptop is one more than the number of persons born before Q. Three persons were born between Q and W. As many persons were born before W as after the person who uses Apple laptop.

**Inference:** The above information is placed in all cases:

| Years | Ages | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|
| | | Persons/Laptop | Persons/Laptop | Persons/Laptop |
| 1968 | 57 | W- Samsung | | |
| 1973 | 52 | V | Q | Q - HP |
| 1979 | 46 | Dell | Apple | Apple |
| 1985 | 40 | P | Samsung | Samsung |
| 1990 | 35 | Q- HP | V | V |
| 1998 | 27 | | W- Dell | W- Dell |
| 2001 | 24 | | | |
| 2004 | 21 | Apple | P- HP | P |

**Clues:** The person who uses Asus laptop is six years older than the R. Only one person was born between R and the person who uses Lenovo laptop. S and T doesn't use Acer laptop. U is not the eldest person. T was born after U.

**Inference:** Case 3 will cancel here because Asus can't be placed. Case 1 will cancel here because Lenovo can't be placed.

| Years | Ages | ~~Case 1~~ | Case 2 | ~~Case 3~~ |
|---|---|---|---|---|
| | | ~~Persons/Laptop~~ | Persons/Laptop | ~~Persons/Laptop~~ |
| 1968 | 57 | ~~W- Samsung~~ | S- Lenovo | |
| 1973 | 52 | ~~V~~ | Q - Asus | ~~Q - HP~~ |
| 1979 | 46 | ~~Dell~~ | R - Apple | ~~R - Apple~~ |
| 1985 | 40 | ~~P~~ | U - Samsung | ~~Samsung~~ |
| 1990 | 35 | ~~Q - HP~~ | V - Acer | ~~V~~ |
| 1998 | 27 | ~~Asus~~ | W- Dell | ~~W- Dell~~ |
| 2001 | 24 | | T- | |
| 2004 | 21 | ~~R - Apple~~ | P- HP | ~~P~~ |

**Inference:** Only place for Microsoft is left. Now, final Arrangement is:

| Years | Ages | Persons/Laptop |
|---|---|---|
| 1968 | 57 | S- Lenovo |
| 1973 | 52 | Q - Asus |
| 1979 | 46 | R - Apple |
| 1985 | 40 | U - Samsung |
| 1990 | 35 | V - Acer |
| 1998 | 27 | W- Dell |
| 2001 | 24 | T - Microsoft |
| 2004 | 21 | P - HP |

Both (c) and (d) are correct

**Q58. What is the sum of ages of R, V and T?**

(a) 100 years

(b) 95 years

(c) 97 years

(d) 105 years

(e) 102 years

**Ans.(d)**

**Sol.** Final Arrangement:

| Years | Ages | Persons/Laptop |
|---|---|---|
| 1968 | 57 | S- Lenovo |
| 1973 | 52 | Q - Asus |
| 1979 | 46 | R - Apple |
| 1985 | 40 | U - Samsung |
| 1990 | 35 | V - Acer |
| 1998 | 27 | W- Dell |
| 2001 | 24 | T - Microsoft |
| 2004 | 21 | P - HP |

**Clues:** The person who uses Samsung laptop is five years elder than V. Two persons were born between V and the person who uses HP laptop. P is six years younger than the person who uses Dell laptop. P was not born before 1985.

**Inference:** We will get three possible cases from the above given information:

| Years | Ages | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|
| | | Persons/Laptop | Persons/Laptop | Persons/Laptop |
| 1968 | 57 | Samsung | | |
| 1973 | 52 | V | | HP |
| 1979 | 46 | Dell/ | Dell/ | Dell/ |
| 1985 | 40 | P/ | P/- Samsung | P/- Samsung |
| 1990 | 35 | HP | V | V |
| 1998 | 27 | Dell/ | Dell/ | Dell/ |
| 2001 | 24 | | | |
| 2004 | 21 | P/ | P/ - HP | P/ |

**Clues:** The number of persons born after the one who uses Dell laptop is one more than the number of persons born before Q. Three persons were born between Q and W. As many persons were born before W as after the person who uses Apple laptop.

**Inference:** The above information is placed in all cases:

| Years | Ages | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|
| | | Persons/Laptop | Persons/Laptop | Persons/Laptop |
| 1968 | 57 | W- Samsung | | |
| 1973 | 52 | V | Q | Q - HP |
| 1979 | 46 | Dell | Apple | Apple |
| 1985 | 40 | P | Samsung | Samsung |
| 1990 | 35 | Q- HP | V | V |
| 1998 | 27 | | W- Dell | W- Dell |
| 2001 | 24 | | | |
| 2004 | 21 | Apple | P- HP | P |

**Clues:** The person who uses Asus laptop is six years older than the R. Only one person was born between R and the person who uses Lenovo laptop. S and T doesn't use Acer laptop. U is not the eldest person. T was born after U.

**Inference:** Case 3 will cancel here because Asus can't be placed. Case 1 will cancel here because Lenovo can't be placed.

| Years | Ages | ~~Case 1~~ | Case 2 | ~~Case 3~~ |
|---|---|---|---|---|
| | | ~~Persons/Laptop~~ | Persons/Laptop | ~~Persons/Laptop~~ |
| 1968 | 57 | ~~W- Samsung~~ | S- Lenovo | |
| 1973 | 52 | ~~V~~ | Q - Asus | ~~Q - HP~~ |
| 1979 | 46 | ~~Dell~~ | R - Apple | ~~R - Apple~~ |
| 1985 | 40 | ~~P~~ | U - Samsung | ~~Samsung~~ |
| 1990 | 35 | ~~Q - HP~~ | V - Acer | ~~V~~ |
| 1998 | 27 | ~~Asus~~ | W- Dell | ~~W- Dell~~ |
| 2001 | 24 | | T- | |
| 2004 | 21 | ~~R - Apple~~ | P- HP | ~~P~~ |

**Inference:** Only place for Microsoft is left. Now, final Arrangement is:

| Years | Ages | Persons/Laptop |
|---|---|---|
| 1968 | 57 | S- Lenovo |
| 1973 | 52 | Q - Asus |
| 1979 | 46 | R - Apple |
| 1985 | 40 | U - Samsung |
| 1990 | 35 | V - Acer |
| 1998 | 27 | W- Dell |
| 2001 | 24 | T - Microsoft |
| 2004 | 21 | P - HP |

The sum of ages of R, V and T is 46+35+24= 105 years.

**Q59. If S is related to Apple and in the same way V is related to Microsoft, then who among the following is related to HP?**

(a) P
(b) R
(c) W
(d) Q
(e) T

**Ans.(c)**

**Sol.** Final Arrangement:

| Years | Ages | Persons/Laptop |
|---|---|---|
| 1968 | 57 | S- Lenovo |
| 1973 | 52 | Q - Asus |
| 1979 | 46 | R - Apple |
| 1985 | 40 | U - Samsung |
| 1990 | 35 | V - Acer |
| 1998 | 27 | W- Dell |
| 2001 | 24 | T - Microsoft |
| 2004 | 21 | P - HP |

**Clues:** The person who uses Samsung laptop is five years elder than V. Two persons were born between V and the person who uses HP laptop. P is six years younger than the person who uses Dell laptop. P was not born before 1985.

**Inference:** We will get three possible cases from the above given information:

| Years | Ages | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|
| | | Persons/Laptop | Persons/Laptop | Persons/Laptop |
| 1968 | 57 | Samsung | | |
| 1973 | 52 | V | | HP |
| 1979 | 46 | Dell/ | Dell/ | Dell/ |
| 1985 | 40 | P/ | P/- Samsung | P/- Samsung |
| 1990 | 35 | HP | V | V |
| 1998 | 27 | Dell/ | Dell/ | Dell/ |
| 2001 | 24 | | | |
| 2004 | 21 | P/ | P/ - HP | P/ |

**Clues:** The number of persons born after the one who uses Dell laptop is one more than the number of persons born before Q. Three persons were born between Q and W. As many persons were born before W as after the person who uses Apple laptop.

**Inference:** The above information is placed in all cases:

| Years | Ages | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|
| | | Persons/Laptop | Persons/Laptop | Persons/Laptop |
| 1968 | 57 | W- Samsung | | |
| 1973 | 52 | V | Q | Q - HP |
| 1979 | 46 | Dell | Apple | Apple |
| 1985 | 40 | P | Samsung | Samsung |
| 1990 | 35 | Q- HP | V | V |
| 1998 | 27 | | W- Dell | W- Dell |
| 2001 | 24 | | | |
| 2004 | 21 | Apple | P- HP | P |

**Clues:** The person who uses Asus laptop is six years older than the R. Only one person was born between R and the person who uses Lenovo laptop. S and T doesn't use Acer laptop. U is not the eldest person. T was born after U.

**Inference:** Case 3 will cancel here because Asus can't be placed. Case 1 will cancel here because Lenovo can't be placed.

| Years | Ages | ~~Case 1~~ ~~Persons/Laptop~~ | Case 2 Persons/Laptop | ~~Case 3~~ ~~Persons/Laptop~~ |
|---|---|---|---|---|
| 1968 | 57 | ~~W- Samsung~~ | S- Lenovo | |
| 1973 | 52 | ~~V~~ | Q - Asus | ~~Q - HP~~ |
| 1979 | 46 | ~~Dell~~ | R - Apple | ~~R - Apple~~ |
| 1985 | 40 | ~~P~~ | U - Samsung | ~~Samsung~~ |
| 1990 | 35 | ~~Q - HP~~ | V - Acer | ~~V~~ |
| 1998 | 27 | ~~Asus~~ | W- Dell | ~~W- Dell~~ |
| 2001 | 24 | | T- | |
| 2004 | 21 | ~~R - Apple~~ | P- HP | ~~P~~ |

**Inference:** Only place for Microsoft is left. Now, final Arrangement is:

| Years | Ages | Persons/Laptop |
|---|---|---|
| 1968 | 57 | S- Lenovo |
| 1973 | 52 | Q - Asus |
| 1979 | 46 | R - Apple |
| 1985 | 40 | U - Samsung |
| 1990 | 35 | V - Acer |
| 1998 | 27 | W- Dell |
| 2001 | 24 | T - Microsoft |
| 2004 | 21 | P - HP |

W is related to HP, Logic here is: first person is born two persons before the person who uses the laptop mentioned in the statement.

**Q60. How many persons were born between Q and the person who uses Microsoft laptop?**
(a) Four
(b) Two
(c) Three
(d) One
(e) Five
**Ans.(a)**
**Sol.** Final Arrangement:

| Years | Ages | Persons/Laptop |
|---|---|---|
| 1968 | 57 | S- Lenovo |
| 1973 | 52 | Q - Asus |
| 1979 | 46 | R - Apple |
| 1985 | 40 | U - Samsung |
| 1990 | 35 | V - Acer |
| 1998 | 27 | W- Dell |
| 2001 | 24 | T - Microsoft |
| 2004 | 21 | P - HP |

**Clues:** The person who uses Samsung laptop is five years elder than V. Two persons were born between V and the person who uses HP laptop. P is six years younger than the person who uses Dell laptop. P was not born before 1985.
**Inference:** We will get three possible cases from the above given information:

| Years | Ages | Case 1 Persons/Laptop | Case 2 Persons/Laptop | Case 3 Persons/Laptop |
|---|---|---|---|---|
| 1968 | 57 | Samsung | | |
| 1973 | 52 | V | | HP |
| 1979 | 46 | Dell/ | Dell/ | Dell/ |
| 1985 | 40 | P/ | P/- Samsung | P/- Samsung |
| 1990 | 35 | HP | V | V |
| 1998 | 27 | Dell/ | Dell/ | Dell/ |
| 2001 | 24 | | | |
| 2004 | 21 | P/ | P/ - HP | P/ |

**Clues:** The number of persons born after the one who uses Dell laptop is one more than the number of persons born before Q. Three persons were born between Q and W. As many persons were born before W as after the person who uses Apple laptop.

**Inference:** The above information is placed in all cases:

| Years | Ages | Case 1 | Case 2 | Case 3 |
|---|---|---|---|---|
| | | Persons/Laptop | Persons/Laptop | Persons/Laptop |
| 1968 | 57 | W- Samsung | | |
| 1973 | 52 | V | Q | Q - HP |
| 1979 | 46 | Dell | Apple | Apple |
| 1985 | 40 | P | Samsung | Samsung |
| 1990 | 35 | Q- HP | V | V |
| 1998 | 27 | | W- Dell | W- Dell |
| 2001 | 24 | | | |
| 2004 | 21 | Apple | P- HP | P |

**Clues:** The person who uses Asus laptop is six years older than the R. Only one person was born between R and the person who uses Lenovo laptop. S and T doesn't use Acer laptop. U is not the eldest person. T was born after U.

**Inference:** Case 3 will cancel here because Asus can't be placed. Case 1 will cancel here because Lenovo can't be placed.

| Years | Ages | ~~Case 1~~ | Case 2 | ~~Case 3~~ |
|---|---|---|---|---|
| | | ~~Persons/Laptop~~ | Persons/Laptop | ~~Persons/Laptop~~ |
| 1968 | 57 | ~~W- Samsung~~ | S- Lenovo | |
| 1973 | 52 | ~~V~~ | Q - Asus | ~~Q - HP~~ |
| 1979 | 46 | ~~Dell~~ | R - Apple | ~~R - Apple~~ |
| 1985 | 40 | ~~P~~ | U - Samsung | ~~Samsung~~ |
| 1990 | 35 | ~~Q - HP~~ | V - Acer | ~~V~~ |
| 1998 | 27 | ~~Asus~~ | W- Dell | ~~W- Dell~~ |
| 2001 | 24 | | T- | |
| 2004 | 21 | ~~R - Apple~~ | P- HP | ~~P~~ |

**Inference:** Only place for Microsoft is left. Now, final Arrangement is:

| Years | Ages | Persons/Laptop |
|---|---|---|
| 1968 | 57 | S- Lenovo |
| 1973 | 52 | Q - Asus |
| 1979 | 46 | R - Apple |
| 1985 | 40 | U - Samsung |
| 1990 | 35 | V - Acer |
| 1998 | 27 | W- Dell |
| 2001 | 24 | T - Microsoft |
| 2004 | 21 | P - HP |

Four