Decision making carries a lot of importance in our daily life. There are occasions in our life when the right and the best decision help us tide over even the most complex of problems. Success of financial institutions like banks depends a great deal on timely decision.

Questions based on decision making have become a regular feature of most of the competitive examinations. Such questions are intended to check the decision making abilities, general intelligence, power of judgement and coordination and presence of mind of the candidates.

Here we deal with a few types of decision making tests.

**TYPE-1**

In this type of questions a symbol is given between two letters of the alphabet. You have to find out the meaning of each symbol by carefully studying the directions. In the questions that follow a statement is given which is followed by two conclusions. You have to find which of the conclusions logically follows the statement. Give answers as per the directions given.

**Example:**

Directions (Q.186-190) : In the following questions the symbols #, *, @, $ and = are used with the following meanings:

A # B means A is greater than B.
A * B means A is greater than or equal to B.
A @ B means A is equal to B.
A $ B means A is lesser than B.
A = B means A is lesser than or equal to B.

Now in each of the following questions, assuming the three statements to be true, find which of the two conclusions I and II given below them is/are true. Give answer.

1) if only conclusion I is true
2) if only conclusion II is true
3) if either conclusion I or conclusion II is true
4) if neither conclusion I nor conclusion II is true
5) if both conclusions I and II are true.

1. **Statements** : P # Q, R $ P, R * O
   **Conclusions** : I. Q # R  II. Q $ R

2. **Statements** : P = Q, T @ R, R # P
   **Conclusions** : I. T = Q  II. Q * T

3. **Statements** : P @ Q, L @ M, P # L
   **Conclusions** : I. Q # M  II. M $ P

4. **Statements** : P # M, M # L, L # N @ Q, Q $ S @ R
   **Conclusions** : I. R @ M  II. L @ R

5. **Statements** : P * Q, Q @ T, T * L
   **Conclusions** : I. Q # L  II. T # P

**ANSWERS WITH EXPLANATIONS**

1. 4; P > Q, R < P, R ≥ O ⇒ Q ≥ R or Q ≤ R
2. 3; P ≤ Q, T = R, R > P ⇒ T ≤ Q or T ≥ Q
3. 5; P = Q, L = M, P > L ⇒ Q > M and M < P
4. 4; P > M > L; L > N = Q; Q < S = R
5. 4; P ≥ Q, Q = T and T ≥ L ⇒ Q ≥ L

**PRACTICE TEST**

1. “@” means “≥”, “Δ” means “>” and “$” means “=”. If P @ Q, R Δ S and Q $ R, then which of the following statements is definitely true?
   1) R Δ P
   2) P$Q
   3) P@R
   4) P @ S
   5) None of these
Directions (Q. 2-6): In the following questions the symbols @, @, =, © and © are used with the following meaning:

P @ Q means P is greater than Q.
P@Q means P is either greater than or equal to Q.
P © Q means P is smaller than Q.
P © Q means P is either smaller than or equal to Q.

Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true? Give answer

1) if only conclusion I is true,
2) if only conclusion II is true,
3) if either I or II is true,
4) if neither I nor II is true,
5) if both I and II are true.

2. Statements : B @ V K © C, C © B
Conclusions: I. V @ C II. B @ K

3. Statements : K @ T, $ = K, T @ R
Conclusions: I. S @ R II. T = R

4. Statements : U = M, P @ U, M @ B
Conclusions: I. P = B II. P @ B

5. Statements : L © N, J @ P, P @ L
Conclusions: I. J = L II. P = N

6. Statements : H @ G, D @ E, H = E
Conclusions: I. D @ H II. G © D

Directions (Q. 7-11): In the questions given below, certain symbols are used with the following meaning:

A $ B means A is greater than B.
A @ B means A is either greater than or equal to B.
A # B means A is smaller than B.
A ® B means A is either smaller than or equal to B.
A $ B means A is equal to B.

Now in each of the following questions assuming the given statements to be true find which of the two conclusions I and II given below them is/are definitely true? Give answer

1) if only conclusion I is true,
2) if only conclusion II is true,
3) if either I or II is true,
4) if neither I nor II is true,
5) if both I and II are true.

7. Statements : T $ G, K @ P, M # T, P + M
Conclusions: I. K @ T II. G $ P

8. Statements : R + N, S @ B, A @ a, B $ A
Conclusions: I. S $ N II. A @ N

9. Statements : G $ K, F @ J, K + Q, Q + F
Conclusions: I. K $ F II. F # K

10. Statements : W @ S, K © Z, U + W, S $ K
Conclusions: I. U @ K II. Z $ S

11. Statements : G $ E, D # K, E # S, K × G
Conclusions: I. S $ D II. D # E

Directions (Q. 12-16): In the following questions the symbol $, @, *, ** and # are used with the following meaning.

A $ B means A is greater than B.
A @ B means A is either greater than or equal to B.
A * B means A is equal to B.
A ** B means A is smaller than B.
A # B means A is either smaller than or equal to B.

Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true? Give answer

1) if only conclusion I is true,
2) if only conclusion II is true,
3) if either I or II is true,
4) if neither I nor II is true,
5) if both I and II are true.

12. Statements : P @ Q, M # N, N ** Q
Conclusions: I. P $ M II. N # P

13. Statements : D ** X, F @ Y, D $ F
Conclusions: I. X @ Y II. Y # D

14. Statements : M ** P, S $ T, M @ T
Conclusions: I. S * M II. T ** P

15. Statements : U V, X $ W, U ** W
Conclusions: I. W $ V II. U ** X

16. Statements : G $ H, J # K, H * K
Conclusions: I. H $ J II. J * H
Directions (Q. 17-21): In the following questions the symbols $, @, *, # and ? are used with the following meanings.

A $ B means A is greater than B.
A @ B means A is either greater than or equal to B.
A * B means A is equal to B.
A # B means A is smaller than B.
A ? B means A is either smaller than or equal to B.

Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely True? Give answer.

1) If only conclusion I is true
2) If only conclusion II is true
3) If either conclusion I or II is true
4) If neither conclusion I nor II is true
5) If both conclusions I and II are true.

17. Statements : M # N, T $ U, N # U
Conclusions : I. M ? T
II. T $ N

18. Statements : P $ T, G ? N, T @ N
Conclusions : I. P $ N
II. G ? T

19. Statements : P ? Q, R $ S, Q @ S
Conclusions : I. P $ S
II. R # Q

20. Statements : J # K, K * F, H @ F
Conclusions : I. J ? H
II. H$K

21. Statements : D @ F, G $ H, F ? H
Conclusions : I. G $ F
II. D @ H

Directions (Q. 22-26): In the questions given below, certain symbols are used with the following meanings:

A @ B means A is greater than B.
A * B means A is either greater than or equal to B.
A # B means A is equal to B.
A $ B means A is either smaller than or equal to B.
A + B means A is smaller than B.

Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true? Give answer.

1) if only conclusion I is true
2) if only conclusion II is true
3) if either conclusion I or II is true
4) if neither conclusion I nor II is true
5) if both conclusions I and II are true.

22. Statements : B + D; E $ T; T * P; P @ B
Conclusions : I. P$D
II. P@D

23. Statements : E * F; G $ H; H # E; G @ K
Conclusions : I. H@K
II. H$F

24. Statements : P $ Q; N # M; M @ R; R * P
Conclusions : I. P+N
II. Q$M

25. Statements : D + T; E $ V; F * T; E @ D
Conclusions : I. D$V
II. D + F

26. Statements : T*U; U $ W; V @ L; W + V
Conclusions : I. V @ T
II. L # W

Directions (Q. 27-31): In the following questions, the symbols +, ×, =, ÷, and - are used with the following meaning:

P + Q means P is greater than Q.
P×Q means P is either greater than or equal to Q.
P = Q means P is equal to Q.
P ÷ Q means P is smaller than Q.
P-Q means P is either smaller than or equal to Q.

Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

1) if only conclusion I is true,
2) if only conclusion II is true,
3) if either I or II is true,
4) if neither I nor II is true,
5) if both conclusions I and II are true.

27. Statements : U + V, W - Y, Y × U
Conclusions : I. W + U
II. W ÷ V

28. Statements : B ÷ A, D × E, E + A
Conclusions : I. D + A
II. B ÷ E

29. Statements : S × Q, R + T, R - S
Conclusions : I. S + T
II. Q = T

30. Statements : M ÷ N, P × Q, P + N
Conclusions : I. N + Q
II. N - Q

31. Statements : G - H, K × L, L - G
Conclusions : I. G ÷ K
II. L - H
Directions (Q. 32-36): In the following questions the symbols @, c, £, ? and $ are used with the following meanings:

A @ B means A is neither equal to nor smaller than B.
A c B means A is neither greater nor smaller than B.
A £ B means A is not equal to B.
A ? B means A is neither greater than nor equal to B.
A $ B means A is either greater or equal to B.

Now, in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

1) if only conclusion I is true
2) if only conclusion II is true
3) if either I or II is true
4) if neither I nor II is true
5) if both I and II are true.

32. Statements : N ? S, S @ P, P £ M
Conclusions : I. S@M    II. PcN
33. Statements : JcP, P$N, J£H
Conclusions : I. JcN    II. H@P
34. Statements : Z @ D, F c D, F $ G
Conclusions : I. DcG    II. Z@G
35. Statements : L @ T, P ? T, K$L
Conclusions : I. L@P    II. K@T
Conclusions : I. WcU    II. W@U

Directions (Q. 37-41): In the following questions, certain symbols are used with the following meanings:

i) A # B means A is not greater than B.
ii) A $ B means A is neither smaller than nor equal to B.
iii) A ? B means A is neither greater than nor smaller than B.
iv) A * B means A is neither greater than nor equal to B.
v) A @ B means A is not smaller than B.

Now in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

1) if only conclusion I is true;
2) if only conclusion II is true;
3) if either I or II is true;
4) if neither I nor II is true; and
5) if both I and II are true.

37. Statements : P $ Q, R @ S, P * R
Conclusions : I. Q"R    II. P # S
38. Statements : U $ V, W * X, U @ X
Conclusions : I. V@X    II. V " X
39. Statements : K # T, D $ F, T * F
Conclusions : I. K*D    II. D $ T
40. Statements : M$N, G@H, N?H
Conclusions : I. M@H    II. M $ G
41. Statements : G@M, N#L, G*L
Conclusions : I. G@N    II. L $ M

Directions (Q. 42-46): In the following questions, the symbols @, &, * , $ and ? are used with the following meanings:

P ? Q means P is either equal to or smaller than Q.
P $ Q means P is neither greater than nor smaller than Q.
P * Q means P is neither greater than nor equal to Q.
P @ Q means P is either greater than or equal to Q.
P & Q means P is not equal to Q.

Now in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

1) if only conclusion I is true;
2) if only conclusion II is true;
3) if either I or II is true;
4) if neither I nor II is true; and
5) if both I and II are true.
42. Statements: K$M, N&M, J@K
   Conclusions: I: J ? M    II: K $ N
43. Statements: K @ R, L & B, B ? K
   Conclusions: I: B ? R    II: R*L
44. Statements: J*M, W$E, J@K
   Conclusions: I: M ? W    II: J $ E
45. Statements: K @ R, L & B, B ? K
   Conclusions: I: B ? R    II: R*L
46. Statements: A*B, B ? C, C @ D
   Conclusions: I: A ? D    II: B ? D

Directions (Q. 47-52): In the following questions the symbols +, *, ?, @ and $ are used with the following meanings:

- P + Q means P is neither smaller nor greater than Q.
- P * Q means P is neither equal to nor smaller than Q.
- P ? Q means P is neither greater than nor equal to Q.
- P @ Q means P is neither equal to nor greater than Q.
- P $ Q means P is not equal to Q.

Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true? Give answer

1) if only conclusion I is true.
2) if only conclusion II is true.
3) if either conclusion I or II is true.
4) if neither conclusion I nor II is true.
5) if both conclusions I and II are true.

47. Statements: P$Q, Q ? R, P + R
   Conclusions: I: P ? Q    II: P ? Q
48. Statements: A + B, B $ C, C ? A
   Conclusions: I: C $ A    II: B + C
49. Statements: Y@Z, Z ? Q, Q $ P
   Conclusions: I: Y ? Q    II: Y ? P
50. Statements: E ? F, F @ L, L + N
   Conclusions: I: N + F    II: E ? L
51. Statements: H@J, J ? K, K ? M
   Conclusions: I: H @ M    II: M ? J
52. Statements: M@T, T + V, V?E
   Conclusions: I: V + M    II: V ? M

Directions (Q. 53-57): In the following questions the symbols *, ×, $, @ and + are used with the following meanings:

- ‘P×Q’ means ‘P is neither smaller nor greater than Q’.
- ‘P@Q’ means ‘P is neither equal to nor greater than Q’.
- ‘P ? Q’ means ‘P is neither equal to nor smaller than Q’.
- ‘P $ Q’ means ‘P is not equal to Q’.

Now in each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are definitely true? Give answer

1) if only conclusion I is true.
2) if only conclusion II is true.
3) if either conclusion I or II is true.
4) if neither conclusion I nor II is true.
5) if both conclusions I and II are true.

53. Statements: D*F, F$M, M@K
   Conclusions: I: F @ K    II: D @ K
54. Statements: K + M, M@R, R × T
   Conclusions: I: K + T    II: T + M
55. Statements: T@M, M*R, R × N
   Conclusions: I: M × N    II: M ÷ N
56. Statements: B $ N, N × R, R + T
   Conclusions: I: B $ R    II: T ÷ N
57. Statements: N × P, K + P, Q @ K
   Conclusions: I: K ÷ N    II: Q + N

Directions (Q. 58-62): In the following questions, the symbols $, ©, ×, @ and # are used with the following meanings:

- P $ Q means P is not smaller than Q.
- P © Q means P is neither greater than nor smaller than Q.
- P @ Q means P is not greater than Q.
- P × Q means P is neither smaller than nor equal to Q.
- P # Q means P is neither greater than nor equal to Q.

Now in each of the following questions assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are definitely true? Give answer

1) if only conclusion I is true.
2) if only conclusion II is true.
3) if either conclusion I or II is true.
4) if neither conclusion I nor II is true.
5) if both conclusions I and II are true.
Now in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

1) if only conclusion I is true;
2) if only conclusion II is true;
3) if either I or II is true;
4) if neither I nor II is true; and
5) if both I and II are true.

58. Statements: Z$K, K × T, T©F
   Conclusions: I. F # Z   II. Z × T

59. Statements: K × B, B @ D, D # K
   Conclusions: I. B @ K   II. B # K

60. Statements: N©R, R@M, M$J
   Conclusions: I. N © M   II. N # M

61. Statements: S $ T, T@R, R © G
   Conclusions: I. M × T   II. M © T

Now in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

1) if only conclusion I is true.
2) if only conclusion II is true.
3) if either I or II is true.
4) if neither I nor II is true.
5) if both conclusions I and II are true.

62. Statements: H@V, V©M, M × R
   Conclusions: I. R × H   II. H × R

Directions (Q. 63-67): In the following questions, the symbol @, ©, *, $ and # are used with the following meaning:

‘P @ Q’ means ‘P is neither smaller than nor equal to Q’.
‘P © Q’ means ‘P is not smaller than Q’.
‘P * Q’ means ‘P is neither greater nor smaller than Q’.
‘P $ Q’ means ‘P is neither greater than nor equal to Q’.
‘P # Q’ means ‘P is not greater than Q’.

Now in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

1) if only conclusion I is true.
2) if only conclusion II is true.
3) if either I or II is true.
4) if neither I nor II is true.
5) if both conclusions I and II are true.

63. Statements: Z#N, F©N, F*K
   Conclusion: I. K $ N   II. K @ Z

64. Statements: D $ T, T©M, M $ K
   Conclusions: I. M $ D   II. D @ M

65. Statements: W©A, B*A, B@M
   Conclusions: I. B # W   II. W $ B

66. Statements: J * M, M $ N, N # T
   Conclusions: I. T @ J   II. T $ J

61 Statements: V * F, F @ R, R © G
   Conclusions: I. G # V   II. G @ V

Directions (Q 68-75): In the questions given below, certain symbols are used with the following meanings:

P $ Q means P is neither equal to nor smaller than Q.
P © Q means P is not smaller than Q.
P * Q means P is neither greater nor smaller than Q.
P # Q means P is neither greater than nor equal to Q.
P @ Q means P is not greater than Q.

Now in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer

1) if only conclusion I is true.
2) if only conclusion II is true.
3) if either I or II is true.
4) if neither I nor II is true.
5) if both conclusions I and II are true.

68. Statement: M#K, K*D, D@P
   Conclusions: I. M @ P   II. M *P

69. Statements: I. W©T, T$M, B#M
   Conclusions: I. W $ B   II. M # W

70. Statements: H*D, D#R, R©N
   Conclusions: I. N * H   II. N$H

71. Statements: Z@R, R©D, D#T
   Conclusions: I. D # Z   II. Z # T

72. Statement: Q#P, P@F, F*M
   Conclusions: I. M $ P   II. P * M

73. Statements: E$J, J#H, H©M
   Conclusions: I. E $ M   II. J $ M

74. Statements: R©P, P$M, M@D
   Conclusions: I. D $ R   II. M # R

75. Statements: F#K, K©D, N@D
   Conclusions: I. N * K   II. N # K
1.3; \( P \leq Q \ldots (i), R > S \ldots (ii), Q = R \ldots (iii) \)
Combining all, we get \( P \leq Q = R > S \Rightarrow \) no relationship between \( P \) and \( S \) can be established. Hence (4) is not true,
From (i) and (in), we get \( P \leq Q = R \Rightarrow P \leq R \).
Combining these, we get \( M < N < U < T \)
Hence \( M < T \) and \( T > N \).
18.5; \( P > T \ldots (i), G \leq N \ldots (ii), T \geq N \ldots (iii) \)
Combining these, we get \( J < K = F \leq H \)
So, \( J < H \). Thus I does not follow.
Again, \( H \geq K \). Thus I does not necessarily follow.
21.1; \( D > F \ldots (i), G > H \ldots (ii), F \leq H \ldots (iii) \)
From (ii) and (iii), \( G > F \). Hence II follows.
22.3; \( B < D \ldots (i), E < T \ldots (ii), T > P \ldots (iii), P > B \ldots (iv) \)
From (i) and (iv), we get, \( P > B < D \) no conclusion.
But II can't be established.
23.5; \( E > F \ldots (i), G > H \ldots (ii), H = E \ldots (iii) \)
Combining these, we get \( H > G > K \)
Hence I is true.
From (i) & (iii), we get, \( H = E \Rightarrow H > F \)
Hence II is true.
24.1; \( P \leq Q \ldots (i), N = M \ldots (ii), M > R \ldots (iii), R \geq P \ldots (iv) \)
From (ii), (iii) & (iv), we get, \( N = M > R \Rightarrow P \Rightarrow N > P \) or \( P < N \). Hence I true.
From (iii), (iv) and (i), we get, \( M > R \geq P \Rightarrow \) No conclusion about the relationship between \( M \) and \( Q \) can be established.
25.2 26.4
27.4; \( U > V \ldots (i), W \leq Y \ldots (ii), Y \geq U \ldots (iii) \)
From (ii) and (iii), \( W \leq Y \Rightarrow U \Rightarrow \) No relationship between \( W \) and \( V \) can be determined. Hence I is not true. Now, using (i), again no relationship between \( W \) and \( V \) can be determined.
28.5; B < A .... (i), D ≥ E .... (ii), E > A .... (iii)
From (ii) & (iii), we get D ≥ E ⇒ A ⇒ D > A. Hence (I) is true.
From (i) and (iii), we get B < A < E ⇒ B < E. Hence (II) is true.

29.1; S ≥ Q .... (i), R> T .... (ii), R ≤ S .... (iii)
Combining all, we get, Q ≤ S ≥ R > T ⇒ No relationship between Q and T can be determined. Hence (II) is not true. But S > T. Hence (I) is true.

30.3; M < N .... (i), P > Q .... (ii), P > N .... (iii)
From (ii) and (iii), we get N < P ≥ Q ⇒ No relationship between N and Q can be established. But I and II together are exhaustive. Hence either I or II is true.

31.2; G < H .... (i), K > L .... (ii), L < G .... (iii)
From (ii) and (iii), we get, K > L > G ⇒ L < H. Hence (II) is true.

(32-36): In these questions the negative meaning of these symbols is given to establish the relation between A and B, which can be easily converted to its simple and positive meaning. Expressing them mathematicaliy, we get @ → > (greater than), c → = (equal to), £ → ≠ (means either greater than or smaller than, but no definite conclusion), ? → < (smaller than), and $ → >.

32.4; N < S .... (i), S > P .... (ii), P ≠ M .... (iii)
From (ii) and (iii), no definite relationship between S and M can be established. Hence (I) is not true. From (i) and (ii), we get, N < S > P ⇒ no conclusion. Hence (II) is not true.

33.4; J = P .... (i), P > N .... (ii), J ≠ H .... (iii)
From (i) and (ii), we get, J = P ≥ N ⇒ J ≥ N ⇒ I may be true but not necessarily so. From (i) and (iii), P = J ≠ H ⇒ P ≠ H. Hence again II may be true but H < P may be other possibility. Hence (II) is not true.

34.2 35.5 36.3

37.1; P > Q .... (i) R > S .... (ii), P < R .... (iii)
From (i) & (ii), we get R > P > Q ⇒ R > Q or, Q < R. Hence (I) is true.
From (ii) and (iii), we get P < R ≥ S ⇒ no conclusion. Hence (II) is not true.

38.3; U > V .... (i), W < X .... (ii), U ≥ X .... (iii)
From (i) and (iii), we get V ≤ U ≥ X ⇒ no conclusion, means either V > X, or V = X, or V < X. Hence either I or II is true.

39.5; K ≤ T .... (i), D ≥ F .... (ii), T < F .... (iii)
From (i) and (ii), we get D ≥ F > T ⇒ D > T. Hence (II) is true.
From II & (i), we get, D > T ≥ K ⇒ D > K or K < D. Hence (I) is true.

40.4
41.2; G > M .... (i), N > L .... (ii), G < L .... (iii)
From (ii) and (iii), we get G < L ≥ N ⇒ no conclusions. Hence (I) is false.
From (i) and (ii), we get L > G ⇒ L > M. Hence (II) is true.

42.4
43.4; K ≥ R .... (i), L ≠ B .... (ii), L ≤ K .... (iii)
From (ii) and (i), we get B < K ≥ R ⇒ no conclusion. Hence (I) does not follow. No relationship between R and L can be determined. Hence (II) does not follow.

44.4; J < M .... (i), W = E .... (ii), J ≥ W .... (iii)
From (i) and (ii), we get M > J ≥ W ⇒ M > W. Hence (I) is not true.
From (ii) and (iii), we get J ≥ W = E ⇒ J ≥ E. Hence (II) is not true.

45.4
46.4
47.5; P ≠ Q .... (i), Q > R .... (ii), P = R .... (iii)
From (ii) and (iii), we get Q > R ⇒ P = Q > P. Hence both I and II are true.

48.1; A = B .... (i) B ≠ C .... (ii), C < A .... (iii)
From (ii), conclusion (I) is true. If contradicts statement (ii), hence it is not true.

49.4; Y ≥ Z .... (i), Z > Q .... (ii), Q ≠ P .... (iii)
From (ii) and (ii), we get Y ≥ Z > Q ⇒ Y > Q. Hence (I) is not true. From (iii), two possible relationships between P and Q are;

Case I: When P > Q  
Now, using (A), we get Y > Q < P ⇒ no conclusion.

Case II: When Q > P  
using (A), we get Y > Q > P ⇒ Y > P. Hence (II) is not true.
50.2; E > F .... (i) F ≥ L .... (ii), L = N .... (iii)
From (ii) & (iii), we get F ≥ L = N ⇒ F ≥ N or N ≤ F.
Hence I may be true but not necessarily so.
From (i) and (ii), we get E > F ≥ L ⇒ E > L
Hence II is true.

51.4; H > J .... (i), J < K .... (ii), K > M .... (iii)
Combining (i) and (ii), we get K < J ⇒ M = N ⇒ K < M.
Combining all, we get K < J ⇒ M = N or K < M
Hence, conclusion I or II is true.

52.3; M > T .... (i), T = V .... (ii), V < E .... (iii)
From (i) and (ii), we get M > V ⇒ M ≥ V ⇒ either V = M or V < M is true.

53.4 54.2 55.356.5 57.1 58.5
59.2; K > B .... (i), B ≤ D .... (ii), D < K .... (iii)
From (i), B < K. Hence II can’t be established.
Again, combining all we can’t conclude the relationship between K and M. Hence I is not true.

59.3; N ≥ R .... (i), R ≤ M .... (ii), M ≥ J .... (iii)
From (i) and (ii), we get N ≥ R ≤ M ⇒ N ≤ M.
Hence either I or II is true.

61.1; S ≥ T .... (i), T ≤ R .... (ii), R ≤ M .... (iii)
From (ii) & (iii), we get T ≤ R < M ⇒ T < M or M > T. Hence I is true and II is not true.

62.4; H ≤ V .... (i), V = M .... (ii), M > R .... (iii)
Combining all, we get H < V = M > R =⇒ no relationship between H and M can be established. Since conclusions I and II are not exhausterate, neither of them is true.

63.2; Z ≥ N .... (i), F ≤ N .... (ii), F ≤ K .... (iii)
Combining all, we get K ≥ F ≥ N ⇒ Z ⇒ K ≥ N and K ≥ Z.
Hence, conclusion I (K = N) is not necessarily true but conclusion II (K > Z) is true.

64.3; D = T .... (i), T ≥ M .... (ii), M < K .... (iii)
Combining (i) and (ii), we get D = T ≥ M ⇒ D ≥ M → D = M or D > M
Hence, either conclusion I (M = D) or conclusion II (D > M) is true.

65.3; W ≥ A .... (i), B ≤ A .... (ii), B > M .... (iii)
Combining all, we get W ≥ A ≥ B > M ⇒ B ≤ W
⇒ B < W or B = W
Hence, either conclusion I or II is true.

66.1; J ≤ M .... (i), M = N .... (ii), N ≤ T .... (iii)
Combining all, we get J ≤ M = N < T ⇒ T > J
Hence, only conclusion I is true

67.4; V ≤ F .... (i), F > R .... (ii), R ≥ G .... (iii)
Combining (ii) and (iii), we get F > R ≥ G
....(iv) Comparing (i) and (iv), we can’t get any specific relationship between G and V.
Hence, both conclusions are not true.

68.4; M < K .... (i), K = D .... (ii), D ≤ P .... (iii)
Combining all the equations, we get P ≥ D = K > M ⇒ P > M. Hence, conclusion I (M ≤ P) & conclusion II (M = P) are not true.

Hence, both conclusions are not true.

69.5; W ≥ T .... (i), T > M .... (ii), B < M .... (iii)
Combining all, we get W > B and W > M.
Hence, both conclusions (W > B, M < W) are true.

70.4; H = D .... (i), D < R .... (ii), R ≥ N .... (iii)
Combining (i) and (ii), we get R = D ...(iv)
From (iii) and (iv), we can’t get any specific relation between N and H. Therefore, conclusion I (N = H) and conclusion II (N > H) are not true.

71.4; Z ≤ R .... (i), R ≥ D .... (ii), D ≤ T .... (iii)
With these equations no relation can be established between D and Z, and Z and T.

72.3; Q < P .... (i), P ≤ F .... (ii), F = M .... (iii)
Combining all the equations, we get F = M ≥ P > Q ⇒ M ≥ P, ie M > P or M = P.
Hence, either conclusion I or II is true.

73.4; E > J .... (i), J < H .... (ii), H ≥ M .... (iii)
No relation can be established between E and M or between J and M. Hence, conclusion I (E > M) and conclusion II (J > M) are not true.

74.2; R ≥ P .... (i), P > M .... (ii), M ≤ D .... (iii)
Combining (i) & (ii), we get R ≥ P > M .... (iv).
From conclusion (iv), we get R > M. Hence, conclusion II (M < R) is true. But we can’t get any specific relation between D and R.
Therefore conclusion I is not true.

75.3; F < K .... (i), K ≥ D .... (ii), N ≤ D .... (iii)
Combining the equations (ii) and (iii), we get K ≥ D ≥ N ⇒ K ≥ N, i.e. K > N or K = N.
Hence, either conclusion I or conclusion II is true.