9

CHAPTER

Coded Inequalities

DIRECTIONS (Qs. 1-5) : In the following questions, the symbols @, $, ★, # and δ are used with the following meaning as illustrated below :

'P $ Q' means 'P is not smaller 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'.

'P δ Q' means P is neither greater than nor smaller than 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 four conclusions I, II, Ill and IV given below them is/are **definitely true** and give your answer accordingly.

1. **Statements :**
   H @ T, T # F, F δ E, E ★ v
   Conclusions :   I. V $ F
                       II. E @ T
                       III. H @ V
                       IV. T # V
   (a) Only I, II and III are true
   (b) Only I, II and IV are true
   (c) Only II, III and IV are true
   (d) Only I, III and IV are true
   (e) All I, II, III and IV are true

2. **Statements :**
   D # R, R ★ K, K @ F, F $ J
   Conclusions :   I.   J # R
                       II. J # K
                       III. R # F
                       IV. K @ D
   (a) Only I, II and III are true
   (b) Only II, III and IV are true
   (c) Only I, III and IV are true
   (d) All I, II, III and IV are true
   (e) None of these

3. **Statements :**
   N δ B, B $ W, W # H, H ★ M
   Conclusions :   I. M @ W
                       II. H @ N
                       III. W δ N
                       IV. W # N
   (a) Only I is true
   (b) Only III is true
   (c) Only IV is true
   (d) Only either III or IV is true
   (e) Only either III or IV and I are true

4. **Statements :**
   R ★ D, D $ J, J # M, M @ K

Conclusions :
I.   K # J
II. D @ M
III. R # M
IV. D @ K
(a) None is true
(b) Only I is true
(c) Only II is true
(d) Only III is true
(e) Only IV is true

5. **Statements :**
   M $ K, K @ N, N ★ R, R # W
   Conclusions :   I.   W @ K
                       II. M $ R
                       III. K @ W
                       IV. M @ N
   (a) Only I and II are true
   (b) Only I, II and III are true
   (c) Only III and IV are true
   (d) Only II, III and IV are true
   (e) None of these

DIRECTIONS (Qs. 6–10): In the following questions, the symbols δ, @, ©, % and * are used with the following meaning as illustrated below :

'P © Q' means 'P is not smaller 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'.

'P δ Q' means 'P is not greater than Q'.

'P @ Q' means 'P is neither greater than nor smaller than Q'.

Now in each of the following questions assuming the given statements to be true, find which of the four conclusion I, II, III and IV given below them is/are **definitely true** and give your answer accordingly.

6. **Statements :**
   R * K, K % D, D @ V, V δ M
   Conclusions :
   I.   R * D
   II. V * R
   III. D @ M
   IV. M % D
   (a) None is true
   (b) Only III is true
   (c) Only IV is true
   (d) Only either III or IV is true
   (e) Only either III or IV and II are true

7. **Statements :**
   F % N, N © W, W δ Y, Y * T
   Conclusions :
   I.   F % W
   II. T % N
   III. N % Y
   IV. T % W

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

8. **Statements :**
B © T, T * R, R % F, F @ K
Conclusions :
I. B % R
II. F * T
III. R % K
IV. K * T
(a) None is true (b) Only I is true
(c) Only II is true (d) Only III is true
(e) Only IV is true

9. **Statements :**
J @ F, F δ N, N % H, H © G
Conclusions :
I. G * N
II. N © J
III. F * J
IV. J δ G
(a) Only I and II are true
(b) Only I, II and III are true
(c) Only II, III and IV are true
(d) All I, II, III and IV are true
(e) None of these

10. **Statements :**
D δ T, T @ R, R © M, M % K
I. R @ D
II. R % D
III. K * T
IV. M δ T
(a) Only either I or II is true
(b) Only III and IV are true
(c) Only either I or II and III are true
(d) Only either I or II and IV are true
(e) Only either I or II and III and IV are true

DIRECTIONS (Qs. 11-15) : In the following questions, the symbols ©, δ, $, ∗ and % are used with the following meaning as illustrated below:

(i) 'A δ B' means 'A is not greater than B'
(ii) 'A % B' means 'A is not smaller than B'.
(iii) 'A © B' means 'A is neither greater than nor smaller than B'.
(iv) 'A $ B' means 'A is greater than B'.
(v) '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 (a) if only Conclusion I is true.
Give answer (b) if only Conclusion II is true.
Give answer (c) if either Conclusion I or II is true.
Give answer (d) if neither Conclusion I nor II is true.
Give answer (e) if both Conclusions I and II are true.

11. **Statements:** R $ J, J % M, M © K
Conclusions: I. K © J
II. K ∗ J

12. **Statements:** D δ R, M $ R, M © F
Conclusions: I. F $ D
II. F $ R

13. **Statements:** H © F, F $ R, R ∗ K
Conclusions: I. R ∗ H
II. K $ F

14. **Statements:** B % D, D ∗ T, T δ R
Conclusions: I. B $ T
II. R $ D

15. **Statements:** M % N, N ∗ A, A $ B
Conclusions: I. B ∗ N
II. A $ M

DIRECTIONS (Qs. 16-20) : In the following questions, the symbols δ ★, $, @ and © are used with the following meaning as illustrated below

'P $ Q' means 'P is neither smaller than nor greater than Q'.
'P δ Q' means 'P is not smaller than Q'.
'P © Q' means 'P is either smaller or equal to Q'.
'P ★ Q' means 'P is smaller than Q'.
'P @ Q' means 'P is neither equal to nor smaller 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?
(a) if only Conclusion I is true.
(b) if only Conclusion II is true.
(c) if either Conclusion I or II is true.
(d) if neither Conclusion I nor II is true.
(e) if **both** Conclusions I and II are true.

16. **Statements :** W $ F, F δ R, R ★ M
Conclusions : I. R ★ W
II. R $ W

17. **Statements :** V δ T, T @ N, N $ J
Conclusions : I. J ★ T
II. N ★ V

18. **Statements :** K © R, R δ M, M ★ F
Conclusions : I. F @ R
II. K ★ M

19. **Statements :** B @ J, J ★ H, H © N
Conclusions : I. N @ J
II. N @ B

20. **Statements :** T ★ K, K © M, M δ D
Conclusions : I. D ★ K
II. M @ T

DIRECTIONS (Qs. 21-25): In the following questions, the symbols ★, $, δ, © and % are used with the following meanings as illustrated below:

'P δ Q' means 'P is neither greater than nor equal to Q'.
'P % Q' means 'P is neither smaller nor greater than Q'.
'P ★ Q' means 'P is not greater than Q'.
'P $ Q' means 'P is greater than Q'.
'P © Q' means 'P is either greater 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
(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true.
(d) if neither conclusion I nor II is true.
(e) if both conclusions I and II are true.

21. **Statements :** H ★ K, K δ N, N $ W
    Conclusions : I. N $ H
    II. W δ H
22. **Statements :** H © K, K % R, R δ N
    Conclusions : I. N © K
    II. R % H
23. **Statements :** R $ T, T © M, M % J
    Conclusions : I. J % T
    II. J δ T
24. **Statements :** B δ A, A ★ M, W © M
    Conclusions : I. W $ B
    II. A ★ W
25. **Statements :** B % T, T © M, M ★ D
    Conclusions : I. D © B
    II. M ★ B

DIRECTIONS (Qs. 26-30): In the following questions, the symbols δ, %, *, $ and © are used with the following meaning as illustrated below :

P % Q' means 'P is not smaller than Q'.

'p * Q' '.means 'P is neither greater than nor equal to Q'.

'P δ Q' means 'P is neither smaller than nor equal to Q'.

'P $ Q' means ' P is neither greater than nor smaller than 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**
(a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true
(d) if neither conclusion I nor II is true
(e) if both conclusions I and II are true
26. **Statements:** D $ T, T % M, M * J
    Conclusions: I. J δ D   II. M © D
27. **Statements:** B * K, K $ N, N % R
    Conclusions: I.R $ K   II. R * K
28. **Statements:** H % F, F * W, W $ E
    Conclusions: I. E δ F   II. H δ W
29. **Statements:** Z δ D, D © K, K δ M
    Conclusions: I. M * D   II. Z δ K
30. **Statements:** W © B, N δ B, N © F
    Conclusions: I. F δ B   II. W * N

DIRECTIONS (Qs. 31-35): In the following questions, the symbols δ, %, $, # and @ are used with the following meaning as illustrated below:

'P $ Q' means 'P is not smaller than Q'.

'P @ Q' means 'P is not greater than Q'.

'P δ Q' means 'P is neither smaller than nor equal to Q'.

'P # Q' means 'P is neither greater than nor equal to Q'.

'P % Q' means 'P is neither smaller than nor 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
(a) if only Conclusion I is true.
(b) if only Conclusion II is true.

(c) if either Conclusion I or II is true.
(d) if neither Conclusion I nor II is true.
(e) if both Conclusions I and II are true.
31. **Statements:** F @ N, N δ R, H @ R
    Conclusions: I. H δ N
    II. F # R
32. **Statements:** M # T, T @ K, K $ N
    Conclusions: I. M # N
    II. K δ M
33. **Statements:** T % H, H $ W
    Conclusions: I. W # T
    II. W % T
34. **Statements:** N δ K, K # D, D % M
    Conclusions: I. M δ K
    II. D δ N
35. **Statements:** J $ B, B % R, R δ F
    Conclusions: I. F # B
    II. R @ J
36. Which of the following symbols should replace question mark (?) in the given expression in order to make the expressions ' A > D' and 'F ≥ C' definitely true?
    A > B ≥ C ? D ≤ E = F
    (a) >   (b) <
    (c) ≤   (d) =
    (e) Either = or ≥
37. Which of the following expressions is definitely true if the given expressions 'R < P' as well as 'S > Q' are definitely true?
    (a) P > Q = R ≤ T < S   (b) S > T ≥ R > Q < P
    (c) Q > R ≤ T > P ≥ S   (d) S > T ≥ R > Q > P
    (e) None of these

DIRECTIONS (Qs. 38-41): In these questions, relationships between different elements is shown in the statements. These statements are followed by two conclusions.

Give answer (a) if **only** conclusion I follows.
Give answer (b) if **only** conclusion II follows.
Give answer (c) if **either** conclusion I or conclusion II follows.
Give answer (d) if **neither** conclusion I nor conclusion II follows.
Give answer (e) if **both** conclusions I and II follow.
38. **Statement :**
    A < L < T < R ≤ H > K
    Conclusions :
    I. H > L
    II. K > T
39. **Statement :**
    P = N > D ≥ G < B = J
    Conclusions :
    I. G < P
    II. G < J
40. **Statement :**
    F ≤ C ≥ V = Z > X = U
    Conclusions :
    I. V < U
    II. Z < F
41. **Statement :**
    Q ≤ E = I > N ≥ R ≥ S
    Conclusions :
    I. E = S
    II. S ≤ N

(RBI Assistant 2012)

Give Answer (a) : If only Conclusion I is true.
Give Answer (b) : If only Conclusion II is true.
Give Answer (c) : If only Conclusion I or II is true.
Give Answer (d) : If neither Conclusion I nor II is true.
Give Answer (e) : If both Conclusions I and II are true.

42. **Statement** : $H \geq I = J > K \leq L$
     Conclusions : I. $K < H$
                         II. $L \geq I$
43. **Statement** : $S > C \geq O; P < C$
     Conclusions : I. $O < P$
                         II. $S < P$
44. **Statement** : $A = B \leq C; A > R$
     Conclusions : I. $B > R$
                         II. $R < C$
45. **Statement** : $D > E \leq F; J < F$
     Conclusions : I. $D > J$
                         II. $E < J$
46. **Statement** : $P < Q > T; R \geq Q$
     Conclusions : I. $R > P$
                         II. $T < R$

DIRECTIONS (Qs. 47-51): In these questions, relationships between different elements is shown in the statements. These statements are followed by two conclusion.

(SBI Clerk 2012)

Give answer (a) if **only** conclusion **I** follows
Give answer (b) if **only** conclusion **II** follows
Give answer (c) if **either** conclusion **I** or conlcusion **II** follows
Give answer (d) if **neither** conclusions **I** nor conlcusion **II** follows
Give answer (e) if **both** conclusions **I and II** follows

47. **Statement:** $R \geq S \geq T > U > X; T < V < W$
     Conclusions: I. $R > X$
                      II. $X < W$
48. **Statement:** $E = F < G < H; G \geq I$
     Conclusions: I. $H > I$
                      II. $E \geq I$
49. **Statement:** $A > B > F > C; D > E > C$
     Conclusions: I. $C < A$
                      II. $B > D$
50. **Statement:** $K \leq L \leq M = N; P \geq O \geq N$
     Conclusions: I. $K < P$
                      II. $K = P$
51. **Statement:** $D < E < F < G; K > F$
     Conclusions: I. $K \leq G$
                      II. $K > D$

DIRECTIONS (Qs. 52-56) : In the following questions, the symbols @, $, #, © and % are used with the following meaning as illustrated below :

(IBPS PO 2012)

'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 neither smaller than nor equal to Q.'
'P % Q' means 'P is not greater than Q.'
'P @ Q' means 'P is neither greater than nor smaller than Q.'

Now in each of the following questions assuming the given statements to be true, find which of the four conclusions I, II, III and IV given below them is/are **definitely true** and give your answer accordingly.

52. **Statement :** R # J, J $ D, D @ K, K % T
     Conclusions :
     I.   T # D
     II.   R @ D
     III. R # K
     IV.   J $ T
     (a) Only either I or II is true
     (b) Only III is true
     (c) Only III and IV are true
     (d) Only either I or II and III are true
     (e) None of these
53. **Statement :** T % R, R $ M, M @ D, D © H
     Conclusions :
     I.   D % R
     II.   H # R
     III. T © M
     IV.   T % D
     (a) Only I is true   (b) Only I and IV are true
     (c) Only II and III are true (d) Only II and IV are true
     (e) None of these
54. **Statement :** M @ B, B # N, N $ R, R © K
     Conclusions :
     I.   K # B
     II.   R © B
     III. M $ R
     IV.   N © M
     (a) Only I and III are true   (b) Only I and IV are true
     (c) Only II and IV are true   (d) Only II, III and IV are true
     (e) None of these
55. **Statement :** F # H, H @ M, M © E, E $ J
     Conclusions :
     I.   J © M
     II.   E # H
     III. M © F
     IV.   F # E
     (a) Only I and II are true
     (b) Only II and III are true
     (c) Only I, II and III are true
     (d) Only II, III and IV are true
     (e) None of these
56. **Statement :** D % A, A @ B, B © K, K % M
     Conclusions :
     I.   B $ D
     II.   K # A
     III. M # B
     IV.   A © M
     (a) Only I, II and IV are true
     (b) Only I, II and III are true
     (c) Only II, III and IV are true
     (d) Only I, III and IV are true
     (e) None of these

DIRECTIONS (Qs. 57-61): In these questions, relationships between different elements is shown in the statement. The statement is followed by two conclusions. Study the conclusions based on the given statement and select the appropriate answer.

(IBPS Clerk 2013)

57. **Statement:** K > I ≥ T ≥ E; O < R < K
    Conclusions: I. R < E
    II. O < T
    (a) Neither conclusion I nor II follows
    (b) Both conclusions I and II follow
    (c) Only conclusion II follows
    (d) Either conclusion I or II follows
    (e) Only conclusion I follows
58. **Statement:** C < L < O = U = D ≥ S > Y
    Conclusions: I. O > Y
    II. C < D
    (a) Neither conclusion I nor II follows
    (b) Both conclusions I and II follow
    (c) Only conclusion I follows
    (d) Only conclusion II follows
    (e) Either conclusion I or II follows
59. **Statement:** K ≥ L > M ≥ N
    Conclusions: I. N ≤ K
    II. N < K
    (a) Both conclusions I and II follow
    (b) Neither conclusion I nor II follows
    (c) Either conclusion I or II follows
    (d) Only conclusion I follows
    (e) Only conclusion II follows
60. **Statement:** Z ≥ Y = W ≤ X
    Conclusions: I. W < Z
    II. W = Z
    (a) Only conclusion II follows
    (b) Only conclusion I follows
    (c) Neither conclusion I nor II follows
    (d) Either conclusion I or II follows
    (e) Both conclusions I and II follow
61. **Statement:** B > A > S < I > C > L > Y
    Conclusions: I. B > L
    II. A > Y
    (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

DIRECTIONS (Qs. 62-66) : In these questions relationship between different elements is shown in the statements. The statements are followed by two conclusions.

(RBI Assistant 2013)
Give answer (a) if only Conclusion I is true.
Give answer (b) if only Conclusion II is true.
Give answer (c) if either Conclusion I or II is true.
Give answer (d) if neither Conclusion I nor II is true.
Give answer (e) if both Conclusions I and II are true.

(62-63) :
Statements : R ≥ T < M = Z ; C > T ≥ B
62. **Conclusions:**
    I. Z > C   II. B < Z
63. **Conclusions:**
    I. B < C   II. R ≥ C

(64-65) :
Statements : P ≥ Q > T; Q < R; T ≥ A
64. **Conclusions :**
    I. A < Q   II. A ≤ P
65. **Conclusions :**
    I. T < P   II. R > A
66. **Statements :**
    P > T = U ≤ W;   Q ≥ R ≥ W
    Conclusions
    I. T = R   II. U < R

DIRECTIONS (Qs. 67-71) : In the following questions, the symbols Δ, Σ @, © and # are used with the following meaning as illustrated below :

(IBPS SO 2013)
'X Δ Y' means 'X' is neither greater than nor equal to Y.
'X Σ Y means 'X is not smaller than Y.
'X @ Y means 'X is not greater than Y'.
'X © Y' means 'X is neither greater than nor smaller than Y'.
'X # Y' means 'X is neither smaller than nor equal to Y.
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 (a) If only Conclusion I is true.
Give answer (b) if only Conclusion II is true.
Give answer (c) if either Conclusion I or II is true.
Give answer (d) if neither Conclusion I nor II is true.
Give answer (e) if both Conclusions I and II are true.
67. **Statements :**
    R @ J, F Σ J, C Σ F
    Conclusions :
    I. R © C
    II. C # R
68. **Statements :**
    W @ P, W # E, E Δ V
    Conclusions :
    I. P # E
    II. V © W
69. **Statements :**
    J © R, P Σ R, Z # P
    Conclusions :
    I. R Δ Z
    II. J @ P
70. **Statements :**
    G @ O, N © O, H # G
    Conclusions :
    I. O Δ H
    II. G © N
71. **Statements :**
    Q Δ B, M © B, K Σ M
    Conclusions :
    I. K © B
    II. Q Δ K

DIRECTIONS (Qs. 72-73) : In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions.

Mark answer If

(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 conclusion I and II follow.

72.   **Statement:** $E < F \leq G = H > S$

 Conclusions:

 I. $G > S$

 II. $F \leq H$

73.   **Statement:** $P \leq Q < W = L$

 Conclusions:

 I. $L > P$

 II. $Q \leq L$

DIRECTIONS (Qs. 74-78) : In these questions the symbols @, #, $, % and ★ are used with different meanings as follow.

'A @ B ' means 'A is not smaller than B'.

'A # B ' means 'A is neither smaller than nor equal to B'.

'A $ B' means 'A is neither greater than nor smaller than B'.

'A % B' means 'A is not greater than B'.

'A ★ B' means 'A is neither greater than nor equal to B'.

In each questions, four statements showing relationships have been given, which are followed by three conclusions I, II and III. Assuming that the given statements are true, find out which conclusion (s) is/are definitely true?

74.   **Statements:** V $ Y, Y @ Z, Z % X, X # T

 Conclusions:

 I.   T # Z   II.   X # Y

 III.   Z ★ Y

 (a)   None follows   (b)   Only I follows

 (c)   II and III follow   (d)   I and III follow

 (e)   Only III follows

75.   **Statements:** R @ J, J % F, F ★ E, E % M

 Conclusions:

 I.   M # J   II.   F % M

 III.   M ★ R

 (a)   Only I follows   (b)   Only II follows

 (c)   Only III follows   (d)   I and II follow

 (e)   All follow

76.   **Statements:** H#R, R@L, L ★ W, W%F

 Conclusions:

 I.   H # J   II.   F # L

 III.   H $ F

 (a)   Only I follows   (b)   I and II follow

 (c)   II and III follow   (d)   Either I or II follows

 (e)   All follow

77.   **Statements:** M # K, M $ F, F % Q, Q ★ H

 Conclusions:

 I.   H # K   II.   Q # K

 III.   Q @ M

 (a)   I and II follow   (b)   Either I or II follows

 (c)   All follow   (d)   II and III follow

 (e)   None of the above

78.   **Statements:** D ★ Q, Q $ L, L # T, T % H

 Conclusions:

 I.   D ★ L   II.   L @ H

 III.   H # L

 (a)   Only I follows   (b)   I and II follow

 (c)   Either II or III follows   (d)   All follow

 (e)   None of these

DIRECTIONS (Qs. 79-83) : In below questions, relationship between different elements is shown in the statements. These statements are following by two conclusions.

Mark answer (a) if only conclusion I follows.

Mark answer (b) if only conclusion II follows.

Mark answer (c) if either conclusion I or II follows.

Mark answer (d) if neither conclusion I nor II follows.

Mark answer (e) if both conclusion I and II follows.

79.   **Statements :**

 $A \geq B = C; B < D \leq E$

 Conclusions : I. $D > A$

        II. $E > C$

80.   **Statements :**

 $L > U \geq K; Z < U < R$

 Conclusions : I. $L > Z$

        II. $K < R$

81.   **Statements :**

 $Y < J = P; P \geq R > I$

 Conclusions : I. $J > I$

        II. $Y < R$

82.   **Statements :**

 $V \geq K > M = N; M > S; T < K$

 Conclusions : I. $T < N$

        II. $V = S$

83.   **Statements :**

 $F \leq X < A; R < X \leq E$

 Conclusions : I. $F \leq E$

        II. $R < F$

DIRECTIONS (Qs. 84-88) : In the following questions the symbols @, @̲ , =, © and ⊖̲ are used with the following meaning:

$P © Q$ means P is less than Q.

$P @ Q$ means P is greater than Q.

$P @̲ Q$ means P is greater than or equal to Q.

$P = Q$ means P is equal to 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.

(a)   if only conclusion I is true.

(b)   if only conclusion II is true.

(c)   if either I or II is true.

(d)   if neither I nor II is true, and

(e)   if both I and II are true.

84.   **Statements:** $B @ V, K © C, C ⊖̲ B$

 Conclusions : I. $V @ C$

        II. $B @ K$

85. **Statements :** $K @ T, S = K, T \underline{\underline{@}} R$

    Conclusions : I. $S @ R$
    II. $T = R$

86. **Statements :** $U = M, P \underline{\underline{@}} U, M \underline{\underline{@}} B$

    Conclusions : I. $P = B$
    II. $P @ B$

87. **Statements:** $L \underline{\underline{@}} N, J \underline{\underline{@}} P, P \underline{\underline{@}} L$

    Conclusions : I. $J = L$
    II. $P = N$

88. **Statements:** $H \underline{\underline{@}} G, D @ E, H = E$

    Conclusions : I. $D @ H$
    II. $G © D$

DIRECTIONS (Qs. 89-93): In the following questions, the symbols @, $, ★, # and δ are used with the following meaning as illustrated below:

P $ Q means 'P is not smaller 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'.

P δ Q means' P is neither greater than nor smaller than 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 four conclusions I, II, III and IV given below them is/are definitely true and give your answer accordingly.

89. **Statements:** H @ T, T#F, FδE, E★V

    Conclusions:
    I. V $ F   II. E@T
    III. H @ V   IV. T#V
    (a) Only I, II and III are true
    (b) Only I, II and IV are true
    (c) Only II. III and IV are true
    (d) Only I, III and IV are true
    (e) All I, II, III and IV are true

90. **Statements:** D # R, R ★ K, K @ F, F $ J

    Conclusions:
    I. J # R   II. J # K
    III. R # F   IV. K @ D
    (a) Only I, II and III are true
    (b) Only II, III and IV are true
    (c) Only I, III and IV are true
    (d) All I, II, III and IV are true
    (e) None of these

91. **Statements:** N δ B, B $ W, W#H, H★M

    Conclusions:
    I. M @ W   II. H@N
    III. WδN   IV. W#N
    (a) Only I is true
    (b) Only III is true
    (c) Only IV is true
    (d) Only either III or IV is true
    (e) Only either III or IV and I is true

92. **Statements:** R★D, D$J, J#M, M@K

    Conclusions:
    I. K # J   II. D@M
    III. R# M   IV. D@K

(a) None is true   (b) Only I is true
(c) Only II is true   (d) Only III is true
(e) Only IV is true

93. **Statements:** M $ K, K@N, N ★ R, R# W

    Conclusions:
    I. W@K   II. M$R
    III. K @W   IV. M@N
    (a) Only I and II are true
    (b) Only I. II and III are true
    (c) Only III and IV are true
    (d) Only II, III and IV are true
    (e) None of these

DIRECTIONS (Qs. 94-98) : In the following question * ,⊕ , $, £ and @ are used according to following meaning.

'P*Q' means, 'P is neither equal 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 nor equal to Q'

'P@Q' means, 'P is not greater than Q'

Now according to the following statement if they are true, judge their Conclusions I, II and III follow definitely true.

94. **Statements**
    E @ F, O ⊕ F, P@E, P$R
    Conclusions
    I. O $ P   II. E ⊕ R   III. P £ O
    (a) Only I is true   (b) Only II is true
    (c) Either I or II is true   (d) Only III is true
    (e) None of these

95. **Statements**
    A * B, B @ C, A $ D, D £ E
    Conclusions
    I. E * B   II. C $ A   III. D @ E
    (a) Only I is true   (b) I and II are true
    (c) Only III is true   (d) No one is true
    (e) None of these

96. **Statements**
    I ⊕ H, H $ T, S £ T, S @ R
    Conclusions
    I. I * T   II. I $ T   III. S * H
    (a) All are true   (b) Either I or II is true
    (c) Only I is true   (d) Only II is true
    (e) None of these

97. **Statements**
    S @ T, Q $ N, T £ N, Q * O
    Conclusions
    I. S $ N   II. N ⊕ O   III. N * O
    (a) None is true   (b) Either I or III is true
    (c) Only I is true   (d) Only II is true
    (e) None of these

98. **Statements**
    H ⊕ J, J * K, L $ K, K @ M
    Conclusions
    I. K £ M   II. L $ J   III. H ⊕ L
    (a) I and III are true   (b) Only II is true
    (c) Only III is true   (d) None is true
    (e) None of these

(SBI SO 2014)

'P % Q' means 'P is neither smaller than nor equal to Q'.

'P ◇ Q' means 'P is not greater than Q'.

'P $ Q' means 'P is not smaller than Q'.

'P # Q' means 'P is neither greater than nor equal to Q'.

'P @ Q' means 'P is neither greater than nor smaller than Q'.

99. **Statements :**

D ◇ R # M, M @ K, K % F

Conclusions :

I.	F $ M	II.	K @ R
III.	K % R	IV.	D @ M

(a) None is true (b) Only I is true

(c) Only II is true (d) Only III is true

(e) Only IV is true

100. **Statements :**

R $ B, B @ A, A % K , K # M

Conclusions :

I.	M % A	II.	K $ B
III.	A % R	IV.	K # R

(a) Only IV is true (b) Only I and IV are true

(c) Only II and III are true (d) Only I, III and IV are true

(e) None is true

101. **Statements :**

D # M, M $ R, R @ J , W % J

Conclusions :

I.	W % R	II.	M $ J
III.	R % D	IV.	W % M

(a) Only II and III are true

(b) Only I and IV are true

(c) Only I and II are true

(d) Only III and IV are true

(e) All are true

102. **Statements :**

W @ T, T $ N, N # F, V % F

Conclusions :

I.	V % N	II.	W $ N
III.	T $ F	IV.	V @ N

(a) Only I and IV are true (b) Only I and II are true

(c) Only IV is true (d) Only II, III and IV are true

(e) Only III and IV are true

103. **Statements :**

B % K, K # D, D ◇ N, N @ T

Conclusions :

I.	N % K	II.	T $ D
III.	K # B	IV.	T % K

(a) Only I and II are true

(b) Only II and III are true

(c) Only I, II and IV are true

(d) Only III and IV are true

(e) All are true

(SBI SO 2014)

Give answer (a) if only Conclusion I is true.

Give answer (b) if only Conclusion II is true.

Give answer (c) if either Conclusion I or Conclusion II is true.

Give answer (d) if neither Conclusion I nor Conclusion II is true.

Give answer (e) if both Conclusions I and II are true.

(104-105) : Statements:

$O = L \leq T > S; L > I; T \leq Z$

104. **Conclusions:**

I.	$I < O$	II.	$Z > S$

105. **Conclusions:**

I.	$Z > I$	II.	$S < I$

106. **Statements:**

$G \leq K = O \geq U > P < S$

Conclusions:

I.	$G \leq U$	II.	$S > O$

107. **Statements:**

$A \geq L < P \leq B; P > M$

Conclusions:

I.	$B \geq M$	II.	$A > M$

(108-109) : Statements:

$I \geq M = P > R; B < P \geq A$

108. **Conclusions:**

I.	$A < I$	II.	$I = A$

109. **Conclusions:**

I.	$A \leq R$	II.	$B < I$

(SBI PO 2014)

The statements are followed by two conclusions.

Give answer (a) if only Conclusion I is true.

Give answer (b) if only Conclusion II is true.

Give answer (c) if either Conclusion I or II is true.

Give answer (d) if neither Conclusion I nor II is true.

Give answer (e) if both Conclusions I and II are true.

110. **Statements:**

$B > C = D \geq X ; E \leq X ; Z \geq D$

Conclusions : I. $B > E$

II. $Z \geq B$

111. **Statements:**

$E > F \geq G < H \leq I < J$

Conclusions : I. $G \leq E$

II. $J \geq F$

112. **Statements:**

$K \leq L < M > N \geq O; T > M \leq P$

Conclusions: I. $T > K$

II. $P > O$

113. **Statements :**

$B > O = K \geq L; D > K \geq S$

Conclusions : I. $O < D$

II. $S \leq L$

114. **Statements :**

$B > O = K \geq L; D > K \geq S$

Conclusions : I. $L > D$

II. $B > S$

DIRECTIONS (Qs. 115-119): In the following questions, the symbols δ, ✶, %, # and @ are used with the following meaning as illustrated below.

(SBI SO 2014)

'P % Q' means 'P is neither greater than nor equal to Q'.
'P δ Q' means 'P is neither smaller than nor equal to Q'.
'P @ Q' means 'P is not greater than Q'.
'P ✶ Q' means 'P is not smaller than Q'.
'P # Q' means 'P is neither greater than nor smaller than Q'.

Now, in each of the follwoing questions assuming the given statements to be true, find which of the four conclusions I, II, III and IV given below them is/are definitely true and give your answer.

115. **Statement: R ✶ T, T δ M, M % K, K @ V**
     Conclusions:
     I.   V δ M   II. V δ T
     III. M % R   IV. K δ R
     (a) I and II are true   (b) I and III are true
     (c) II and IV are true   (d) I, III and IV are true
     (e) None of these

116. **Statement: H δ J, J # N, N @ R, R δ W**
     Conclusions:
     I.   W % N   II. W % H
     III. R # J   IV. R δ J
     (a) Only I is true   (b) Only II is true
     (c) Only III is true   (d) Only IV is true
     (e) Either III or IV is true

117. **Statement: B @ D, D δ F, F % M, M ✶ N.**
     Conclusions:
     I.   B % F   II. M δ D
     III. N % F   IV. D δ N
     (a) None is true   (b) Only I is true
     (c) Only II is true   (d) Only III is true
     (e) Only IV is true

118. **Statement: F # Z, Z @ H, H % N, N δ B**
     Conclusions:
     I.   F @ H   II. N % Z
     III. B % H   IV. B % Z
     (a) I and III are true   (b) II, III and IV are true
     (c) I and II are true   (d) I, II and III are true
     (e) None of the above

119. **Statement : M % K, K ✶ W, W δ V, V @ N**
     Conclusions:
     I.   N ✶ K   II. M % W
     III. K δ V   IV. V % M
     (a) None is true   (b) Only I is true
     (c) Only II is true   (d) Only III is true
     (e) Only IV is true

DIRECTIONS (Qs. 120-124): In the following questions, the symbols β , γ , Ψ, α and δ are used with the following meanings..

(IBPS SO 2014)

P β Q means P is not smaller than Q.
P γ Q means P is neither greater than nor smaller than Q.
P ψ Q means P is not greater than Q.
P α Q means P is neither smaller than nor equal to Q.
P δ Q means P is neither greater than nor equal to Q.

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

(a) if only conclusion I is true;
(b) if only conclusion II is true;
(c) if either I or II is true;
(d) if neither I nor II is true; and
(e) if both I and II are true.

120. **Statements:**   M β N, H ψ Q, B β M
     Conclusions: I. H γ M
                         II. Q γ N

121. **Statements:**   C α B, L δ S, S ψ C
     Conclusions: I. B α S
                         II. C α L

122. **Statements:**   I β H, E α F, I γ F
     Conclusions: I. E α I
                         II. H δ E

123. **Statements:**   V γ O, R γ V, O β B
     Conclusions: I. R γ B
                         II. R α B

124. **Statements:**   L α U, T γ V, O β B.
     Conclusions: I. T α W
                         II. U γ W

DIRECTIONS (Qs. 125-129) : In the following questions, the symbols @, ©, $, % and * are used with the following meanings as illustrated below:

(IBPS SO 2015)

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

125. **Statements: J $ K, K * T, T @ N, N © R**
     Conclusions:
     I.   J $ T   II. R * T
     III. N $ K   IV. R * K
     (a) None is true   (b) Only I is true
     (c) Only II is true   (d) Only III is true
     (e) Only IV is true

126. **Statements: F % W, W © R, R @ M, M $ D**
     Conclusions:
     I.   D @ R   II. M $ F
     III. R @ D   IV. R * F
     (a) None is true   (b) Only III is true
     (c) Only I is true   (d) Only IV is true
     (e) Only II is true

127. **Statements: H @ B, B * E, V © E, W $ V**
     Conclusions:
     I.   W $ E   II. H @ E
     III. H @ V   IV. W $ B
     (a) Only I and II are true
     (b) Only I, II and III are true
     (c) Only II, III and IV are true
     (d) All are true
     (e) None of these

128. **Statements: R © K, K * N, N $ J, J % H**
     Conclusions:
     I.   R $ N   II. J @ K
     III. H @ N   IV. R $ H
     (a) Only I is true   (b) Only III is true
     (c) Only II is true   (d) None of true
     (e) Only IV is true

129. **Statements:** K * D, D $ N, N % M, M © W
Conclusions:
I. M @ K   II. N @ K
III. M @ D   IV. W * N
(a) Only I and II are true
(b) Only III and IV are true
(c) Only I, II and III are true
(d) All are true
(e) None is true

DIRECTIONS (Qs. 130-134) : Read the following information and answer the question carefully.

'P $ Q' means 'P is not smaller 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'
'P & Q' means 'P is neither greater than nor smaller than Q'
'P * Q' means 'P is not greater than Q'

130. **Statements :**
H @ T, T # F, F& E, E * V
Conclusions :
I. V $ F   II. E @ T
III. H @ V   IV. T # V
(a) Only I, II and III are true
(b) Only I, II and IV are true
(c) Only II, III and IV are true
(d) Only I, III and IV are true
(e) All I II, III and IV are true

131. **Statements :**
D # R, R * K, K @ F, F $ J
Conclusions:
I. J # R   II. J # K
III. R # F   IV. K @ D
(a) Only I, II and III are true
(b) Only II, III and IV are true
(c) Only I, III and IV are true
(d) All I, II, III and IV are true
(e) None of these

132. **Statements:**
N & B, B $ W, W # H, H * M
Conclusions:
I. M @ W   II. H @ N
III. W & N   IV. W # N
(a) Only I is true
(b) Only III is true
(c) Only IV is true
(d) Only either III or IV are true
(e) Only either III or IV and I are true

133. **Statements:**
R * D, D $ J, J # M, M @ K
Conclusions:
I. K # J   II. D @ M
III. R # M   IV. D @ K
(a) None is true   (b) Only I is true
(c) Only II is true   (d) Only III is true
(e) Only IV is true

134. **Statements:**
M $ K, K @ N, N * R, R # W
Conclusions:
I. W @ K   II. M $ R
III. K @ W   IV. M @ N
(a) Only I and II are true
(b) Only III and IV are true
(c) Only III or IV are true
(d) Only II, III and IV are true
(e) None of these

135. Which one of the following symbols should be placed in the blank spaces(from left to right) in order to complete the given expression in such a manner that both N > L and G ≥ K definitely true ? **(IBPS Clerk 2015)**
N _ G _ P _ L _ K
(a) ≤, =, >, <   (b) ≥, ≤, =, <
(c) >, =, ≥, ≥   (d) <, = ,≤, ≥
(e) None of these

136. Which one of the following will be definitely true if the expression 'Q < S > V = W ≥ O ≥ R ' is definitely true ? **(IBPS Clerk 2015)**
(a) S ≥ O   (b) O ≥ Q
(c) W < Q   (d) R ≤ V
(e) None of these

137. Which one of the following will be definitely true if the expression 'F = A < L ≤ C > O ≥ N; Y > L; Q > C' is definitely true ? **(IBPS Clerk 2015)**
(a) Q ≥ N   (b) F = Y
(c) Q > F   (d) Y ≤ N
(e) None of these

138. Which one of the following symbols should be placed in the blank spaces(from left to right) in order to complete the given expression in such a manner that both S ≤ T and P > R definitely true ? **(IBPS Clerk 2015)**
S _ N _ P _ T _ R
(a) ≤, ≤, =, >   (b) ≤, <, =, <
(c) <, ≤, =, >   (d) ≥, <, >, <
(e) None of these

139. Which one of the following will be definitely true if the expression 'D = C ≥ A > B ≥ F < G = E ≤ H' is definitely true ? **(IBPS Clerk 2015)**
(a) F ≤ H   (b) D > F
(c) A = G   (d) D ≥ B
(e) None of these

DIRECTIONS (Qs. 140-144): Relationship between different elements is shown in the statements. Find if the conclusions also follow or not.

140. **Statements :** P = Q ≥ R = S ≥ T; V ≤ W = T; R > X
Conclusions:
I. P > X
II. Q ≥ W
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follows
(e) both I and II follow

141. **Statements:** P = Q ≥ R = S > T; V ≤ X ≤ T
Conclusions:
I. P > X
II. X ≥ P
(a) only I follows   (b) only II follows
(c) either I or II follows   (d) neither I nor II follow
(e) both I and II follow

142. **Statements:** $P = T \geq A < D > W; W \leq X > L; P < K = N$
   Conclusions:
   I. $D > L$
   II. $A \leq N$
   (a) only I follows   (b) only II follows
   (c) either I or II follows   (d) neither I nor II follow
   (e) both I and II follow

143. **Statements:** $A > L \geq J = I; K < L \leq H; G = H \leq B$
   Conclusions:
   I. $J \leq B$
   II. $J > B$
   (a) only I follows
   (b) only II follows
   (c) either I or II follows
   (d) neither I nor II follows
   (e) both I and II follow

144. **Statements:** $T > P \leq B = H; J \leq P > M; L < G = J$
   Conclusions:
   I. $T < J$
   II. $G \leq H$
   (a) only I follows   (b) only II follows
   (c) either I or II follows   (d) neither I nor II follow
   (e) both I and II follow

DIRECTIONS (Qs. 145-149): In the following questions, the symbols are used as follows

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 three statements to be true, state which of the two conclusions I and II given below them is definitely true.
Given Anwser (a) if only conclusion I is true;
Given Answer (b) if only conclusion II is true;
Given Answer (c) if either I or II is true;
Given Answer (d) if neither I nor II is true
Given Answer (e) if both I and II are true.

145. **Statements:** $Q @ R, R @̲ M, M @̲ D$
   Conclusions: I. $D © R$ II. $D © Q$

146. **Statements:** $M @ K, K © R, R © P$
   Conclusions: I. $P @ K$ II. $P @ M$

147. **Statements:** $T © M, M = P, P © R$
   Conclusions: I. $R @ T$ II. $T © R$

148. **Statements:** $P @ Q, Q © K, K @ M$
   Conclusions: I. $M = Q$ II. $M © Q$

149. **Statements:** $P ©̲ F, M @ F, F © N$
   Conclusions: I. $M © P$ II. $N @ P$

150. In which of the following expressions will the expression $P < M$ be definitely true ?   **(SBI SO 2015)**
   (a) $M < R > P \geq S$ (b) $M \geq S = P < F$
   (c) $Q < M < F = P$ (d) $P = A < R < M$
   (e) None of these

DIRECTIONS (Qs. 151-156) : In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusion.

Mark answer (a) **if** only conclusion I follows
Mark answer (b) **if** only conclusion II follows.
Mark answer (c) **if either** conclusion I or II follows
Mark answer (d) **if neither** conclusion I nor II follows.
Mark answer (e) **if both** conclusions I and II follows

151. **Statement :**
   $A \geq B \leq C, C < D, D > F$
   Conclusions :
   I. $F > B$ II. $A > D$

152. **Statement :**
   $X > Y \geq Z, Q = Y, P > X$
   Conclusions :
   I. $Z < P$ II. $P > Q$

153. **Statement :**
   $L \geq I, H > I \geq J, K < J$
   Conslusions :
   I. $H > L$ II. $L > K$

154. **Statement :**
   $O \geq P = Q, R < P, S < Q$
   Conclusions :
   I. $R < S$ II. $O > S$

155. **Statement :**
   $D \geq E > F = G, E = H < J$
   Conclusions :
   I. $J > D$ II. $G < J$

156. **Statement :**
   $J \geq R > Z, R > F < W, B > J$
   Conclusions :
   I. $J > F$ II. $B > W$

DIRECTIONS (Qs. 157-161) : In these questions relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Give answer (a) if only conclusion I is true.
Give answer (b) if only conclusion II is true.
Give answer (c) if either conclusion I or II is true.
Give answer (d) if neither conclusion I nor II is true.
Give answer (e) if both conclusion I and II are true.

157. **Statements :**
   $E \geq F = G; I = T; T \leq G$
   Conclusions :
   I. $I < E$ II. $I = E$

158. **Statements :**
   $G > H < T; I > F; H > J$
   Conclusions :
   I. $J < G$ II. $F < H$

159. **Statements :**
   $V > W < X; X < Y; Z > X$
   Conclusions :
   I. $Z > V$ II. $Y > W$

160. **Statements :**
   $M > N > P; O > P; S < P$
   Conclusions :
   I. $S < M$ II. $O < M$

161. **Statements :**
A > E > F; G > F; M > A
Conclusions :
I.   M > E   II.   G < A

DIRECTIONS (Qs. 162-166): Read the following information and answer the questions based on it.

P @ Q means P is either greater than or equal to Q
P + Q means P is either smaller than or equal to Q
P % Q means P is greater than Q
P × Q means P is smaller than Q
P $ Q means P is neither greater than nor smaller than Q.

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

Give answer.
   (a)   If only conclusion I is true
   (b)   If only conclusion II is true
   (c)   If either I or II is true
   (d)   If neither I or II is true
   (e)   If both I and II are true

162. **Statements :** M @ R, R % T, T $ K
   Conclusion : (I) K × M, (II) T × M
163. **Statements :** M % J, B + J, B @ F
   Conclusion : (I) F $ J, (II) J % F
164. **Statements :** D $ M, M % W, W @ R
   Conclusion : (I) R×D, (II) W + D
165. **Statements :** A + N, N×V, V$J
   Conclusion : (I) J @ N, (II) A + V
166. **Statements :** K×T, T @ B, B + M
   Conclusion : (I) M % T, (II) K + B

DIRECTIONS (Qs. 167-171): In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions.

Give answer
(a)   If only conclusion I follows
(b)   If only conclusion II follows
(c)   If either conclusion I nor II follows
(d)   If neither conclusion I nor II follows
(e)   If both conclusion I and II follow

167. **Statements :** W ≥ D < M < P < A = F
   Conclusions
   I.   F > D   II.   P < W
168. **Statements :** H ≥ M > F < A = B > S
   Conclusions
   I.   H > B   II.   F < S
169. **Statements :** B > T > Q > R = F
   Conclusions
   I.   Q ≥ F   II.   T > F
170. **Statements :** S = R ≥ Q, P < Q
   Conclusions
   I.   S ≥ P   II.   R > P

171. **Statements :** S ≥ M < Y = Z > F > T
   Conclusions
   I.   S > F   II.   Y > T

DIRECTIONS (Qs. 172-176): In these questions, the following symbols are used with different meaning as follows:

'A#B' means ' A is neither greater than nor equal to B'.
'A©B' means 'A is neither equal to nor smaller than B'.
'A%B' means 'A is neither smaller than nor greater than B'.
'A$B' means 'A is not smaller than B'.
'A@B' means 'A is not greater 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 true.
Give answer.
(a)   if only conclusion I is true.
(b)   if only conclusion II is true.
(c)   if either conclusion I or II is true.
(d)   if neither conclusion I nor II is true.
(e)   if both conclusions I and II are true.

172. **Statements :** Z # F,   R @ F,   D©R
   Conclusions : I. Z # R   II. D © Z
173. **Statements :** R @ D,   D © W,   B @ W
   Conclusions : I. W # R   II. D © B
174. **Statements :** M © R,   R % D,   D @ N
   Conclusions : I. M © N   II. N $ R
175. **Statements :** H $ V,   V % M,   K © M
   Conclusions : I. K © V   II. M @ H
176. **Statements :** K # T, T $ B, B @ F
   Conclusions : I. F $ T   II. K # B

DIRECTIONS (Qs. 177-181): Read the following information and answer the questions that follows.

P@Q - P is neither greater than nor equal to Q
P%Q - P is neither smaller than nor equal to Q
P#Q - P is not greater than Q
P$Q - P is not smaller than Q
P*Q- P is neither smaller than nor greater than Q

177. **Statements:** A@B, B%C, C*D, D$E
   Conclusions: (1) B%E   (2)   A%E
   (a)   Only conclusion 1 follows
   (b)   Only conclusion 2 follows
   (c)   Either conclusion 1 or 2 follow
   (d)   Neither conclusion 1 nor 2 follows
   (e)   Both conclusion 1 and 2 follow
178. **Statements:** A%B, B*C, C#D, D*E
   Conclusions: (1) A%C   (2)   E$B
   (a)   Only conclusion 1 follows
   (b)   Only conclusion 2 follows
   (c)   Either conclusion 1 or 2 follows
   (d)   Neither conclusion 1 nor 2 follows.
   (e)   Both conclusion 1 and 2 follow
179. **Statements:** A*B, B$C, C#D, D@E
   Conclusions: (1) E*A   (2)   C%A
   (a)   Only conclusion 1 follows
   (b)   Only conclusion 2 follows
   (c)   Either conclusion 1 or 2 follows
   (d)   Neither conclusion 1 nor 2 follows.
   (e)   Both conclusion 1 and 2 follow

180. **Statements:** AB, BC, C*D, D@E
    Conclusions: (1) A$E   (2)   E%C
    (a) Only conclusion 1 follows
    (b) Only conclusion 2 follows
    (c) Either conclusion 1 or 2 follows
    (d) Neither conclusion 1 nor 2 follows
    (e) Both conclusion 1 and 2 follow
181 **Statements:** A%E, E@C, C%B, B*D
    Conclusions: (1) C%D   (2)   B@A
    (a) Only conclusion 1 follows
    (b) Only conclusion 2 follows
    (c) Either conclusion 1 or 2 follows
    (d) Neither conclusion 1 nor 2 follows
    (e) Both conclusion 1 and 2 follow

DIRECTIONS (Qs. 182-186): In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer.

(a) Only conclusion I is true.
(b) Only conclusion II is true.
(c) Both conclusions I and II are true.
(d) Neither conclusion I nor II is true.
(e) Either conclusion I or II is true.

182. **Statements** $N < A = T \geq Z; R \geq T; Z < S$
    Conclusions   I. $R > N$ II. $S > Z$
183. **Statements** $L \leq E = A > P; Y > E > R$
    Conclusions   I. $Y \geq L$ II. $A > R$
184. **Statements** $D < S \geq L > U; Q < S$
    Conclusions   I. $Q < D$ II. $U > Q$
185. **Statements** $L \leq E = A > P; Y \geq E > R$
    Conclusions   I. $P > R$ II. $A \leq Y$
186. **Statements** $N < A = T \geq Z; R \geq T; Z < S$
    Conclusions   I. $R = Z$ II. $Z < R$

DIRECTIONS (Qs. 187-191) : In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statement(s) and select the appropriate answer.

187. **Statements:** $P < L < A > M = K > E$
    Conclusions:
    I. $K < L$
    II. $P < E$
    (a) Only conclusion II is true.
    (b) Either conclusion I or II is true.
    (c) Both conclusions I and II are true.
    (d) Neither conclusion I nor II is true.
    (e) Only conclusion I is true.
188. **Statements:** $P > R = A < Y; D < A$
    Conclusions:
    I. $P > D$
    II. $D < Y$
    (a) Both conclusions I and II are true.
    (b) Only conclusion I is true.
    (c) Neither conclusion I nor II is true.
    (d) Either conclusion I or II is true.
    (e) Only conclusion II is true

189. **Statements:** $P > R = A < Y; D < A$
    Conclusions:
    I. $P < Y$
    II. $R < D$
    (a) Both conclusions I and II are true.
    (b) Neither conclusion I nor II is true.
    (c) Only conclusion I is true.
    (d) Only conclusion II is true.
    (e) Either conclusion I or II is true.
190. **Statements:** $C > R > A = S < H; R < P < Q$
    Conclusions:
    I. $C > S$
    II. $P < C$
    (a) Either conclusion I or II is true.
    (b) Both conclusions I and II are true.
    (c) Only conclusion II is true.
    (d) Neither conclusion I nor II is true.
    (e) Only conclusion I is true.
191. **Statements:** $C > R > A = S < H; R < P < Q$
    Conclusions:
    I. $H > R$
    II. $R < Q$
    (a) Both conclusions I and II are true.
    (b) Only conclusion II is true.
    (c) Only conclusion I is true.
    (d) Either conclusion I or II is true.
    (e) Neither conclusion I nor II is true.
192. In which of these expressions 'S > V' be definitely false?
    (a) $S > P \geq Q = G \geq R > V$ **(SBI PO Main 2016)**
    (b) $P < A \leq S \leq T; V \geq O > T$
    (c) $V \leq A \leq L = R < S$
    (d) $S > C > = F \leq H; V < F$
    (e) $S > T = O \geq P; V < J = P$
193. Which of the following symbols should be placed in the blank spaces respectively(in the same order from left to right) in order to complete the given expression in such a manner that both 'D>S' as well as 'E≤B' definitely holds true?
    B _ A _ S _ E _ D   **(SBI PO Main 2016)**
    (a) $>, \geq, <, =$ (b) $>, >, \geq, <$
    (c) $\geq, \geq, \geq, \leq$ (d) $\geq, =, \geq, <$
    (e) Other than those given as options
194. In Which of the following expressions does the expression 'L< T' to definitely hold true?   **(SBI PO Main 2016)**
    (a) $K > L > R = P < S \leq T$ (b) $U \geq T \geq M = F \leq A \geq L$
    (c) $L \geq C > Q \geq B = N \leq T$ (d) $G \geq L = A < B \leq S \leq T$
    (e) $T \geq E = G \geq W = Y \geq L$
195. Which of the following expressions is true if the expression $P < T < = Q > S > M > = W$ is definitely true?
    (SBI PO Main 2016)
    (a) $W \leq P$ (b) $S < P$
    (c) $M > P$ (d) $W < Q$
    (e) $T \leq M$
196. Which of the following expression is true ?
    Statements: $Y \leq K < D = S; D < V < O; G \geq D < Q$
    Conclusions: I. $G > V$, II. $Y < Q$ **(SBI PO Main 2016)**
    (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

197. What should come in place of question mark in the expression P>Q ? R < T < S so as to make the expressions P>R and S>Q always true? **(IBPS PO Prelim 2016)**
   (a) =
   (b) >
   (c) <
   (d) ≥
   (e) None of these

198. What should come in place of question mark in the expression A = B >C ? D< E = F so as to make the expression F>C always true? **(IBPS PO Prelim 2016)**
   (a) >
   (b) =
   (c) ≥
   (d) ≤
   (e) Both (b) and (d)

199. **Statements:** P = S, P < Q, R ≤ Q, R ≥ T
   Conclusions : (1) Q > S (2) Q = T **(IBPS PO Prelim 2016)**
   (a) Only 1 follow
   (b) Only 2 follow
   (c) Neither follows
   (d) Both follow
   (e) Either follow

200. **Statements:** A > N, K ≥ N, K > M, R > M
   Conclusions: (1) M = N (2) R ≥ A **(IBPS PO Prelim 2016)**
   (a) Only 1 follow
   (b) Only 2 follow
   (c) Neither follows
   (d) Both follow
   (e) Either follows

201. What should come in place of question mark to make B> D always true? **(IBPS PO Prelim 2016)**
   A = B > C ? D < E
   (a) >
   (b) <
   (c) ≥
   (d) ≤
   (e) both (a) and (c)

DIRECTIONS (Qs. 202-206): Read the following information carefully and answer the questions that follows :

(SBI PO Prelim 2016)

P@Q - P is neither greater than nor equal to Q
P%Q - P is neither smaller than nor equal to Q
P#Q - P is not greater than Q
P$Q - P is not smaller than Q
P*Q- P is neither smaller than nor greater than Q

202. **Statements:** A@B, B%C, C*D, D$E
   Conclusions: I. B%E   II. A%E
   (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 conclusion I and II follow

203. **Statements:** A%B, B*C, C#D, D*E
   Conclusions: I. A%C   II. E$B
   (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 conclusion I and II follows

204. **Statements:** A*B, B$C, C#D, D@E
   Conclusions: I. E*A   II. C%A
   (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 conclusion I and II follow

205. **Statements:** AB, BC, C*D, D@E
   Conclusions: I. A$E   II. E%C
   (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 conclusion I and II follow

206. **Statements:** A%E, E@C, C%B, B*D
   Conclusions: I. C%D   II. B@A
   (a) Only conclusion I follows
   (b) Only conclusion II follows
   (c) Either conclusion I or II follow
   (d) Neither conclusion I nor II follows
   (e) Both conclusion I and II follow

DIRECTIONS (Qs. 207-211) : In the following Questions, $, ×, %, @ and © are used with the following meaning as illustrated below

(IBPS PO Main 2016)

A × B means A is not greater than B
A @ B means A is neither greater than nor equal to B
A © B means A is not smaller than B
A % B means A is neither smaller than nor greater than B
A $ B means A is neither smaller than nor equal to B

207. **Statement :** X × W, W @ Z, Z % Y
   Conclusion:
   I.Y $ W   II.Z $ W   III.X © Y
   (a) Only I is true
   (b) Ony II is true
   (c) Both I and II are true
   (d) Both I and III are true
   (e) None is true

208. **Statement :** D $ E, E © C, C @ A
   Conclusion :
   I.   C × D
   II.   A $ E
   III.   A $ D
   (a) Only I is true
   (b) Ony II is true
   (c) Both I and II are true
   (d) Both I and III are true
   (e) None is true

209. **Statement :** M @ O, O % P, P © N
   Conclusion:
   I.   P © M
   II.   N @ O
   III.   N % O
   (a) Only I is true
   (b) Ony II is true
   (c) Both II and III are true
   (d) Either II or III is true
   (e) None is true

210. **Statement :** A © C, C $ B, B % E
   Conclusion :
   I.   E @ C
   II.   B @ A
   III.   A © E
   (a) Only I is true
   (b) Ony II is true
   (c) Both I and II are true
   (d) Both I and III are true
   (e) None is true

211. **Statement :** P © S, S $ R, R × Q
   Conclusion :
   I.   Q $ S
   II.   R @ P
   III.   R % P
   (a) Only I is true
   (b) Ony II is true
   (c) Both I and II are true
   (d) Either II or III is true
   (e) All I, II and III are true

DIRECTIONS (Qs. 212-214): In the given questions, assuming the given statements to be true. Find which of the given two conclusions numbered I, II is/are definitely true and give your answer accordingly.

(SBI PO Prelim 2017)

212. **Statement:** M > U > L ≤ N; L ≥ Y > A
 Conclusions:
 I. Y < N   II. Y = N
 (a) Both I and II are true   (b) Only II
 (c) Only I is true   (d) Either I or II is true.
 (e) None is true.

213. **Statement:** J ≥ A > D = E; L < A < M
 Conclusions:
 I. M < J   II. J > L
 (a) Only II is true.   (b) Either I or II are true.
 (c) Both I and II are true   (d) Only I is true.
 (e) None is true.

214. **Statement:** M ≤ K > L = Y; P ≤ T > M
 Conclusions:
 I. P > Y   II. T < L
 (a) Only II is true   (b) Only I
 (c) Either I or II are true   (d) Both I and II are true
 (e) None is true

DIRECTIONS (Qs. 215-219): In these questions, relationships between different elements are shown in the statements. These statements are followed by two conclusions. Give answer

(IBPS RRB O/S-1 Prelim 2017)

 (a) if only conclusion I follows
 (b) if only conclusion II follows
 (c) if either conclusion I or conclusion II follows
 (d) if neither conclusion I nor conclusion II follows
 (e) if both conclusions I and II follow

215. **Statement:** R ≥ S ≥ T > U > X; T < V < W
 Conclusions:
 I. R > X   II. X < W

216. **Statement:** E = F < G < H; G ≥ I
 Conclusions:
 I. H > I   II. E > I

217. **Statement:** A > B > F > C; D > E > C
 Conclusions:
 I. C < A   II. B > D

218. **Statement:** K ≤ L ≤ M = N; P ≥ O ≥ N
 Conclusions:
 I. K < P   II. K = P

219. **Statement:** D < E < F < G; K > F
 Conclusions:
 I. K ≤ G   II. K > D

220. Which of the following expressions will be true if the expression V ≤ W < R ≥ N = S ≥ M is definitely true ?
 (RRB Scale-2 2017)
 (a) R ≤ V
 (b) R = N
 (c) R > N
 (d) Either R = N or R > N
 (e) None of these

221. Which of the following expressions will not be definitely true for the given expression V ≥ W ≥ T ≤ U = S ≥ R > M > X?
 (RRB Scale-2 2017)

DIRECTIONS (Qs. 222-226): In each of the following questions, assuming the given statements to be true, find which of the following two conclusions I and II is/are definitely true. Give answer:

(IBPS RRB PO Prelim 2017)

 (a) if only conclusion I is true.
 (b) if only conclusion II is true.
 (c) if either I or II is true.
 (d) if neither I nor II is true.
 (e) if both I and II are true.

In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions. Mark answer—

222. **Statement:** P ≤ F, L = K, N = P, F ≥ L,
 Conclusions:
 I. F = K
 II. F > K

223. **Statement:** C ≥ G, Q ≥ R, J ≥ C, Q = Z, G ≥ Q
 Conclusions :
 I. G ≥ Z
 II. C ≥ R

224. **Statement:** D > C, A > B > C, D > E > F,
 Conclusions:
 I. E > C
 II. F > B

225. **Statement:** M ≥ N, K < L, N > O, K > M,
 Conclusions :
 I. O < M
 II. O < K

226. **Statement:** E < F ≤ G = H > S
 Conclusions:
 I. G > S
 II. F ≤ H

DIRECTIONS (Qs. 227-231): In these questions, a relationship between different elements is shown in the statements. The statements are followed by two conclusions. Give answer

(IBPS PO Prelim 2017)

 (a) If only conclusion I is true.
 (b) If only conclusion II is true.
 (c) If either conclusion I or II is true.
 (d) If neither conclusion I nor II is true.
 (e) If both conclusions I and II are true.

(227-228):
Statements: L > I = N > P; I ≥ R > K; N ≤ E < Z
227. **Conclusions:**
 I. E > P   II. R < L
228. **Conclusions:**
 I. K > N   II. I < Z

(229-230):
Statements: S > A = N ≥ D; A ≥ L > E; M ≤ L ≤ D
229. **Conclusions:**
 I. S > E   II. L < S
230. **Conclusions:**
 I. A > M   II. A = M

231. **Statements:** P ≥ V ≥ R ≤ E < Y; G ≥ E > N
Conclusions:
I. P > N II. G ≥ Y

(IBPS SO IT Prelim 2018)

232. **Statements:** I > J = K ≤ L, M < N ≤ O = P ≤ Q > K
Conclusions: I. L > J II. L = J
   (a) Only conclusion I is true
   (b) Only conclusion II is true
   (c) Either conclusion I or II is true
   (d) Neither conclusion I nor II is true
   (e) Both conclusion I and II are true
233. **Statements:** I > J = K ≤ L, M < N ≤ O = P ≥ Q > K
Conclusions: I. I > K II. Q > J
   (a) Only conclusion I is true
   (b) Only conclusion II is true
   (c) Either conclusion I or II is true
   (d) Neither conclusion I nor II is true
   (e) Both conclusion I and II are true
234. **Statements:** A = M > P, N > R, A > T
Conclusions: I. T = P II. R < A
   (a) If only conclusion I follows.
   (b) If only conclusion II follows.
   (c) If either conclusion I or conclusion II follows.
   (d) If neither conclusion I nor II follows.
   (e) If both conclusion I and II follow.
235. **Statements:** X = M < A < S = T < R
Conclusions: I. M = T II. R > A
   (a) If only conclusion I follows.
   (b) If only conclusion II follows.
   (c) If either conclusion I or conclusion II follows.
   (d) If neither conclusion I nor II follows.
   (e) If both conclusion I and II follow.
236. **Statements:** Y > A < N, Y = B < P
Conclusions: I. P > A II. N > B
   (a) If only conclusion I follows.
   (b) If only conclusion II follows.
   (c) If either conclusion I or conclusion II follows.
   (d) If neither conclusion I nor II follows.
   (e) If both conclusion I and II follow.

(SBI PO Pre 2018)

Give answer
   (a) : If only conclusion I is true
   (b) : If only conclusion II is true
   (c) : If either conclusion I or II is true
   (d) : If neither conclusion I nor II is true
   (e) : If both conclusions I and II are true
237. **Statements:** A ≥ B = C; B > D ≥ E; D ≥ F < G
Conclusions
   I. A > E
   II. F < B
238. **Statements:** L > M = N ≥ O ≥ P; S < R ≤ Q < P
Conclusions
   I. L > S
   II. N ≥ P

239. **Statements:** A > B ≥ C ≤ D; E ≥ F ≥ G = A
Conclusion :
   I. F > D
   II. D ≥ F
240. **Statements:** P ≥ Q = R; S = T ≤ V ≥ P
Conclusion :
   I. P < S
   II. Q ≤ T
241. **Statements:** L ≥ M > N ≥ O; P > N ≥ Q
Conclusion :
   I. L > P
   II. L > Q

(IBPS PO Pre 2018)

242. **Statement:** M ≤ N ≤ T ≥ Q < R, P < J ≤ M ≥ S ≥ O
   I. O < R II. P > Q
   (a) if only conclusion II is true.
   (b) if only conclusion I is true.
   (c) if neither conclusion I nor II is true.
   (d) if either conclusion I or II is true.
   (e) if both conclusions I and II are true.
243. **Statement:** F < L ≤ J ≤ X ≤ T < R, P > X ≤ M < G
   I. F < M II. R > P
   (a) if both conclusion I and II are true.
   (b) if only conclusion I is true.
   (c) if neither conclusion I nor II is true.
   (d) if either conclusion I or II is true.
   (e) if only conclusion II is true.
244. **Statement:** M ≤ N ≤ T ≥ Q < R, P < J ≤ M ≥ S ≥ O
   I. O ≥ Q II. J > Q
   (a) if only conclusion II is true.
   (b) if either conclusion I or II is true.
   (c) if neither conclusion I nor II is true.
   (d) if only conclusion I is true.
   (e) if both conclusions I and II are true.
245. **Statement:** F < L ≤ J ≤ X ≤ T < R, P > X ≤ M < G
   I. T ≥ L II. G > F
   (a) if only conclusion II is true.
   (b) if only conclusion I is true.
   (c) if neither conclusion I nor II is true.
   (d) if either conclusion I or II is true.
   (e) if both conclusions I and II are true.
246. **Statement:** J > K ≥ H = U ≥ B ≤ T < F ≤ R
   I. J > B II. H < R
   (a) if only conclusion II is true.
   (b) if either conclusion I or II is true.
   (c) if neither conclusion I nor II is true.
   (d) if only conclusion I is true.
   (e) if both conclusions I and II are true.
247. Which of the following symbols should replace the sign ($) and (&) respectively in the given expression in order to make the expression L ≥ U and R > J definitely true?
   L ≥ K ≥ P = N = J $ U ≤ A & R   **(IBPS Clerk Main 2019]**
   (a) ≤, =   (b) ≤, ≤
   (c) >, ≤   (d) =, <
   (e) ≥, <

248. Which of the following will be definitely true if the given expression A ≥ U ≥ B = N < C = P < D ≤ R is definitely true?

(a) A < C   (b) U > B

(c) R > N   (d) R ≥ B

(e) A < P

DIRECTIONS (Qs. 249-253) : In these questions, relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Give answer

(a) If only conclusion I follows

(b) If only conclusion II follows

(c) If either conclusion I or conclusion II follows

(d) If neither conclusion I nor conclusion II follows

(e) If both conclusions I and II follow

249. **Statements :**

M ≤ N < O ≤ P ≤ R ≤ S

Conclusions :

I. O ≤ S   II. M < R

250. **Statements :**

C = G < B ≤ L > P = Q

Conclusions :

I. Q < B   II. Q < L

251. **Statements :**

M ≤ N > P, M ≥ T = L < Q

Conclusions :

I. L = N   II. T > N

252. **Statements :**

A > B ≤ C = D ≤ E, C ≥ F = G > H

Conclusions :

I. G ≤ E   II. A > H

253. **Statements :**

N = O ≥ Q, P = M < O ≤ B

Conclusions :

I. N < P   II. Q ≤ N

DIRECTIONS (Qs. 254-255): Read the following information carefully to answer the question.

254. **Statement:** D ≤ N ≤ K < R; S < K ≤ Q; N > Y ≤ Z

Conclusions:

I. R > Y

II. Q ≤ D

III. S > Y

(a) Only I and II follow   (b) Only II follows

(c) Only III follows   (d) Only I and II follow

(e) None of these

255. **Statement:** T ≥ M > W ≤ V < D ≥ G; E > B ≥ V; L > M < S = U

Conclusions:

I. S < D

II. T < B

III. W < D

(a) Only I and II follow

(b) Only I follows

(c) Only I and III follow

(d) Only III follows

(e) None of these

DIRECTIONS (Qs. 256-258): In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.

(a) If only conclusion I follows.

(b) If only conclusion II follows.

(c) If either conclusion I or II follows.

(d) If neither conclusion I nor II follows.

(e) If both conclusions I and II follow.

256. **Statements:** P ≥ Q ≥ R = S > T ≤ U < V

Conclusions: I. T < Q

II. V > T

257. **Statements:** A ≤ C < E = F ; B ≥ E ≤ D ≥ G

Conclusions: I. B > A

II. G < C

258. **Statements:** A > B = D ≥ E ; C ≤ B = G ≥ H

Conclusions: I. H ≤ E

II. C < A

DIRECTIONS (Qs. 259-263): In the following questions, the symbols %, ®, #, × and @ are used with the following meaning as illustrated below-

'A#B' means 'A is not greater than B'

'A×B' means 'A is neither equal to nor smaller than B'

'A%B' means 'A is not smaller than B'

'A@B' means 'A is neither smaller than nor greater than B'

'A®B' means 'A is neither greater than nor equal to B'

Now in each of the following questions assuming the given statement to be true, find which of the conclusions given below them is/are definitely true and give your answer accordingly.

(a) If only conclusion I follows.

(b) If only conclusion II follows.

(c) If either conclusion I or II follows.

(d) If neither conclusion I nor II follows.

(e) If both conclusions I and II follow.

259. **Statements:** U × V % W % X ® Y @ Z

Conclusions: I. U % X

II. X ® Z

260. **Statements:** A # B × C × D ® E

Conclusions: I. A × D

II. D ® B

261. **Statements:** M % N × O % P; O × R % S

Conclusions: I. Q ® M

II. S × N

262. **Statements:** B # D ® F # G × H % C

Conclusions: I. B ® G

II. G @ B

263. **Statements:** J % K ® L # M; K × O @ P

Conclusions: I. P ® M

II. J × K

DIRECTIONS (Qs. 264-268): In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.

(IBPS RRB PO Prelim-2019)

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

264. **Statements:** $D \leq L = F \leq R \leq M = P \geq T$
    Conclusions: I. $P = D$
        II. $D < P$

265. **Statements:** $X > B = S \geq K < I \leq M \leq C$
    Conclusions: I. $K < X$
        II. $B > I$

266. **Statements:** $E < O \leq K = S > A \geq P \geq T$
    Conclusions: I. $T < K$
        II. $E < A$

267. **Statements:** $G \leq B = H \leq C = D \geq S > T$
    Conclusions: I. $S \geq B$
        II. $G > T$

268. **Statements:** $J \geq O = T \geq E > K \geq G > P$
    Conclusions: I. $G < O$
        II. $J \geq K$

DIRECTIONS (Qs. 269-270): Relationship between different elements is shown in the statements. Find if the conclusions also follow or not.

(IBPS RRB PO Main-2019)

269. **Statements:** $S > K \geq X < C = N \leq Q > A$
    Conclusions:
    I. $X \geq Q$
    II. $A > X$
    III. $N < K$
    (a) only I follows
    (b) only II follows
    (c) either I or II follows
    (d) None follows
    (e) both I and II follow

270. **Statements:** $M < W < U \leq A = T \geq V \geq S$
    Conclusions:
    I. $T > W$
    II. $A = S$
    III. $S < A$

(a) Only I follows
(b) Only II follows
(c) Only I either II or III follows
(d) Neither I nor II follow
(e) Both I and II follow

DIRECTIONS (Qs. 271-274): In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.

(IBPS RRB Clerk Prelim-2019)

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

271. **Statements:** $Q < R \leq M = L > W \leq V > Z$
    Conclusions:
    I. $L > Q$ II. $W > R$

272. **Statements:** $P \geq Q > D = F < R \leq S$
    Conclusions:
    I. $Q > R$ II. $D < S$

273. **Statements:** $A = E \geq H \geq C < S \leq B$
    Conclusions:
    I. $C < A$ II. $A = C$

274. **Statements:** $Y \geq N = O > P \leq R > T$
    Conclusions:
    I. $R < Y$ II. $N < R$

DIRECTIONS (Qs. 275-277): In these questions, relationship between different elements is shown in the statements. These statements are followed by two conclusions. Mark answer

(IBPS Clerk Main-2020)

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

275. **Statements:** $A > B \leq C = D \leq E, C \geq F = G > H$
    Conclusions: I. $G \leq E$ II. $A > H$

276. **Statements:** $H \geq T > S \leq Q, T \geq U = V > B$
    Conclusions: I. $V > S$ II. $B \leq H$

277. **Statements:** $A \leq R < T = S; T < Y < O; G \geq T < Q$
    Conclusions: I. $G > Y$ II. $A < Q$

Answers & Explanations

1. (b) H @ T ⇒ H > T
T # F ⇒ T < F
F δ E ⇒ F = E
E ★ V ⇒ E ≤ V
Therefore, H > T < F = E ≤ V
Conclusions
I. V $ F ⇒ V ≥ F : True
II. E @ T ⇒ E > T : True
III. H @ V ⇒ H > V : Not True
IV. T # V ⇒ T < V : True
So conclusion I , II & IV follow

2. (e) D # R ⇒ D < R
R ★ K ⇒ R ≤ K
K @ F ⇒ K > F
F $ J ⇒ F ≥ J
Therefore, D < R ≤ K > F ≥ J
Conclusions
I. J # R ⇒ J < R : Not True
II. J # K ⇒ J < K : True
III. R # F ⇒ R < F : Not True
IV. K @ D ⇒ K > D : True
So only conclusion II & IV follow

3. (e) N δ B ⇒ N = B
B $ W ⇒ B ≥ W
W # H ⇒ W < H
H ★ M ⇒ H ≤ M
Therefore, N = B ≥ W < H ≤ M
Conclusions
I. M @ W ⇒ M > W : True
II. H @ N ⇒ H > N : Not True
III. W δ N ⇒ W = N : Not True
IV. W # N ⇒ W < N : Not True
W is either smaller than or equal to N. Therefore either III or IV and I are true.

4. (a) R ★ D ⇒ R ≤ D, D $ J ⇒ D ≥ J
J # M ⇒ J < M, M @ K ⇒ M > K
Therefore, R ≤ D ≥ J < M > K
Conclusions
I. K # J ⇒ K < J : Not True
II. D @ M ⇒ D > M : Not True
III. R # M ⇒ R < M : Not True
IV. D @ K ⇒ D > K : Not True
So none of the conclusion follows

5. (e) M $ K ⇒ M ≥ K
K @ N ⇒ K > N
N ★ R ⇒ N ≤ R
R # W ⇒ R < W
Therefore, M ≥ K > N ≤ R < W
Conclusions
I. W @ K ⇒ W > K : Not True
II. M $ R ⇒ M ≥ R : Not True
III. K @ W ⇒ K > W : Not True
IV. M @ N ⇒ M > N : True
So, only conclusion IV is true.

6. (d) R * K ⇒ R < K
K % D ⇒ K > D

D @ V ⇒ D = V
V δ M ⇒ V ≤ M
Therefore, R < K > D = V ≤ M
Conclusions
I. R * D ⇒ R < D : Not True
II. V * R ⇒ V < R : Not True
III. D @ M ⇒ D = M : Not True
IV. M % D ⇒ M > D : Not True
D is either smaller than or equal to M.
Therefore, either III or IV follows.

7. (b) F % N ⇒ F > N
N © W ⇒ N ≥ W
W δ Y ⇒ W ≤ Y
Y * T ⇒ Y < T
Therefore, F > N ≥ W ≤ Y < T
Conclusions
I. F % W ⇒ F > W : True
II. T % N ⇒ T > N : Not True
III. N % Y ⇒ N > Y : Not True
IV. T % W ⇒ T > W : True
So, only conclusion I and IV follow

8. (d) B © T ⇒ B ≥ T
T * R ⇒ T < R
R % F ⇒ R > F
F @ K ⇒ F = K
Therefore, B ≥ T < R > F = K
Conclusions
I. B % R ⇒ B > R : Not True
II. F * T ⇒ F < T : Not True
III. R % K ⇒ R > K : True
IV. K * T ⇒ K < T : Not True
So only conclusion III is true.

9. (a) J @ F ⇒ J = F
F δ N ⇒ F ≤ N
N % H ⇒ N > H
H © G ⇒ H ≥ G
Therefore, J = F ≤ N > H ≥ G
Conclusions
I. G * N ⇒ G < N : True
II. N © J ⇒ N ≥ J True
III. F * J ⇒ F < J : Not True
IV. J δ G ⇒ J ≤ G : Not True
So only conclusion I and II follow.

10. (e) D δ T ⇒ D ≤ T
T @ R ⇒ T = R
R © M ⇒ R ≥ M
M % K ⇒ M > K
Therefore, D ≤ T = R ≥ M > K
Conclusions
I. R @ D ⇒ R = D : Not True
II. R % D ⇒ R > D : Not True
R is either greater than or equal to D.

Therefore, either I or II is true.

III. K * T ⇒ K < T : True

IV. M δ T ⇒ M ≤ T : True

11. (c) 12. (e) 13. (a) 14. (b) 15. (d)
16. (c) 17. (e) 18. (d) 19. (a) 20. (b)

21. (a) **Statements :**
H ★ K ⇒ H ≤ K
K δ N ⇒ K < N
N $ W ⇒ N > W
Therefore, H ≤ K < N > W
Conclusions :
I.   N $ H ⇒ N > H (True)
II.   W δ H ⇒ W < H (False)

22. (d) **Statements :**
H © K ⇒ H ≥ K
K % R ⇒ K = R
R δ N ⇒ R < N
Therefore, H ≥ K = R < N
Conclusions :
I.   N © K ⇒ N ≥ K (False)
II.   R % H ⇒ R = H (False)

23. (c) **Statements :**
R $ T ⇒ R > T
T © M ⇒ T ≥ M
M % J ⇒ M = J
Therefore, R > T ≥ M = J
Conclusions :
I. J % T ⇒ J = T (False) ⎤
II. J δ T ⇒ J < T (False) ⎦ Either

24. (e) **Statements :**
B δ A ⇒ B < A
A ★ M ⇒ A ≤ M
W © M ⇒ W ≥ M
Therefore, B < A ≤ M ≤ W
Conclusions :
I.   W $ B ⇒ W > B (True)
II.   A ★ W ⇒ A ≤ W (True)

25. (b) **Statements :**
B % T ⇒ B = T
T © M ⇒ T ≥ M
M ★ D ⇒ M ≤ D
Therefore, B = T ≥ M ≤ D
Conclusions :
I.   D © B ⇒ D ≥ B (False)
II.   M ★ B ⇒ M ≤ B (True)

26. (b) D $ T ⇒ D = T
T % M ⇒ T ≥ M
M * J ⇒ M < J
Therefore, D = T ≥ M < J
Conclusions :
I.   J δ D ⇒ J > D (False)
II.   M © D ⇒ M ≤ D (True)

27. (c) B * K ⇒ B < K
K $ N ⇒ K = N
N % R ⇒ N ≥ R
Therefore, B < K = N ≥ R
Conclusions :
I. R $ K ⇒ R = K (False) ⎤
II. R * K ⇒ R < K (True) ⎦ Either

28. (a) H % F ⇒ H ≥ F
F * W ⇒ F < W
W $ E ⇒ W = E
Therefore, H ≥ F < W = E
Conclusions :
I.   E δ F ⇒ E > F (True)
II.   H δ W ⇒ H > W (False)

29. (d)

30. (e)

31. (d) Accordingly,
F @ N ⇒ F ≤ N
N δ R ⇒ N > R
H @ R ⇒ H ≤ R
∴ F ≤ N > R ≥ H
Conclusion : I. H δ N ⇒ H > N   [not true]
II. F # R ⇒ F < R   [not true]

32. (b) Accordingly,
M # T ⇒ M < T
T @ K ⇒ T ≤ K
K $ N ⇒ K ≥ N
∴ M < T ≤ K ≥ N
Conclusion : I. M # N ⇒ M < N   [not true]
II. K δ M ⇒ K > M   [true]
Only conclusion II is true.

33. (c) Accordingly,
T % H ⇒ T = H
H $ W ⇒ H ≥ W
∴ T = H ≥ W
Conclusion : I. W # T ⇒ W < T   [true]
II. W % T ⇒ W = T   or
If either conclusion I or II is true.   [true]

34. (a) Accordingly,
N δ K ⇒ N > K
K # D ⇒ K < D
D % M ⇒ D = M
∴ N > K < D = M
Conclusion : I. M δ K ⇒ M > K   [true]
II. D δ N ⇒ D > N   [not true]
Only conclusion I is true.

35. (e) Accordingly,
J $ B ⇒ J ≥ B
B % R ⇒ B = R
R δ F ⇒ R > F
∴ J ≥ B = R > F
Conclusion : I. F # B ⇒ F < B   [true]
II. R @ J ⇒ R ≤ J   [true]
Both conclusions I and II are true.

36. (d) In the expression A > B ≥ C ▣ D ≤ E = F to make A > D true and F ≥ C true.

37. (a) Trying option (a)
P > Q = R ≤ T < S
P > R ⌐   ⌐
R < S As Q = R so Q < S
Both the expressions are true in option (a)

38. (a) A < L < T < R ≤ H > K
Conclusions:
I. H > L : True
II. K > T : Not True

39. (e) $P = N > D \geq G < B = J$
   Conclusions:
   I. $G < P$: True
   II. $G < J$: True

40. (d) $F \leq C \geq V = Z > X = U$
   Conclusions:
   I. $V < U$: Not True
   II. $Z < F$: Not True

41. (b) $Q \leq E = I > N \geq R \geq S$
   Conclusions :
   I. $E = S$: Not True
   II. $S \leq N$: True

42. (a) $H \geq I = J > K \leq L$
   Conclusions:
   I. $K < H$: True
   II. $L \geq I$: Not True

43. (d) $S > C \geq O$
   $S > C > P$
   $P < C \geq O$
   Conclusions :
   I. $O < P$: Not True
   II. $S < P$: Not True

44. (e) $R < A = B \leq C$
   Conclusions :
   I. $B > R$: True
   II. $R < C$: True

45. (d) $D > E \leq F > J$
   Conclusions :
   I. $D > J$: Not True
   II. $E < J$: Not True

46. (e) $P < Q \leq R$
   $R \geq Q > T$
   Conclusions :
   I. $R > P$: True
   II. $T < R$: True

47. (e) As (i) $U > X$ (ii) $T > U$
   Hence $T > X$
   As $R \geq T$ So $R > X \rightarrow$ Ist follows
   As (i) $W > T$ (ii) $T > X$
   Combining, we get $W > X \rightarrow$ IInd follows.

48. (a) As (i) $H > G$ (ii) $G \geq I$
   Combining, we get $H > I \rightarrow$ Ist follows.
   As (i) $G \geq I$ (ii) $G > E$
   Combining, we get $E \geq I$ not possible.

49. (a) As (i) $A > F$ (ii) $F > C$
   So $A > C \rightarrow$ Ist follows

50. (c) 51. (b) 52. (e) 53. (e) 54. (e)
55. (e) 56. (e)

57. (a) **Statement :** $O < R < K > I > T \geq E$
   Conclusions : I. $R < E$ (×)
   II. $O < T$ (×)

58. (b) **Statement :** $C < L < O = U = D \geq S > Y$
   Conclusions : I. $O > Y$ (✔)
   II. $C < D$ (✔)

59. (e) **Statement :** $K \geq L > M \geq N$
   Conclusions : I. $N \leq K$ (×)
   II. $N < K$ (✔)

60. (d) **Statement :** $Z \geq Y = W \leq X$
   Conclusions : I. $W < Z$ (✔)
   II. $W = Z$ (✔) } Either

61. (d) **Statement :** $B > A > S < I > C > L > Y$
   Conclusions : I. $B > L$ (×)
   II. $A > Y$ (×)

62. (b) **Conclusions :**
   I. $Z > C$: Not True
   II. $B < Z$: True
   So only conclusions II follows.

63. (a) **Conclusions :**
   I. $B < C$: True
   II. $R \geq C$: Not True
   So, only conclusions I follows.

Sol. (64-65):
   $P \geq Q > T$
   $R > Q$
   $T \geq A$
   $P \geq Q > T \geq A$
   $P \geq Q < R$
   $R > Q > T \geq A$

64. (a) **Conclusions :**
   I. $A < Q$: True
   II. $A \leq P$: Not True
   So, only conclusions I follows.

65. (e) **Conclusions :**
   I. $T < P$: True
   II. $R > A$: True
   So, both the conclusions I and II follow.

66. (d) $P > T = U \leq W$
   $Q \geq R \geq W$
   $P > T = U \leq W \leq R \leq Q$
   Conclusions :
   I. $T = R$: Not True
   II. $U < R$: Not True
   So, None of the conclusion follows.

67. (c) **Statements:**
   $R @ J \Rightarrow R \leq J$
   $F \Sigma J \Rightarrow F \geq J$
   $C \Sigma F \Rightarrow C \geq F$
   Therefore,
   $R \leq J \leq F \leq C$
   Conclusions:
   I. $R © C \Rightarrow R = C$: True
   II. $C \# R \Rightarrow C > R$: True } Either
   So either conclusion I or II is true.

68. (a) **Statements:**
   $W @ P \Rightarrow W \leq P$
   $W \# E \Rightarrow W > E$
   $E \Delta V \Rightarrow E < V$
   Therefore,
   $V > E < W \leq P$
   Conclusions:
   I. $P \# E \Rightarrow P > E$: True
   II. $V © W \Rightarrow V = W$: Not True
   So, only conclusion I is true.

69. (e) **Statements:**
   $J © R \Rightarrow J = R$
   $P \Sigma R \Rightarrow P \geq R$

Z # P ⇒ Z > P
Therefore,
J = R ≤ P < Z
Conclusions:
I. R Δ Z ⇒ R < Z : True
II. J @ P ⇒ J ≤ P : True
So, both the conclusions I and II are true.

70. (d) **Statements:**
G @ O ⇒ G ≤ O
N © O ⇒ N = O
H # G ⇒ H > G
Therefore,
H > G ≤ O = N
Conclusions:
I. O Δ H ⇒ O < H : Not True
II. G © N ⇒ G = N : Not True
So, none of the conclusion follows.

71. (b) **Statements**
Q Δ B ⇒ Q < B
M © B ⇒ M = B
K Σ M ⇒ K ≥ M
Therefore,
Q < B = M ≤ K
Conclusions:
I. K © B ⇒ K = B : Not True
II. Q Δ K ⇒ Q < K : True

72. (e) E < F ≤ G = H > S
Conclusion
I : G > S : True
Conclusion
II : F ≤ H : True

73. (a) P ≤ Q < W = L
Conclusion
I : L > P : True
Conclusion
II : Q ≤ L : False

74. (a) V $ Y ⇒ V = Y
Y @ Z ⇒ Y ≥ Z
Z % X ⇒ Z ≤ X
X # T ⇒ X > T
From all above statements,
V = Y ≥ Z ≤ X > T
Conclusions
I. T # Z ⇒ T > Z (False)
II. X # Y ⇒ X > Y (False)
III. Z ★ Y ⇒ Z < Y (False)
None follows.

75. (a) R @ J ⇒ R ≥ J
J % F ⇒ J ≤ F
F ★ E ⇒ F < E
E % M ⇒ E ≤ M
From all above statements, R ≥ J ≤ F < E ≤ M
Conclusions
I. M # J ⇒ M > J (True)
II. F % M ⇒ F ≤ M (False)
III. M ★ R ⇒ M < R (False)
Only (I) follows.

76. (b) H # R ⇒ H > R
R @ L ⇒ R ≥ L
L ★ W ⇒ L < W
W % F ⇒ W ≤ F
From all above statements, H > R ≥ L < W ≤ F
Conclusions
I. H # L ⇒ H > L (True)
II. F # L ⇒ F > L (True)
III. H $ F ⇒ H = F (False)

77. (c) M # K ⇒ M > K
M $ F ⇒ M = F
F % Q ⇒ F ≤ Q
Q ★ H ⇒ Q < H
From all above statements,
K < M = F ≤ Q < H
Conclusions
I. H # K ⇒ H > K (True)
II. Q # K ⇒ Q > K (True)
III. Q @ M ⇒ Q ≥ M (True)
So, all follow.

78. (e) D ★ Q ⇒ D < Q
Q $ L ⇒ Q = L
L # T ⇒ L > T
T % H ⇒ T ≤ H
From all above statemens,
D < Q = L > T ≤ H
Conclusions
I. D ★ L ⇒ D < L (True)
II. L @ H ⇒ L ≥ H (Not true) ⎤
III. H @ L ⇒ H ≥ L (Not true) ⎦ Either
Only (I) and either (II) or (III) follow.

79. (b) A ≥ B = C < D ≤ E
Conclusions
I. D > A : Not true
II. E > C : True

80. (e) L > U > Z
R > U ≥ K
Conclusions
I. L > Z : True
II. K < R : True

81. (a) Y < J = P ≥ R > I
Conclusions
I. J > I : True
II. Y < R : Not True

82. (d) T < K > M = N
V ≥ K > M = N > S
∴ K > T or N
Conclusions
I. T < N : Not true
II. V = S : Not true

83. (a) F ≤ X ≤ E
F ≤ X > R
Conclusions
I. F ≤ E : True
II. R < F : Not true

84. (b) B > V ....(i) K < C ...(ii); C ≤ B ...(iii)
No relationship can be find out between V and C.
Hence I does not follow.
From (ii) and (iii), B > K. Hence II follows.

85. (d) $K > T$ ...(i) ; $S = K$ ...(ii); $T \le R$ ...(iii)
Neither relationship $S > R$ nor $T = R$ can be established.

86. (c) $U = M$ ...(i) $P \ge U$ ...(iii); $M \ge B$ ...(iii)
Combining, we get $P \ge U = M \ge B \Rightarrow P \ge B$
$\Rightarrow P = B$ or $P > B$

87. (d) $L \ge N$ ...(i) ; $J \le P$ ...(ii); $P \ge L$ ...(iii)
Neither relationship $J = L$ nor $P = N$ can be established.

88. (e) $H \ge G$ ....(i); $D > E$ ...(ii); $H = E$ ...(iii)
Combining, we get $D > E = H \ge G$
$\Rightarrow D > H$ and $G < D$ are follow.

89. (b)

90. (e)

91. (e) $N \delta B \Rightarrow N = B$
$B \$ W \Rightarrow B \ge W$
$W \# H \Rightarrow W < H$
$H \star M \Rightarrow H \le M$
Therefore, $N = B \ge W < H \le M$
Conclusions
I : $M @ W \Rightarrow M > W$; True
II : $H @ N \Rightarrow H > N$; False
III : $W \delta N \Rightarrow W = N$; either true
IV : $W \# N \Rightarrow W < N$; either true
W is either smaller or equal to N. Therefore, either III or IV is true.

92. (a) $R \star D \Rightarrow R \le D$
$D \$ J \Rightarrow D \ge J$
$J \# M \Rightarrow J < M$
$M @ K \Rightarrow M > K$
Therefore, $R \le D \ge J < M > K$
Conclusions
I. $K \# J \Rightarrow K < J$; Not true
II. $D @ M \Rightarrow D > M$; Not true
III. $R \# M \Rightarrow R < M$; Not true
IV. $D @ K \Rightarrow D > K$; Not true

93. (e) $M \$ K \Rightarrow M \ge K$
$K @ N \Rightarrow K > N$
$N \star R \Rightarrow N \le R$
$R \# W \Rightarrow R < W$
Therefore, $M \ge K > N \le R < W$
Conclusions,
I. $W @ K \Rightarrow W > K$; Not True
II. $M \$ R \Rightarrow M \ge R$; Not True
III. $K @ W \Rightarrow K > W$; Not True
IV. $M @ N \Rightarrow M > N$; True

94. (b) **Statements**
$O \ge F \ge E \ge P = R$
Conclusions
I. $O \$ P \to O = P$ (False)
II. $E \oplus R \to E \ge R$ (True)
III. $P \pounds O \to P < O$ (False)

95. (a) **Statements**
$E > D = A > B \le C$
Conclusions
I. $E * B \to E > B$ (True)
II. $C \$ A \to C = A$ (False)
III. $D @ E \to D \le E$ (False)

96. (b) **Statements**
$I \ge H = T > S \le R$
Conclusions
I. $I * T \to I > T$ **I.** $L > J$ ⎤ Either
II. $I \$ T \to I = T$ **II.** $L = J$ ⎦ (False)
III. $S * H \to S > H$

97. (e) **Statements**
$S \le T < N = Q > O$
Conclusions
I. $S \$ N \to S = N$ (False)
II. $N \oplus O \to N \ge O$ (False)
III. $N * O \to N > O$ (True)

98. (d) **Statements**
$H \ge J > K = L, K \le M$
Conclusions
I. $K \pounds M \to M > K$ (False)
II. $L \$ J \to L = J$ (False)
III. $H \oplus L \to H \ge L$ (False)

99. (d) $D \blacklozenge R \Rightarrow D \le R$
$R \# M \Rightarrow R < M$
$M @ K \Rightarrow M = K$
$K \% F \Rightarrow K > F$
Therefore,
$D \le R < M = K > F$
Conclusions:
I. $F \$ M \Rightarrow F \ge M$: Not True
II. $K @ R \Rightarrow K = R$: Not True
III. $K \% R \Rightarrow K > R$: True
IV. $D @ M \Rightarrow D = M$: Not True

100. (a) $R \$ B \Rightarrow R \ge B$
$B @ A \Rightarrow B = A$
$A \% K \Rightarrow A > K$
$K \# M \Rightarrow K < M$
Therefore,
$R \ge B = A > K < M$
Conclusions :
I. $M \% A \Rightarrow M > A$: Not True
II. $K \$ B \Rightarrow K \ge B$: Not True
III. $A \% R \Rightarrow A > R$: Not True
IV. $K \# R \Rightarrow K < R$: True
Only conclusion IV follows.

101. (c) $D \# M \Rightarrow D < M$
$M \$ R \Rightarrow M \ge R$
$R @ J \Rightarrow R = J$
$W \% J \Rightarrow W > J$
Therefore,
$D < M \ge R = J < W$
Conclusions :
I. $W \% R \Rightarrow W > R$: True
II. $M \$ J \Rightarrow M \ge J$: True
III. $R \% D \Rightarrow R > D$: Not True
IV. $W \% M \Rightarrow W > M$: Not True
Only conclusion I and II follow.

102. (b) $W @ T \Rightarrow W = T$
$T \$ N \Rightarrow T \ge N$
$N \# F \Rightarrow N < F$
$V \% F \Rightarrow V > F$

Therefore,

$W = T \geq N < F < V$

Conclusions :

I. $V \% N \Rightarrow V > N$: True

II. $W \$ N \Rightarrow W \geq N$: True

III. $T \$ F \Rightarrow T \geq F$: Not True

IV. $V @ N \Rightarrow V = N$: Not True

So only conclusion I and II follow.

103. (e) $B \% K \Rightarrow B > K$

$K \# D \Rightarrow K < D$

$D \lozenge N \Rightarrow D \leq N$

$N @ T \Rightarrow N = T$

Therefore,

$B > K < D \leq N = T$

Conclusions:

I. $N \% K \Rightarrow N > K$: True

II. $T \$ D \Rightarrow T \geq D$: True

III. $K \# B \Rightarrow K < B$: True

IV. $T \% K \Rightarrow T > K$: True

104. (e)   **Conclusions:**

I. $I < O$: True

II. $Z > S$: True

105. (a)   **Conclusions:**

I. $Z > I$: True

II. $S < I$: Not True

106. (d) $G \leq K = O \geq U > P < S$

Conclusions:

I. $G \leq U$: Not True

II. $S > O$: Not True

107. (a) $A \geq L < P \leq B$

$P \geq M$

$A \geq L < P \geq M$

$M \leq P \leq B$

Conclusions:

I. $B \geq M$: True

II. $A > M$: Not True

Sol. (108-109):

$I \geq M = P > R$

$B < P \geq A$

$I \geq M = P > B$

$I \geq M = P \geq A$

$I \geq M = P > R$

$B < M = P > R$

108. (c)   **Conclusions:**

I. $A < I$: Not True   II. $I = A$: Not True

A is either smaller than or equal to I.

109. (b)   **Conclusions:**

I. $A \leq R$: Not True

II. $B < I$: True

110. (a) $B > C = D \geq X \geq E$

$B > C = D \leq Z$

Conclusions:

I. $B > E$: True   II. $Z \geq B$: Not True

111. (d) $E > F \geq G < H \leq I < J$

Conclusions:

I. $G \leq E$: Not True

II. $J \geq F$: Not True

112. (e) $K \leq L < M > N \geq O$

$K \leq L < M < T$

$P \geq M > N \geq O$

Conclusions:

I. $T > K$: True

II. $P > O$: True

Sol. (113-114) :

$B > O = K \geq L$

$D > K \geq S$

$B > O = K \geq S$

$D > K = O \geq L$

$S \leq O = K \geq L$

113. (a)   **Conclusions:**

I. $O < D$: True

II. $S \leq L$: Not True

114. (b)   **Conclusions:**

I. $L > D$: Not True

II. $B > S$: True

115. (b)	116. (e)	117. (a)	118. (e)	119. (d)
120. (d)	121. (b)	122. (e)	123. (c)	124. (d)
125. (d)	126. (d)	127. (d)	128. (b)	129. (b)

Sol. (130-134) :

$P \$ Q \quad \Rightarrow \quad P \geq Q$

$P @ Q \quad \Rightarrow \quad P > Q$

$P \# Q \quad \Rightarrow \quad P < Q$

$P \& Q \quad \Rightarrow \quad P = Q$

$P * Q \quad \Rightarrow \quad P \leq Q$

130. (b) $H @ T \; - \; H > T$

$T \# F \; - \; T < F$

$F \& E \; - \; F = E$

$E * V \; - \; E \leq V$

$H > T < F = E \leq V$

Conclusion I : $V \$ F \Rightarrow V \geq F \Rightarrow$ True

Conclusion II : $E @ T \Rightarrow E > T \Rightarrow$ True

Conclusion III : $H @ V \Rightarrow H > V \Rightarrow$ False

Conclusion IV : $T \# V \Rightarrow T < V \Rightarrow$ True

131. (e) $D \# R - D < R$

$R * K - R \leq K$

$K @ F - K > F$

$F \$ J - F \geq J$

$D < R \leq K > F \geq J$

Conclusion I : $J \# R \Rightarrow J < R \Rightarrow$ False

Conclusion II : $J \# K \Rightarrow J < K \Rightarrow$ True

Conclusion III : $R \# F \Rightarrow R < F \Rightarrow$ False

Conclusion IV : $K @ D \Rightarrow K > D \Rightarrow$ True

132. (e) $N \& B = N = B$

$B \$ W = B \geq W$

$W \# H = W < H$

$H * M = H \leq M$

$N = B \geq W < H \leq M$

Conclusion I : $M @ W \Rightarrow M > W \Rightarrow$ True

Conclusion II : $H @ N \Rightarrow H > N \Rightarrow$ False

Conclusion III : $W \& N \Rightarrow W = N \Rightarrow$ True $\rceil$ Either

Conclusion IV : $W \# N \Rightarrow W < N \Rightarrow$ True $\rfloor$

133. (b) $R * D - R \leq D$

$D \$ J - D \geq J$

$J \# M - J < M$

$M @ K - M > K$

$R \leq D \geq J < M > K$

Conclusion I : $K \# J \Rightarrow K < M \Rightarrow$ True

Conclusion II : $D @ M \Rightarrow D > M \Rightarrow$ False

Conclusion III : R # M ⇒ R < M ⇒ False
Conclusion IV : D @ K ⇒ D > K ⇒ False

134.	(e)	135.	(c)	136.	(d)	137.	(c)	138.	(a)
139.	(b)	140.	(e)	141.	(a)	142.	(d)	143.	(a)

144. (b)

145. (e)   Here, Q < R < M ≤ D or D ≥ M > R > Q
   Now,   I. D © R ⇒ D > R   (True)
         II. D © Q ⇒ D > Q   (True)

146. (a)   Here, M < K > R > P
   Now,   I. P @ K ⇒ P < K   (True)
         II. P @ M ⇒ P < M   (False)

147. (e)   Here, T > M = P > R
   Now,   I. R @ T ⇒ R < T   (True)
         II. T © R ⇒ T > R   (True)

148. (d)   Here, P < Q > K < M
   Now,   I. M = Q ⇒ M = Q   (False)
         II. M © Q ⇒ M > Q   (False)

149. (b)   Here, P ≥ F > N, M < F
   Now,   I. M © P ⇒ M > P   (False)
         II. N @ P ⇒ N < P   (True)

150. (d)   P = A < R < M ⇒ P < M

151. (d)   A ≥ B ≤ C < D > F
   Conclusions
   I.   F > B : Not True
   II. A > D : Not True

152. (e)   P > X > Y = Q ≥ Z
   Conclusions
   I.   Z < P : True   II. P > Q : True

153. (b)   L ≥ I; H > I ≥ J > K
   Conclusions
   I.   H > L : Not True
   II. L > K : True

154. (b)   O ≥ P = Q > R : O ≥ P = Q > S
   Conclusions
   I.   R < S : Not True
   II. O > S : True

155. (b)   D ≥ E = H > F = G
   D ≥ E = H < J
   Conclusions
   I.   J > D : Not True
   II. G < J : True

156. (a)   B > J ≥ R > Z
   B > J ≥ R > F < W
   Conclusions
   I.   J > F : True
   II. B > W : Not True

157. (c)   E ≥ F = G ≥ T = I
   Conclusions :
   I.   I < E : True ⎤
   II. I = E : True ⎦ Either
   I is either smaller than or equal to E. Therefore, either conclusion I or II follows.

158. (a)   G > H < T
   I > F
   H > J
   G > H > J
   J < H < T

Conclusions :
   I.   J < G : True
   II. F < H : Not True
   So only conclusion I follows.

159. (b)   V > W < X < Y
   V > W < X < Z
   Conclusions :
   I.   Z > V : Not True
   II. Y > W : True
   So only conclusion II is true.

160. (a)   M > N > P
   O > P
   S < P
   M > N > P < O
   M > N > P > S
   O > P > S
   Conclusions :
   I.   S < M : True   II. O < M : Not True

161.	(a)	162.	(e)	163.	(c)	164.	(a)	165.	(d)

166. (d)

167. (a)   **Statements** W ≥ D < M < P < A = F
   Conclusions
   I.   F > D → It follows.
   II. P < W → It does not follow.
   So, only conclusion I follows.

168. (d)   **Statements** H ≥ M > F < A = B > S
   Conclusions
   I.   H > B → It does not follow.
   II. F < S → It does not follow.
   Neither Conclusion I nor II follows.

169. (b)   **Statements** B > T > Q > R = F
   Conclusions
   I.   Q ≥ F ⇒ It does not follow because Q > F only.
   II. T > F ⇒ It follows.
   Only Conclusion II follows.

170. (b)   **Statements** S = R ≥ Q, P < Q
   ∴ S = R ≥ Q > P
   Conclusions
   I.   S ≥ P ⇒ It does not follow because S ≥ Q and Q > P.
   II. R > P ⇒ It follows.
   Only conclusion II follows.

171. (b)   **Statements** S ≥ M < Y = Z > F > T
   Conclusions
   I.   S > F ⇒ It does not follow.
   II. Y > T ⇒ It follows.
   Only conclusion II follows.

Sol. (172-176) :
   A # B → A < B
   A © B → A > B
   A % B → A = B
   A $ B → A ≥ B
   A @ B → A ≤ B

172. (d)   Z # F,   R @ F,   D © R
         Z < F,   R ≤ F,   D > R
   I.   Z < R (×)
   II. D > Z (×)

Combining the given expressions,

D > R ≤ F > Z

so, neither I nor II is true.

173. (b) R @ D,   D © W,   B @ W
     R ≤ D,   D > W,   B ≤ W
   I.   W < R,
   II.   D > B
     Combining given expressions,

R ≤ D > W ≥ B

     can't compare R and W
     Thus, I doesn't follow.

Again,   R ≤ D > W ≥ B combining

R ≤ D > B
     Thus, B < D and II follows.

174. (b) M © R,   R % D,   D @ N
     M > R,   R = D,   D ≤ N
   I.   M > N
   II.   N ≥ R
     Combining all the given expressions,

M > R   =   D ≤ N
combining

M > R   ≤   N
comparison is not possible

     Thus only II follows.

175. (e) H $ V,   V % M,   K © M
     H ≥ V,   V = M,   K > M
   I.   K > V
   II.   M ≤ H
     Combining all the given expressions,

H ≥ V = M < K
combining

H ≥ V < K
     Thus, I follows.

Again,   H ≥ V = M < K combining

H ≥ M < K
     Thus, II follows

176. (d) K # T,   T $ B,   B @ F
     K < T,   T ≥ B,   B ≤ F
   I.   F ≥ T
   II.   K < B
     Combining all the given expressions,

K < T ≥ B ≤ F

     can't compare T and F

Again,   K < T ≥ B ≤ F

   can't compare K and B
     Therefore, neither I nor II follows.

177. (a) Only conclusion 1 follows
     A < B > C = D > = E (clearly B is greater than E and no relation between A and E.

178. (e) Both conclusion 1 and 2 follow.
     A > B = C < = D = E (clearly A is greater than C and E is greater than or equal to B)

179. (d) Neither conclusion 1 nor 2 follows.
     A = B > = C < = D < E (clearly E is not equal to A and C is not greater than A)

180. (b) Only conclusion 2 follows
     A > = B > = C = D < E (no relation can be made between A and E and clearly E is greater than C)

181. (a) Only conclusion 1 follows
     A > E < C > B = D (clearly C > D and No relation between B and A can be made)

182. (c)   183. (b)   184. (d)   185. (b)   186. (e)
187. (d)   188. (a)   189. (b)   190. (e)   191. (b)
192. (b)   193. (e)   194. (d)   195. (d)   196. (b)

197. (a) P > Q = R < T < S (Both expression true)

198. (e) A = B > C = D < E = F and A = B > C < = D < E = F (F > C true in both cases)

199. (a) T ≤ R > Q > P = S (clearly Q > S and no relation between Q and T)

200. (c) A > N < = K > M < R (no relation between M and N and R and A)

201. (e) A = B > C > D < E and A = B > C > = D < E in both cases B will be greater than D

202. (a) A < B > C = D > = E (clearly B is greater than E and no relation between A and E)

203. (e) A > B = C < = D = E (clearly A is greater than C and E is greater than or equal to B)

204. (d) A = B > = C < = D < E (clearly E is not equal to A and C is not greater than A)

205. (b) A > = B > = C = D < E (no relation can be made between A and E and clearly E is greater than C)

206. (a) A > E < C > B = D (clearly C > D and No relation between B and A can be made)

207. (c) X ≤ W < Z = Y
     Y > W => true
     Z > W => true
     X ≥ Y => false

208. (e) D > E ≥ C < A
     C ≤ D ⇒ False
     A > E ⇒ false
     A > D ⇒ false

209. (d) M < O = P ≥ N
     P ≥ M = false
     N < O ⎤
     N = O ⎦ Either

210. (c) A ≥ C > B = E,   E < C ⇒ true
     B < A ⇒ true,   A ≥ E ⇒ false

211. (b) P ≥ S > R ≤ Q
     Q > S ⇒ false
     R < P ⇒ true
     R = P ⇒ false

Sol. (212-214) :
212. (d) Either I. Y < N   or   II. Y = N
213. (a) J > L is true.
214. (e) None is true.

215. (e) I. R > X (True)
II. X < W (True)
So, Both conclusion I and II follow.
216. (a) I. H > I (True)
II. E > I (False)
So, Only conclusion I follows.
217. (a) I. C < A (True)
II. B > D (False)
Only conclusion I follows.
218. (c) I. K < P or
II. K = P
Either conclusion I or II follows.
219. (b) I. K ≤ G (False)
II. K > D (True)
So, Only conclusion II follows.
220. (d) V ≤ W < R ≥ N = S ≥ M
Check for I. V≤W < R ≥N = S ≥ M

combining
So, option I is not true for the given conditions.
Check for II. V≤W < R≥N = S≥M

combining
So, option II is also not true alone.
Option III is also not true alone.
Option (IV). V≤W < R≥N = S≥M

combining
So, either 'R > N' or 'R = N' holds true.
221. (b) V ≥ W ≥ T ≤ U = S ≥ R > M > X
From option (I)
V ≥ W ≥ T ≤ U = S ≥ R > M > X

combining
So, V ≥ T holds true.
V ≥ W ≥ T ≤ U = S ≥ R > M > X

Comparison is not possible
So, W ≥ U is not definitely true in this expression.

Sol. (222-226) :
222. (c) N = P ≤ F ≥ L = K
I. Not follow   II. Not follow
But Either (I) or (II) is true
223. (e) J ≥ C ≥ G ≥ Q = Z ≥ R
I. Follow   II. Follow
224. (d) A > B > C < D > E > F
I. Not follow   II. Not follow
225. (e) L > K > M ≥ N > O
I. Follow   II. Follow
226. (e) E < F ≤ G = H > S
Conclusion I: G > S : True
Conclusion II: F ≤ H : True

Sol. (227-231) :
227. (e) I. E > P (True)
II. R < L (True)

228. (b) I. K > N (False)
II. I < Z (True)
229. (e) I. S > E (True)
II. L < S (True)
230. (c) I. A > M
II. A = M
So, either I or II is true.
231. (d) I. P > N (False)
II. G ≥ Y (false)
So, neither I nor II is true.
232. (c) J = K ≤ L
I. L > J ⎤
II. L = J ⎦ Either
233. (e) I > J = K
I. I > K (true)
Q > K = J
II. Q > J (true)
234. (d) A = M > P, N > R, A > T
I. T = P (false) There is no relation between T and P.
For conclusion II -
A = M > P, N > R
II. R < A (false) - there is no relation between R and A.
Hence, neither conclusion I nor II follows.
235. (b) X = M < A < S = T < R
Conclusions:
For conclusion I h: M < A < S = T
I. M = T (false)
For conclusion II :
A < S = T < R II. R > A (True) - R is greater than A.
Hence, only conclusion II follow.
236. (a) Y > A < N, Y = B < P
P > B = Y > A < N
For conclusion I :
P > B = Y > A
P > Y > A
I. P > A (True) P is greater than A is true.
For conclusion II :
B = Y > A < N
II. N > B (false) There is no relation between N and B.
Hence, only conclusion I follow.

Sol. (237-241):
237. (e) I. A > E (True)   II. F < B (True)
238. (e) I. L > S (True)   II. N ≥ P (True)
239. (c) I. F > D (False)   II. D ≥ F (False)
240. (d) I. P < S (False)   II. Q ≤ T (False)
241. (b) I. L > P (False)   II. L > Q (True)
242. (c) I. O < R (false)   II. P > Q (false)
243. (b) I. F < M (True)   II. R > P (false)
244. (c) I. O ≥ Q (false)   II. J > Q (false)
245. (d) I. T ≥ L (True)   II. G > F (True)
246. (d) I. J < B (True)   II. H < R (false)

247. (d)   248. (c)
Sol. (249-253) :
249. (e) M ≤ N < O ≤ P ≤ R ≤ S
I. O ≤ S   (True)
II. M < R   (True)

250. (b) $B \le L > P = Q \Rightarrow B > Q$ (False)
$L > P = Q \Rightarrow L > Q$ (True)
251. (d) $N \ge M \ge T = L \Rightarrow N = L$ (False)
$N \ge M \ge T \Rightarrow T > N$ (False)
252. (a) $E \ge D = C \ge F = G \Rightarrow G \le E$ (True)
$A > B \le C \ge F = G > H \Rightarrow A > H$ (False)
253. (b) $P = M < O = N \Rightarrow P > N$ (False)
$N = O \ge Q \Rightarrow N \ge Q$ (True)

Sol. (254-255) :
254. (d) Only I and II follow
$R > Y (Y < N \le K < R)$ TRUE
$Q \ge D (D \le N \le K < Q)$ TRUE
$S > Y (Y < N \le K > S)$ FALSE
255. (d) Only I and II follow
$S < D (S > m > W \le V < D)$ FALSE
$T < B (T > M > W \le V \le B < E)$ FALSE
$D > W (W \le V < D)$ TRUE

Sol. (256-258):
256. (e) I. $T < Q$ (True)
II. $V > T$ (True)
257. (a) I. $B > A$ (True)
II. $G < C$ (False)
258. (b) I. $H \le E$ (False)
II. $C < A$ (True)
259. (b) I. $U \% X$ (False)
II. $X ® Z$ (True)
260. (b) I. $A \times D$ (False)
II. $D ® B$ (True)
261. (a) I. $O ® M$ (True)
II. $S \times N$ (False)
262. (a) I. $B ® G$ (True)
II. $G @ B$ (False)
263. (a) I. $P ® M$ (True)
II. $J \times K$ (False)
264. (c) $D \le L = F \le R \le M = P \ge T$
Conclusion: I: $D \le L = F \le R \le M = P$
$P = D$ (False)
II. $D < P$ (False)
But it is a complimentary pair so, either conclusion I or II follows.
265. (a) $X > B = S \ge K < I \le M \le C$
Conclusion: I. $X > B = S \ge K$
$K < X$ (True)
Conclusion: II. $B = S \ge K < I$
$B > I$ (False)
So, only conclusion I follows.
266. (a) $E < O \le K = S > A \ge P \ge T$
Conclusion: I. $K = S > A \ge P \ge T$
$T < K$ (True)
Conclusion: II. $E < O \le K = S > A$
$E < A$ (False)
So, only conclusion I follows.
267. (d) $G \le B = H \le C = D \ge S > T$
Conclusion: I. $B = H \le C = D \ge S$
$S \ge B$ (False)

Conclusion: II. $G \le B = H \le C = D \ge S > T$
$G > T$ (False)
So, neither conclusion I nor II follows.
268. (a) $J \ge O = T \ge E > K \ge G > P$
Conclusion: I. $O = T \ge E > K \ge G$
$G < O$ (True)
Conclusion: II. $J \ge O = T \ge E > K$
$J \ge K$ (False)
So, only conclusion I follows.

Sol. (269-270):
269. (d) None follows
$X < C = N \le Q$ gives only $X < Q$ so $X \le Q$ false
$X < C = N \le Q > A$ So relation between A and X cant be determined.
$K \ge X < C = N$ so $N < K$ is false
270. (d) Only I either II or III follows
$W < U \le A = T$ so $T > W$ is true
$A = T \ge V \ge S$ so A=S and $S < A$ is a complementary pairs so, either II and III follows

Sol. (271-274):
271. (a) $Q < R \le M = L > W \le V > Z$

I. $Q < R \le M = L$ $L > Q$ (True)

II. $R \le M = L > W$ $W > R$ (False)

272. (b) $P \ge Q > D = F < R \le S$

I. $Q > D = F < R$ $Q > R$ (False)

II. $D = F < R \le S$ $D < S$ (True)

273. (c) $A = E \ge H \ge C < S \le B$

I. $A = E \ge H \ge C$ $(C < A)$

either conclusion I or II follows.

II. $A = E \ge H \ge C$ $(A = C)$

274. (d) $Y \ge N = O > P \le R > T$

I. $Y \ge N = O > P \le R$ $R < Y$ (False)

II. $N = O > P \le R$ $N < R$ (False)

Sol. (275-277):
275. (a) $G = F \le C = D \le E$
I. $G \le E$ (True)
$A > B \le C \ge F = G > H$
II. $A > H$ (False)
276. (d) $V = U \le T > S$
I. $V > S$ (False)
$B < V = U \le T \le H$
II. $B \le H$ (False)
277. (b) $O > Y > T \le G$
I. $G > Y$ (False)
$Q > T > R \ge A$
II. $A < Q$ (True)