

Directions (Q1-5): In the following questions, the symbols @, ©, #, \$ and * are used with the following meaning illustrated.

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

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

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

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

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

Q1. Statement:

$U * V, V @ W, W \% Z$

Conclusions:

I. $Z @ U$ II. $W \# U$

III. $Z \# V$

- (A) Only I and II are true
- (B) Only II and III are true
- (C) Only I and III are true
- (D) All are true
- (E) None of these

Q2. Statement:

$N \% R, R \# Q, Q © S$

Conclusions:

I. $N @ Q$ II. $R © S$

III. $S @ R$

- (A) Only I is true
- (B) Only II is true
- (C) Only III is true
- (D) Only I and II are true
- (E) None of these

Q3. Statements:

$A © B, B \# C, C * D$

Conclusions:

I. $D @ B$ II. $D \% A$

III. $C * A$

- (A) Only I is true
- (B) Only II is true
- (C) Only III is true
- (D) Only I and II are true
- (E) All are true

Q4. Statements:

$U @ P, P \# S, S © V$

Conclusions:

I. $S \# V$ II. $S \% U$

III. $V * P$

- (A) Only I is true
- (B) Only II is true

(C) Only III is true

(D) Only I and II are true

(E) None is true

Q5. Statement:

$P * Q, Q @ S, S \% V$

Conclusions:

I. $V \# Q$ II. $S \# P$

III. $P @ V$

- (A) Only I is true
- (B) Only I and II are true
- (C) Only II and III are true
- (D) Only I and III are true
- (E) All are true

Directions (Q6-10): Read the instructions and answer the following question:

$X \$ Y \Rightarrow X$ is not smaller than Y.

$X @ Y \Rightarrow X$ is neither greater than nor equal to Y.

$X * Y \Rightarrow X$ is neither smaller than nor equal to Y.

$X \% Y \Rightarrow X$ is not smaller than or greater than Y.

$X \neq Y \Rightarrow X$ is not greater than Y.

Q6. Statements:

$A \neq B, B \% C, D * C$

Conclusion:

I. $A @ C$ II. $D * A$

- (A) Only statement I is true.
- (B) Only statement II is true.
- (C) Either statement I or II is true
- (D) Neither I nor II is true.
- (E) Both I and II are true.

Q7. Statement:

$A * B, B @ C, D \% A$

Conclusions:

I. $C * D$ II. $D * B$

- (A) Only statement I is true.
- (B) Only statement II is true.
- (C) Either statement I or II is true
- (D) Neither I nor II is true.
- (E) Both I and II are true.

Q8. Statements:

$A \% B, C @ A, D \neq C$

Conclusions:

I. $B * D$ II. $C @ B$

- (A) Only statement I is true.
- (B) Only statement II is true.
- (C) Either statement I or II is true
- (D) Neither I nor II is true.
- (E) Both I and II are true.

Q9. Statements:

$A \neq B, B * C, D \neq A$

Conclusion:

I $B * D$ II $C \neq D$

- (A) Only statement I is true.
- (B) Only statement II is true.
- (C) Either statement I or II is true
- (D) Neither I nor II is true.
- (E) Both I and II are true.

Q10. Statements:

$A \% B, C \neq B, D @ B$

Conclusions:

I. $C \% A$ II. $A * C$

- (A) Only statement I is true.
- (B) Only statement II is true.
- (C) Either statement I or II is true
- (D) Neither I nor II is true.
- (E) Both I and II are true.

Directions (Q11-15) study the following instructions carefully and answer the below:

Q11: Statements: $P \geq Q; R > G; P \geq J; Q \geq R$

Conclusions:

I. $R > J$ II. $J > Q$ III. $Q > G$

- (A) only I follows
- (B) only II follows
- (C) only III follows
- (D) either I or II follows
- (E) neither I nor II follow

Q12: Statements: $W=V; C \leq F; K > C; V < F$

Conclusions:

I. $F < V$ II. $F > K$ III. $W > K$

- (A) only I follows
- (B) only II follows
- (C) only III follows
- (D) either I or II follows
- (E) None follows

Q13: Statements: $D \leq N, C \geq N; C > M; O \leq M$

Conclusions:

I. $C \geq D$ II. $C \geq O$ III. $N > M$

- (A) only I follows
- (B) only II follows
- (C) only III follows
- (D) only I and II follows
- (E) None follows

Q14: Statement : $X \geq Y > A < S \leq B$

Conclusion:

I. $B > A$ II. $B > Y$ III. $A < X$

- (A) only I follows

(B) only II follows

(C) only III follows

(D) only I and III follows

(E) either I or II follows

Q15: Statements : $F < E < G < J \leq I$

Conclusion:

I. $I \geq G$ II. $F < G$ III. $I > F$

- (A) None follows
- (B) All follows
- (C) only I follows
- (D) Only II follows
- (E) Only III follows

Direction (16-21): Relationship between different elements is shown in the statements.

Find if the conclusions also follow or not.

Q16. Statements: $H \geq O = U \geq B < L = P; D < N =$

$B \geq S > K$

Conclusions:

I. $K < L$ II. $H \geq K$

- (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

Q17. Statements: $B < N = T \geq G > H = F; G > L =$

$D > V; L > W = A$

Conclusions:

I. $A < H$ II. $V < B$

- (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

Q18. Statements: $F \geq V = T \geq G < L \leq D = S; E = Q$

$< T \leq N; Q > P = W$

Conclusions:

I. $D > N$ II. $F > W$

- (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

Q19. Statements: $N > D \geq F > J; E < L \leq G < S < P$

$< F; G > W$

Conclusions:

I. $W < J$ II. $J \leq W$

- (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

Q20. Statements: $H > L = G \geq S < L \leq W$; $S > W > P = R \leq V$; $P < X = O$

Conclusions:

- I. $W > R$ II. $O > R$
 (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

Q21. Statements: $V < E = D = W \geq L$; $F \geq S = D < K$; $L \geq R = H \geq B$

Conclusions:

- I. $B < S$ II. $B = S$
 (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

Q22. Which of the following would replace % and # in the following expression so that $A \leq B$ holds true?

$Q < D \% S \geq A = W$; $B \geq P \# D = Z > X$

- (A) $>, \leq$
 (B) $\geq, >$
 (C) \geq, \geq
 (D) $>, =$
 (E) None of these

Q23. In which of the following expressions does the expression ' $B \leq H$ ' and ' $A > G$ ' definitely hold true?

- (A) $A = B < F \geq H = K > G > D$
 (B) $D > A = G \geq B = F \leq G < H$
 (C) $A < O > G < H = H \geq S \geq B$
 (D) $G = U \leq B = E \leq H = O < A$
 (E) None of these

Q24. In which of these expression ' $L > P$ ' is definitely false?

- (A) $W < P \geq S \geq Q < N > A \geq L > V$
 (B) $N > L > M = D \geq B = A > P = R$
 (C) $M \leq A > L > W \geq V \leq B = P < S$
 (D) $S > L = C \geq H = H \geq P \leq Q = T$
 (E) $B > L \leq A = M < Q \leq T = P < G$

Q25. In which of these expression ' $A \leq P$ ' is definitely false?

- (A) $W < P \geq S \geq Q < N > A \geq R > V$

- (B) $N > A > M = D \geq B = L > P = R$
 (C) $M \leq A > L > W \geq V \leq B = P < S$
 (D) $S > A > = C \leq H = P \leq Q = T = K$
 (E) $B > L \leq A > M \geq Q < T > P < G$

Directions (Q26-31) study the following instructions carefully and answer the below:

Q26. Statements: $A > L \geq H > M = D < G \leq F$; $U \leq K = P > M$; $N = K < S$

Conclusions:

- I. $A > S$ II. $A = S$
 (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

Q27. Statements: $B < G \leq V = F > H$; $K = L > F \leq N = P$; $D > N = S$

Conclusions:

- I. $H < S$ II. $B < P$
 (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

Q28. Statements: $V < L = D < K \geq H > S$; $P \leq K = D > E$; $K = F \leq Z$

Conclusions:

- I. $Z > L$ II. $E < V$
 (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

Q29. Statements: $K = L < D \leq G = P$; $U > E = D \geq X \leq B$; $P > O \geq V < S$

Conclusions:

- I. $V < X$ II. $P \geq X$
 (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

Q30. Statements: $K = L < D \leq G = P$; $U > E = D \geq X \leq B$; $P > O \geq V < S$

Conclusions:

- I. $U > K$ II. $P > B$
 (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

Q31. Statements: $B < G \leq V = F > H$; $K = L > F \leq N = P$; $D > N = S$

Conclusions:

- I. $L > G$ II. $D > K$

- (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

Q32. Which of the following would replace & and # in the following expression so that ' $A > N$ ' holds true?

$A > L \geq H \& M = D < G \leq F$; $U \leq K = M > P$; $N \# K < S$

- (A) =, =
 (B) \geq , >
 (C) \geq , \geq
 (D) <, =
 (E) None of these

Q33. In which of the following expressions does the expression ' $G < S$ ' definitely hold true?

- (A) $A = S < F \geq H = K > G > D$
 (B) $D > A = G \geq B = F \leq S < H$
 (C) $A < O > G < H = H < S \geq B$
 (D) $G = U \leq B = S \leq H = O < A$
 (E) None of these

Q34. In which of these expressions ' $L \geq R$ ' is definitely false?

- (A) $W < R \geq S \geq Q < N > A \geq L > V$
 (B) $N > L > M = D \geq B = A > P = R$
 (C) $M \leq A > L > W \geq V \leq B = P < R$
 (D) $S > L = C \geq H = V \geq P \leq R = T$
 (E) $B > R \leq A = M = Q \leq T = L < G$

Q35. Which of the following expressions is definitely false if the expression $K > O = G \leq D > F = P \geq Q < T$ is definitely true?

- (A) $K > D$
 (B) $F \geq T$
 (C) $F < G$
 (D) $D = Q$
 (E) $P < O$

Direction (36-40): In the following questions, the symbols #, *, %, @ and © are used with the following meaning:

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

'P @ Q' means 'P is not greater than or equal to Q'.

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

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

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

Q36. Statements: $R \text{ © } K$, $K \# M$, $M * J$

Conclusions:

- I. $J \# K$, II. $M \text{ @ } R$

- (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

Q37. Statements: $W \text{ © } K$, $K \# R$, $R \% N$

Conclusions:

- I. $N \text{ @ } K$ II. $W \# N$

- (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

Q38. Statements: $D \text{ @ } K$, $K \% F$, $F \text{ © } B$

Conclusions:

- I. $F \# D$, II. $B \% K$

- (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

Q39. Statements: $R \# B$, $B \text{ © } N$, $N \text{ @ } T$

Conclusions:

- I. $T \# B$, II. $N \text{ @ } R$

- (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

Q40. Statements: $H * W$, $W \text{ @ } N$, $N \% R$

Conclusions:

- I. $R \# W$,

- II. $H * R$

- (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.

Q41. 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 'X > V' and 'Z < W' definitely holds true? X > U ≥ Z ? V ? T ≤ W

- (A) >, <
- (B) =, =
- (C) =, <
- (D) >, =
- (E) ≥, ≤

Q42. Which of the following expressions is definitely true if the expressions M < T and P > R are definitely false?

- (A) K > M = R > S ≤ T = P
- (B) M ≥ K > R = S < T ≤ P
- (C) K > M = R < S ≤ T = P
- (D) R = S ≤ P > T ≥ M = K
- (E) None of these

Q43. 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 'T > R', 'P < S' and 'R ≤ M' definitely holds true? T > S ? C ≥ R ? P ? M

- (A) >, >, <
- (B) >, =, <
- (C) ≥, =, ≤
- (D) >, =, ≤
- (E) Other than those given as options

Q44. If the expressions M > Y ≥ N and Y < K, N = S are true. which of the following expressions is not definitely true?

- (A) S < M
- (B) M ≥ K
- (C) K > S
- (D) N < K
- (E) None of these

Q45. Which of the following expressions will definitely be true if the expressions 'X < Y = W' and 'Y > V' are true?

- (A) X = Z = W ≤ T < Y ≥ R > V
- (B) X ≤ Z < Y = W ≥ R > V
- (C) X ≥ Z = Y > W < R > V
- (D) X = Z > Y ≥ W = R > V
- (E) None of these

Direction (46-50): Relationship between different elements is shown in the statements. Find if the conclusions also follow or not.

Q46. Statements: A > B ≥ F = P < L < G; F = E > M ≥ S; M ≤ D = U

Conclusions:

- I. A > M
- II. D < L
- (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

Q47. Statements: L < G ≤ D > P = E > R; S > D < W = J; M ≥ K ≥ Y > J

Conclusions:

- I. R < S
- II. M > E
- (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

Q48. Statements: P ≤ D = O < M ≤ B; L ≥ S = E > P; M ≤ L ≥ C = R

Conclusions:

- I. D ≥ L
- II. L > D
- (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

Q49. Statements: K = F > S < V ≤ E; N = P < V ≤ M = Q; G > N ≥ X = B

Conclusions:

- I. E ≥ B
- II. E < B
- (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

Q50. Statements: A = S > D ≥ F < G; D < H ≤ P > K; R > L = P ≥ U

Conclusions:

- I. A > L
- II. L < S
- (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

ANSWER KEY (Inequalities)

1(B)	2(C)	3(A)	4(E)	5(E)	6(B)	7(B)	8(E)	9(D)	10(C)
11(C)	12(E)	13(A)	14(D)	15(B)	16(A)	17(D)	18(B)	19(C)	20(E)
21(C)	22(C)	23(D)	24(E)	25(B)	26(D)	27(E)	28(B)	29(B)	30(A)
31(A)	32(A)	33(C)	34(B)	35(D)	36(B)	37(E)	38(A)	39(B)	40(A)
41(C)	42(D)	43(D)	44(E)	45(B)	46(A)	47(E)	48(B)	49(D)	50(D)

