

INEQUALITIES

Directions (1-10): 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 follow**
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 or II follow

- Statement: $B \geq E < N < Q < R = S$
 Conclusions:
 I. $S > E$
 II. $Q < B$
- Statement: $P \geq Q > R < E = G > N$
 Conclusions:
 I. $P > G$
 II. $R > N$
- Statement: $A > S > P > O = E$
 Conclusions:
 I. $P \geq E$
 II. $S > E$
- Statement: $A = B \geq C, D < C$
 Conclusions:
 I. $A \geq D$
 II. $B > D$
- Statement: $P \geq R < Q = D > E > O$
 Conclusions:
 I. $P > E$
 II. $Q > O$
- Statements: $Q \geq R, P > R, P = O \geq T, S \geq U > Q$
 Conclusions:
 I. $S \geq R$ II. $P < T$ III. $Q < T$ IV. $U > R$
 A. Only I is true B. Only II is true
 C. Only III is true D. Only IV is true
 E. All are true
- Statements: $E < D, F > C, D < F, C \geq A = B$
 Conclusions:
 I. $A < E$ II. $F > B$ III. $E > C$ IV. $B > C$
 A. Only I is true B. Only II is true
 C. Only III is true D. Only IV is true
 E. All are true
- Statements: $O = R, P = N > I, M \geq R, N > M$
 Conclusions:
 I. $O < I$ II. $R < N$ III. $N < I$ IV. $O = I$
 A. Only II is true B. Only III is true
 C. None is true D. Either I or IV and II are true
 E. All are true
- Statements: $P < A > S, B = Q > T, S \leq M < T$
 Conclusions:
 I. $P < T$ II. $S \leq T$ III. $M < Q$ IV. $B = M$
 A. Only I is true
 B. Only II is true
 C. Only III is true
 D. Only IV is true
 E. All are true
- Statements: $G \leq J < I, N \geq K = H, N = F > G$
 Conclusions:
 I. $H < G$ II. $G < I$ III. $K = G$ IV. $K < G$
 A. Only II and IV is true

- B. Only II and III is true
 C. None is true
 D. Either III or IV and II are true
 E. All are true

Directions: (11-13): In the following questions, the symbols @, \$, #, © 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 # 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.

- Statements: $R \# J, J \$ D, D @ K, K \% T$
 Conclusions:
 I. $T \# D$ II. $T @ D$
 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

- Statements: $T \% R, R \$ M, M @ D, D © H$
 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 I and III are true
 (d) Only II and IV are true
 (e) None of these

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

Direction (14-15): Study the following information to answer the given questions
 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 equal to B
 A&B means A is neither greater than nor smaller than B
 A*B means A is not greater than B

- Statements: $O \& A, A \$ R, R \# S, S * Q$
 Conclusions:
 I. $Q @ R$ II. $S @ O$
 III. $R \& O$ IV. $R \# O$
 A. Only I is true B. Only III is true
 C. Only IV is true D. Either III or IV is true
 E. Either III or IV and I are true

15. Statements: $A * E$, $E \$ F$, $F \# O$, $O @ L$

Conclusions:

I. $L \# F$

II. $E @ O$

III. $A \# O$

IV. $E @ L$

A. None is true

B. Only I is true

C. Only II is true

D. Only III is true

E. Only IV is true

Direction: Question (16-18): In the following Questions, \$, *, %, @ 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 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

16. Statement: $X * W$, $W @ Z$, $Z \% Y$

Conclusion:

I. $Y \$ W$

II. $Z \$ W$

III. $X © Y$

A. Only I is true

B. Only II is true

C. Both I and II are true

D. Both I and III are true

E. None is true

17. Statement: $D \$ E$, $E © C$, $C @ A$

Conclusion:

I. $C * D$

II. $A \$ E$

III. $A \$ D$

A. Only I is true

B. Only II is true

C. Both I and II are true

D. Both I and III are true

E. None is true

18. Statement: $M @ O$, $O \% P$, $P © N$

Conclusion:

I. $P © M$

II. $N @ O$

III. $N \% O$

A. Only I is true

B. Only II is true

C. Both II and III are true

D. Either II or III is true

E. None is true

19. What should come in place of blank spaces to make $L \leq H$ and $I > K$ always true in the expression $L_K_H_I_J$.

A. =, ≤, <, >

B. <, ≥, >, <

C. >, >, =, =

D. ≥, <, >, ≤

E. None of these

20. What should come in place of question mark in the given expression so as to make $B > C$ always false? $B > D ? F = A \geq C$

A. =

B. >

C. >=

D. <

E. can't be determined

21. In which of these expressions ' $I > K$ ' be definitely false?

A. $I > P \geq Q = G \geq R > K$

B. $P < A \leq I \leq T; K \geq O > T$

C. $K \leq A \leq L = R < I$

D. $I > C \geq F \leq H; K < F$

E. $I > T = O \geq P; K < J = P$

22. 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 ' $F > N$ ' as well as ' $N \leq B$ '

definitely holds true? $B_A_N_E_F$

A. >, ≥, <, =

B. >, >, ≥, <

C. ≥, ≥, ≥, ≤

D. ≥, =, ≤, <

E. Other than those given as options

23. In Which of the following expressions does the expression ' $I \geq D$ ' to definitely hold true?

A. $K \geq I \leq R = P < S \leq D$

B. $U \geq D \geq M = F \leq A \geq I$

C. $I \geq C \geq Q \geq B = N \geq D$

D. $G \geq I = A < B \leq S \leq D$

E. $D \geq E = G \geq W = Y \geq I$

24. Which of the following expressions is true if the expression $P < T \leq B > S > M \geq E$ is definitely true?

A. $E \leq P$

B. $S < P$

C. $M > P$

D. $E < S$

E. $T \leq M$

25. In which of these expressions ' $U > W$ ' be definitely false?

A. $U > P \geq Q = G \geq R > W$

B. $P < A \leq U \leq T; W \geq O > T$

C. $W \leq A \leq L = R < U$

D. $U > C \geq F \leq H; W < F$

E. $U > T = O \geq P; W < J = P$

26. In Which of the following expressions does the expression ' $D = V$ ' to definitely hold true?

A. $K \geq D \leq R = P < S \leq V$

B. $U \geq V \geq M = F \leq A \geq D$

C. $D \geq C > Q \geq B = N \leq V$

D. $G \geq D = A < B \leq S \leq V$

E. $V \geq E = G \geq W = Y \geq D$

27. Which of the following expressions is true if the expression $P < T \leq B > S > M \geq A$ is definitely true?

A. $A \leq P$

B. $S < P$

C. $M > P$

D. $A < B$

E. $T \leq M$

28. 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 ' $B > S$ ' as well as ' $E \leq F$ ' definitely holds true? $B_A_S_E_D_F_G$

A. >, ≥, <, =, <, <

B. >, >, ≥, <, >, =

C. ≥, ≥, ≥, ≤, >, >

D. >, =, ≥, =, ≤, =

E. Other than those given as options

29. In Which of the following expressions does the expression ' $L = T$ ' and ' $E \geq W$ ' to definitely hold true?

A. $E \geq W \leq R = P < S \leq T$

B. $U \geq T \geq M = W \leq E \geq L$

C. $L \geq C > E \geq W = N \leq T$

D. $E \geq W = A < B \leq S \leq T$

E. $T \geq E = G \geq W = Y \geq L$

30. In which of these expressions ' $T > P$ ' and ' $T = P$ ' be definitely false?

A. $T \geq S \geq P \geq Q = G \geq R > V$

B. $P < A \leq S \leq T; V \geq O > T$

C. $V \leq A \leq L = R < S$

D. $S > C \geq F \leq H = P \leq Q = T; V < F$

E. $S > T = O \geq P; V < J = P$

Answer Key

1. A	2. D	3. B	4. B	5. B	6. D	7. B	8. B	9. C	10. D
11. D	12. A	13. C	14. E	15. A	16. C	17. E	18. D	19. A	20. E
21. B	22. D	23. C	24. D	25. B	26. E	27. D	28. D	29. E	30. C