

# Inequality

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

**Q1** Statements:  $R > S > T$ ;  $R > F > B$ . Conclusions: I.  $B > S$  II.  $F < T$

**Q2** Statement:  $W > D \geq C = X < A < Z \leq F$  Conclusion: I.  $Z > C$  II.  $X < W$

**Q3** Statement:  $L \geq M = N < O$ ,  $P < Q \geq R = S \geq L$  Conclusion: I.  $Q > M$  II.  $N = Q$

**Q4** Statements:  $D \geq E > F = A \leq U < L \geq T = R$  Conclusions: I.  $F < L$  II.  $D > A$

**Q5** Statements:  $J \geq N \leq T$ ;  $T = S > R$ ;  $K > V \geq J$  Conclusions: I.  $V \geq N$  II.  $K > J$

**Q6** Statement:  $C \geq J = K \geq R$ ;  $J \leq U < P$  Conclusions I:  $K \leq U$  II:  $C < P$

**Q7** Statement:  $F > D < I \leq E = J$ ;  $G \leq H \leq D$  Conclusions I :  $G \leq I$  II:  $E > G$

**Q8** Statements:  $A \geq B > C \leq D \leq E < F$  Conclusions: I.  $A \geq E$  II.  $C < F$

**Q9.** Statements:  $G > R \geq E = A \leq T \leq S$ ;  $D \leq A \leq J$  Conclusions: I.  $T \geq D$  II.  $R > J$

**Q10** Statements:  $S \leq L \leq I = P \geq E > R$ ;  $L < O$  Conclusions: I.  $P \geq S$  II.  $O > R$

**Q11** Which of the following expressions is definitely true if the expressions  $A \leq B$  and  $C \geq D$  are definitely true?

- a)  $A = D \leq E = C \geq B$
- b)  $B = C \geq E \leq A = D$
- c)  $A \leq D = E \leq C = B$
- d)  $B = C \geq E = D > A$
- e)  $A \leq C < E = B \leq D$

**Q12** Which of the following set of symbols should be placed in the place of question marks respectively (in the same order from left to right) in order to complete the given expression in such a manner that  $S < L$  as well as  $T \leq M$  are definitely true ? ? < ? = ?  $\leq$  ? < ?

- a) S, T, N, M, L
- b) S, M, N, T, L
- c) L, T, N, M, S

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d) L, M, S, N, T

e) None of these

**Q13** Which of the following pair of symbols should be placed in place of question marks respectively (from left to right ) in order to complete the given expression in such a manner that  $P \geq R < U$  is definitely true?  $U > T ? S = R ? Q \leq P$

a)  $\geq, <$

b)  $>, \leq$

c)  $\leq, \leq$

d)  $>, <$

e) None of these

**Q14** If  $G \geq L = A > N \leq C < E$  which of the following is definitely false?

a)  $N > G$

b)  $E > N$

c)  $G > A$

d)  $A = G$

e)  $G > L$

**Q15** In Which of the following expressions does the expression " $T > G$ " definitely hold true?

a)  $A \geq T \leq G = P < K \leq M$

b)  $S \geq T \geq V = G \leq B \geq K$

c)  $T \geq L = M \geq S = G \leq Y$

d)  $G < A = K < T \leq S \leq L$

e)  $L \geq B = G \geq N = Y \geq T$

**Q16** . Which of the following expressions will be true if the given expression " $K > T \geq V < S = L \leq O$ " is true ?

a)  $T > L$

b)  $L = T$

c)  $K < S$

e) -Either (a) or (b)

**Q17** If the expressions, " $Q > R, S < Q$  and  $S \geq P = U \geq T$ " are true then, which of the following combinations will be definitely true?

a)  $T < Q$

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b)  $U > R$

c)  $T = S$

d)  $Q \geq T$

e) None of these

**Q18** If the expressions, " $\$ > ^ > \%$ ,  $\% > \& = \#$  and  $\# \leq * < @$ " are true then which of the following combinations will be definitely false?

a)  $\$ > \#$

b)  $\& < @$

c)  $\% > *$

d)  $\# < ^$

e) None of these

**Q19** Which of the following would replace  $\$$  and  $\&$  in the following expression so that  $U \geq P$  holds true?  
 $Q > R \$ S = U \geq W; T \leq P \& R = V < X$

a)  $>, \leq$

b)  $\geq, \geq$

c)  $\leq, \leq$

d)  $< \geq$

e) N. O .T

**Q20** In the expression " $F \leq T < R = P$ "; " $S \leq T > A$ " are true, which of the following conclusions is definitely false?

a)  $P > F$

b)  $P \leq A$

c)  $S < R$

d)  $P > S$

e)  $R > A$

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## Solution:

**Q1**  $B > S \rightarrow \text{False}$      $F < T \rightarrow \text{False}$     Hence, neither conclusion I nor II is true.

**Q2**  $Z > C \rightarrow \text{True}$      $X < W \rightarrow \text{True}$     Hence, both I and II are true.

**Q3**  $Q > M \rightarrow \text{False}$      $N = Q \rightarrow \text{False}$     Hence, either I or II is true.

**Q4**  $F < L \rightarrow \text{True}$      $D > A \rightarrow \text{True}$     Therefore, both conclusions follow.

**Q5**  $V \geq N \rightarrow \text{True}$      $K > J \rightarrow \text{True}$     Thus, Both I and II are true.

**Q6** I:  $K \leq U \Rightarrow K = J \leq U$  (Option I follows)

II:  $C < P \Rightarrow C \geq J \leq U < P$  (Option II not follows)

Only conclusion I is true

**Q7** I:  $G \leq I$  ( $G \leq H \leq D < I$ ) (Option I not follows)

II:  $E > G$  ( $E \geq I > D \geq H \geq G$ ) (Option II follows)

Only conclusion II is true

**Q8** I.  $A \geq E$  ( $A \geq B > C \leq D \leq E$ ) (Option I not follows)

II.  $C < F$  ( $C \leq D \leq E < F$ ) (Option II follows)

Only conclusion II is true

**Q9** I.  $T \geq D$  ( $T \geq A \geq D$ ) (Option I follows)

II.  $R > S$  ( $R \geq E = A \leq J$ ) (Option II does not follows)

Only conclusion I is true

**Q10** I.  $P \geq S$  ( $P = I \leq L \leq S$ ) (Option I follows)

II.  $O > R$  ( $O > L \leq I = P \geq E > R$ ) (Option II does not follows)

Only conclusion I is true

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**Q11 Answer: C**

$$A \leq D = E \leq C = B$$

Hence, both the expressions  $A \leq B$  and  $C \geq D$  are Definitely true

**Q12 Answer: A**

$$S < T = N \leq M < L$$

Hence,  $S < L$  as well as  $T \leq M$  are definitely true

**Q13 Answer: B**

$$U > T > S = R \leq Q \leq P$$

Hence,  $P \geq R < U$  is definitely true

**Q14 Answer: A**

$$G \geq L = A > N$$

Hence  $G > N$ . So  $N > G$  is false.

**Q15 Answer: D**

From option (d),  $G < A = K < T \leq S \leq L$ , clearly  $T > G$  is True.

**Q16 Answer: D**

From the given expression " $K > T \geq V < S = L \leq O$ ", " $O > V$ " Holds true

**Q17 Answer: A**

$$R < Q > S \geq P = U \geq T$$

Option a:  $T < Q$  (True)

Option b:  $U > R$  (False)

Option c:  $T = S$  (False)

Option d:  $Q \geq T$  (False)

**Q18 Answer: C**

Combining the expressions we get,  $\$ > ^ > \% > \& = \# \leq * < @$

Option a:  $\$ > \#$  (True)

Option b:  $\& < @$  (True)

Option c:  $\% > *$  (False)

Option d:  $\# < ^$  (True)

**Q19 Answer: C**

Placing  $\$$  as  $\leq$  and  $\&$  as  $\leq$  we get  $T \leq P \leq R \leq S = U$

Which satisfies the condition  $U \geq P$ .

**Q20 Answer: B)**

Given expression " $F \leq T < R = P$ "; " $S \leq T > A$ "

Option a:  $P > F$  (True)

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Option b:  $P \leq A$  (False)

Option c:  $S < R$  (True)

Option d:  $P > S$  (True)

Option e:  $R > A$  (True)