

## **Logical Reasoning- INEQUALITIES**

Directions (1 – 5): Study the following information and answer the questions below: P& Q - P is neither smaller than nor equal to Q P@Q - P is neither greater than nor equal to Q P\*Q - P is not smaller than Q P\$Q - P is not greater than Q P%Q - P is neither greater than nor smaller than Q a) Only conclusion 1 follow b) Only conclusion 2 follow c) Either 1 or 2 follow d) Both follow e) Neither conclusion 1 nor 2 follow **^ 1).**Statement: **♪**\*B, B&E( F&E**.**\F\*D Conclusion; 1) A&E 🔌 🗚 D 2).Statements: A%B, B&C, C\*D, D\$E  $A = B > C > D \leq E$ Conclusion: 1/) A& C 2/ B \* D **ϼ•3).**A % B, C& B, C \* D, E@D A = B < C7) D> E onclusions: 1) C % D 2) C& D • **4).**A&B, B @ C, C \$ D, E&D A 7B L C > D7 Conclusion: 1) E&A 2) B\*E **5).**A\*B, B\$C, C&D, D\*E Conclusion:1) & D, 2 E@C Directions (6 – 10): Answer the following questions with these options: (A) only 1st follows (B) only 2nd follows (C) either 1st or 2nd (D) neither 1st nor 2nd (E) both 1st and 2nd **6).** Statements:  $K > B \le G = A$ ,  $G \le P \le Q$ ,  $A \le M$ Conclusions: I. Q > MII.  $Q \leq M$ 7). Statements:  $Q \ge P > K$ , P > F < C, A > WConclusions: I. Q> F II. A > C



8).Statements:  $Q > V < B \le P$ ,  $A \le M \le V$ , G < M

Conclusions:

I. P> G II. A< Q

**9).**Statements: L> P, P< N, N  $\geq$  A

Conclusions: I. A< P II. L> N

**10).** Statements:  $K \ge T \ge J$ , R < L, L > O

Conclusions:

**11).**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?

- a) = b) >
- c) < d) >= e) None of these

**12).** 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?

- a) >
- b) =
- c) >=
- d) <=
- e) both b and d

**13).** 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 $\leq$ B' definitely holds true? B \_ A \_ S \_ E \_ D

- a) >,  $\geq$ ,<, =
- b) >,>,≥,<
- c)  $\geq$ ,  $\geq$ ,  $\geq$ ,  $\leq$
- d)  $\geq$ , =,  $\geq$ , <

e) Other than those given as options

Statements: M≤V; P<R; P=M; S>T; R≤T

**Conclusions:** 

I. S>M II. V=P III. P<V IV. T<P

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

Statements: B<P; P≤S; S=M; M≥F; Q≥M; M<O

**Conclusions:** 

i. P≤F ii. B<Q iii. Q≥M iv. F<O

A. Only I, II and III are true B. Only II is true C. Only II,III and IV are true D. Neither I nor II is true

E. None is true

Statements:  $A \ge B$ ; F < E;  $A \le D$ ;  $F \le B$ ; C = B

**Conclusions:** 

I. C < E II.  $D \ge B$  III.  $A \ge F$  IV. E > D

A. Only II is true B. Only III is true

C. Either I or II true D. II and III are true E. I and II are true



Statements: P=M; Q≤R; T>Q; M<R

**Conclusions:** 

I. M < R II. R > T III. P > T IV. P > Q

A. None is true B. Only I is true C. Only I and II are true D. Only II and III are true E. Only IV is true

Statements: S = A; R < T;  $R \ge S$ ;  $P \ge Q$ ; Q > A

**Conclusions:** 

I. P > S II. Q > S III. T < A IV.  $A \ge R$ 

A. Only I is true B. Only II is true

C. Only I and II are true D. Only III and IV are true E. All are true

## Direction(6-10): Study the following information to answer the given questions

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

Statements: A \$ M, P @ L, K # P, A \$ L

**Conclusions:** 

I. K # L II. A @ P III.L\*A IV.M # P

A. None is true B. Only I is true

C. Only II is true D. Only III is true E. Only IV is true

Statements: W\*N, K \* V, Y @ V, W @ K

**Conclusions:** 

I. Y @ K II. W \$ N III. W @ Y IV. W @ V

A. None is true B. Only I is true

C. Only II is true D. Only III is true E. Only IV is true

Statements: T \* Y, S # M, Y \$ S, M @ K

**Conclusions:** 

I. K # S II. Y @ M III.T # M IV.Y @ 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

Statements: S @ L, L # M, M & B, B \* Q

**Conclusions:** 

I. Q \$ M II. B @ L III.S @ Q IV.L @ Q

A. I, II and III are true B. I, II are true

C. I, III are true D. I, III and IV are true E. All are true

Statements: C # P, P \* L, L @ E, E \$ M

**Conclusions:** 

I. M # P II. M @ L III.P # E IV.L # C

A. None is true B. Only I is true

C. Only II is true D. Only III is true E. Only IV is true



Statements:  $Q \ge R$ , P > R,  $P = O \ge T$ ,  $S \ge U > Q$ 

Conclusions:

 $I.S{\ge}R \qquad II.P{<}T \qquad III.Q{<}T \quad IV.U{>}R$ 

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≥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≥R, N>M

Conclusions:

I.O<I II.R<N III.N<I IV.O=I

A.Only II is true B.Only II 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≤M<T

Conclusions:

I.P<T II.S≤T III.M<Q IV.B=M

A.Only I is true B.Only II is true C.Only III true D.Only IV is true E.All are

true

Statements:  $G \le J < I$ ,  $N \ge K = H$ , 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

Statements: D < A  $\leq$  E < L, A = K > N, L > K  $\geq$  M

Conclusions:

I.D>M II.L>M III.K  $\leq$  N IV.M  $\leq$  A

A.Only I is true B.Only II is true C.Only I and II are true D.Only II and IV are true E.All are

true

Statements:  $X > S = T \le U$ ,  $Y = Z > V \ge U$ , S=W>O

Conclusions:

I.S=W II.T<Y III.X>O IV.T≤V

A.Only I and IV are true B.Only II is true C.Only II and III are true D.Either I or III and I are true

E.All are true

Statements:  $F \le H \ge T \le B$ ,  $A \ge Q = B$ , T > K = G

Conclusions:

I.A≥T II.T=G III.K<A IV.F>T

A.Only I and II are true B.Only I and III are true C.Either I or III are true D.Either I or IV and III are

true E.All are true

What should come in place of question mark to make S>Q always true?

R≤T>P=S>R ? O >Q

A.> B.= C.≥ D.All of these E.None of these



A.≤, ≤ B.≤, <

 $C.=, \geq D. \geq, \leq E.$  None of these

Directions (6-10): In these questions, relationship between different elements is shown in thestatements. These statements are followed by two conclusions:

- (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 conclusion I and II follow.

 $\rightarrow$  Q6. Statements: A  $\leq$  D < C  $\geq$  B < E

Conclusion:

**1.** C **>** A

II. A ≥ C

Q7. Statements:  $P > L \leq M \leq N > Q$ 

Conclusion:

I. P > Q ⊀

II. Q > M <sup>⋆</sup>

**Q8. Statement**:  $S \ge T = U < V \ge X$ 

Conclusions:

 $I. V > S \times$ 

**Q9. Statement**: M ≤ N > O ≥ P = Q

Conclusions:

✓ I. M ≥ Q

✓ II. Q 
✓M

**Q10. Statement:** U ≤ V **<**W =X < Y

Conclusions:

**√1. Y** > **V** /l. ₩ > U

Directions (11-13): Read the statements carefully and answer the following questions. Q11. In which of the following expressions will the expression 'H < J' be definitely true?

- (a) G < H ≥ I = J
- (b) H > G ≥ I = J
- (c)  $J = I \ge G > H$
- (d)  $H \ge G > I < J$
- (e) None of these

 $\color{0}$ 12. Which of the following expressions will be true if the expression 'K  $\geq$  L > M  $\geq$  N' is definitely true?

K7N

- (a) N ≤ K
- (b) K = M
- <(c) K < N
  - (d)  $L \ge N$
  - (e) None is true

Q13. Which of the following expressions will be true if the expression 'M  $\geq$  K < T = Q' is definitely true?

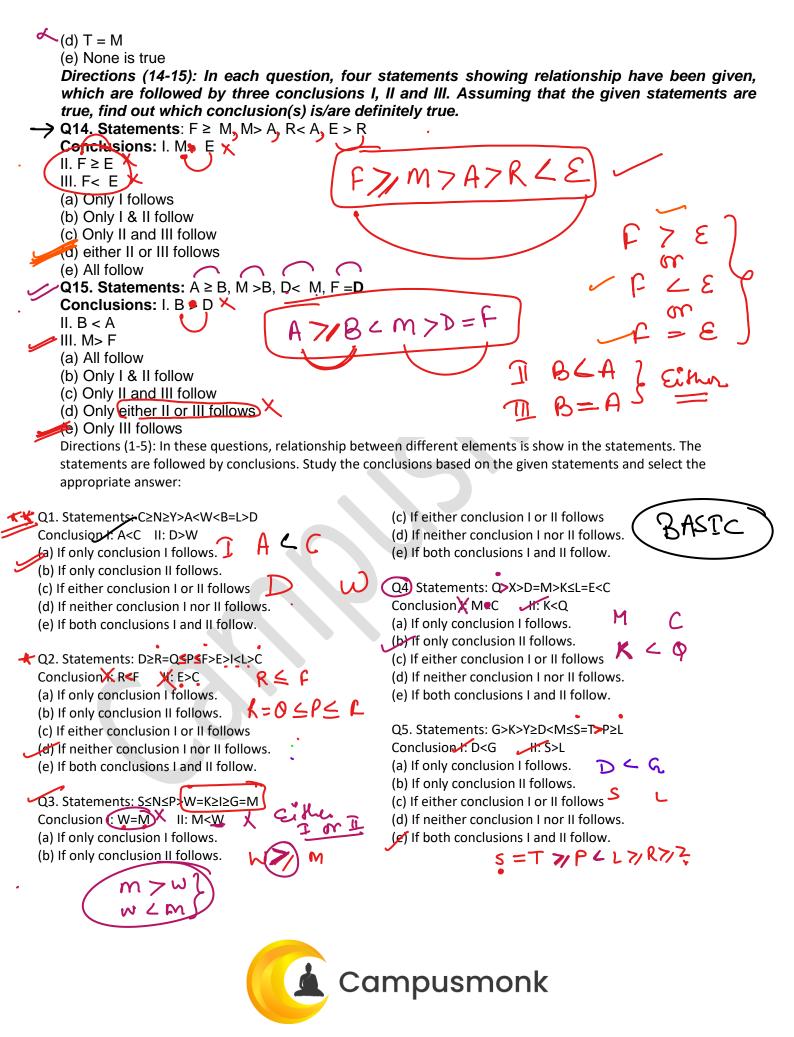
**X**(a) Q < K

(b) M ≥ T

(c) K < Q







P > Q > R > S < T P > R P = R P > R P > R P = R

