Basic Model

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.

1. **Statement: $M \leq N > O \geq P = Q$**
    Conclusions: I. $M \geq Q$ II. $Q < M$

    $M \geq Q$, $Q < M$ opposite symbols, so both are false.

2. **Statement: $U \leq V < W = X < Y$**
    Conclusions: I. $Y > V$ II. $W > U$

    Both conclusions are true

3. **Statements : $C > A \geq T , S < E = T$**

    Conclusions : $A > E , C > S$

    After combining both the statements, we get:

    $C > A \geq T = E > S$

    Thus $A > E$ is false as the true relationship is $A \geq E$.

    $C > S$ is true.

    Hence only conclusion II follows.

4. **Statements : $F < U \leq N , D > H < U = B$**

    Conclusions : $H < N , H = N$

    From statements I and II , we get:

$H < U \le N$

Thus H < U is true whereas H = N is false.

Hence only conclusion I follows.

5. **Statement : G ≤ L ≥ O ≥ W ≥ I < N**

   Conclusions : I. I < L   II. L = I

   Given statement: $G \le L \ge O \ge W \ge I < N$
    Thus, $L \ge I$ or $I \le L$ is true.
   It means either I < L or L = I is true.
    Thus, Conclusion I and II make a complementary pair.
    Hence, either conclusion I or II is true.

6. **Statement : G ≤ L ≥ O ≥ W ≥ I < N**

   Conclusions : I. O > G   II. W < N

   Given statement: $G \le L \ge O \ge W \ge I < N$
    Thus, we can't compare G and O or W and N,
    Hence neither conclusion I (O > G) nor II (W < N) is true.

7. **Statement : R > M ≥ T ≤ Q = S**

   Conclusions : I. R > Q, II. Q ≥ M

   Given statement:
    $R > M \ge T \le Q = S$
    Thus, we can't compare R and Q or Q and M.
    Hence neither I (R > Q) nor II (Q ≥ M) is true.

8. **Statements : P ≤ Q ≤ R = S,   U ≥ V ≥ S**

   Conclusions : P < U,   P = U

   Combining statements I and II, we get:
   $P \le Q \le R = S \le V \le U$
   Here, the common sign between P and U is '≤' and the given conclusions are P < U and P
   = U. Hence, either P < U or P = U follows.

Hence, the correct answer would be Either conclusion I or conclusion II follows.

9. **Statement : P = R,   R < F,   F < T**

    Conclusions : T < R,   F < P

    Combining statements II and III, we get:
    $R < F < T$

    Here, the common sign between R and T is '<' and the given conclusion is T < R. Hence, conclusion I does not follow.

    For conclusion II: F < P

    Combining statement I and II, we get:

    $P = R < F$

    Here the common sign between P and F is '<' and the given code is F < P. Hence, conclusion II does not follow too.

    Hence, the correct answer would be 'Neither conclusion I nor conclusion II follows'.

10. **Statements : P ≥ Q , R < S , Q = S , T > P**
    Conclusions : R < T , T > S
    Checking C1:

    $R < S = Q \leq P < T$

    Thus C1 follows.

    Checking C2:

    $S = Q \leq P < T$

    Thus C2 also follow.

    Both C1 and C2 follow

11. **Statements: D ≥ S , X < W, S = J, W > Y, X > D, Y ≤ O, J ≥ E**

    Conclusions: (i) D > E   (ii) D = E   (iii) O > S
            By combining all the statements, we get the following equation:

    $O \geq Y < W > X > D \geq S = J \geq E$

For conclusion (i): D > E

Here, the common sign between D and E is '≥'. Thus D ≥ E.

Hence conclusion (i) does not follow individually.

For conclusion (ii): D = E

Here, the common sign between D and E is '≥'. Thus D ≥ E.

Thus conclusion (ii) does not follow individually.

On combining conclusions I and II we get "D ≥ E".

Therefore either conclusion (i) or (ii) follows.

For conclusion (iii): O > S

Here we can see the opposite signs between O and S, thus no relationship can be established between them.

Therefore conclusion (iii) does not follow.

Either conclusion (i) or (ii) follows

12. **Statements: S < V, P = M, T > V, M < I, R = I, P < T**

    Conclusions: (i) I > P (ii) S > M (iii) I < T

    By combining all the statements, we get the following equation:

    R = I > M = P < T > V > S

    For conclusion (i): I > P

    Here we can see the common sign between I and P is '>', thus I > P.

    Hence conclusion (i) follows.

    For conclusion (ii): S > M

    Here we can see opposite sign between S and M, thus no relationship can be established between them.

    Thus conclusion (ii) does not follow.

For conclusion (iii): I < T

Here we can see opposite sign between I and T, thus no relationship can be established between them.

Therefore conclusion (iii) does not follow.
Only conclusion (i) follows

True / False

13. Which of the following expressions will be true if the expression 'K ≥ L > M ≥ N' is definitely true?
(a) N ≤ K   b) K = M   (c) K < N   (d) L ≥ N   **(e) None is true**

14. Which of the following expressions will be true if the expression 'M ≥ K < T = Q' is definitely true?
(a) Q < K   (b) M ≥ T   **(c) K < Q**   (d) T = M   (e) None is true

Using symbols

In the following questions, the symbols $, @, %, & and # are used with the following meanings as illustrated below:
'A $ B' means A is neither greater nor smaller than B
'A @ B' means A is neither greater than nor equal to B
`A % B' means A is neither smaller than nor equal to B
'A& B' means A is not smaller than B
'A # B' means A is not greater than B
In each of the following questions, assuming the given statements to be true, find out 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.

15. **Statements: V&D, D %T, K $ T, K # F**
    Conclusions: I. V% F II. V% K

    Conclusion 1 : V>F
    Comparing with statement it is false.

     Conclusion 2 : V>K
     Comparing with statements it is true

Hence option b (only conclusion 2 Follows)

16. **Statements: S $ Q, Q @ B, B &K, K # W**
    Conclusions: I. W%K II. S @ B
    Conclusion 1 ; W>K

    Comparing with statements it is false

    Conclusion 2 : S<B

    Comparing with statements it is true.

    Hence Option B (only conclusion 2 follows)

    A@B means A is not greater than B.

    A!B means A is greater than B.

    A*B means A is not less than B.

    A%B means A is less than B.

    A#B means A is neither greater nor less than B.

17. **Statements : M!H , K%M, G#H**
    Conclusions : H#K , M*G

    From statements I and II, we get:

    K < M > H

    Here, we get the opposite signs between H and K, thus no relationship can be established between them.

    Hence conclusion I does not follow.

    From statements I and III, we get:

    M > H = G

    Thus M ≥ G is not a true relationship from the above equation.

    Hence conclusion II does not follow.

neither conclusion I nor II follows.

18. Statements : E@F , D%E , T*F

    Conclusions : D%F , T*E
    From statements I and II, we get:

    $D < E \leq F$

    Thus D < F is the true relationship.

    Hence conclusion I follows.

    From statements I and III, we get:

    $T \geq F \geq E$

    Thus $T \geq E$ is the true relationship.

    Hence conclusion II follows.
    both conclusion I and II follow.

19. **Statements: T#Y , Y%L, G*L**
    Conclusions: L!T , G*T
    From statements I and II, we get:

    $T = Y < L$

    Thus L > T is the true relationship.

    Hence conclusion I follows.

    From statements I, II and III, we get:

    $G \geq L > Y = T$

    Thus $G \geq T$ is not a true relationship.

    Hence conclusion II does not follow.

    Only conclusion I follows

20. **Statements : G!U , L@U, M*G**

Conclusions : M#U , M!U
$M \geq G > U \geq L$
Thus $M > U$ is the true relationship.

Hence conclusion I does not follow.

But conclusion II definitely follows.

Only conclusion II follows

21. **Statements : Z!U , P*W , W@U**
    Conclusions : Z!W , P%U
    From statements I and III, we get:

    $Z > U \geq W$

    $Z > W$ is the true relationship.

Hence the conclusion I follows.

From statements II and III, we get:

$P \geq W \leq U$

Thus due to opposite sign between P and U no relationship can be established between them.

Hence conclusion II does not follow.

Only conclusion I follows