Coded Inequalities

Part 1 - Basic

Model 1: Symbol Based Inequalities

Directions (1-5): In the following questions, the symbols @, #, $, * and ^ are used with the following meanings as illustrated below.

'A@B' means 'A is neither smaller than nor equal to B'

'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 neither greater than nor smaller than B'

'A⊴B' means 'A is not smaller than B'

1. Statements: L#V, V$E, E^U, U@B
   Conclusions: I. B$E   II. L$E   III. B*L
   1) Only I and II are true   2) Only III is true
   3) Only either I or II is true   4) All are true   5) None of these

2. Statements: M$T, T*R, R@H, H#G
   Conclusions: I. M$H   II. R@G   III. M#R
   1) Only I is true   2) Only II is true   3) Only III is true
   4) All are true   5) None is true

3. Statements: T#W, W$Q, Q^D, D@J
   Conclusions: I. J$T   II. T#J   III. T$Q
   1) Only I and III are true   2) Only either II or II is true
   3) Only II and III are true   4) Only III and either I or II are true
   5) None of these

4. Statements: F@J, J#R, R*L, L^M
   Conclusions: I. F$R   II. M#R   III. M^J
   1) None is true   2) Only I is true   3) Only II is true
   4) Only either II or III is true   5) All are true

5. Statements: H^R, R@W, W*F, J$F
   Conclusions: I. H@F   II. J$W   III. R@J
   1) Only I and II are true   2) Only II and III are true   3) Only III is true
   4) Only either I or III is true   5) All are true

Directions (6-9): In the following questions, the symbols @, #, %, $ and & are used with the following meanings as illustrated below.

'P#Q' means 'P is neither greater than nor equal to Q'

'P&Q' means 'P is neither equal to nor smaller than Q'

'P%Q' means 'P is neither smaller than nor greater than Q'

'P$Q' means 'P is not smaller than Q'

'P@Q' means 'P is not greater than Q'

6. Statements: K#T, T$B, B@F
   Conclusions: 1. F$T   II. K#B   III.T$F
   1) None is true   2) Only I is true
   3) Only I and II are true   4) Only II and III are true   5) All are true

7. Statements: R@D, D&W, B$W
   Conclusions: I. W#R   II. B&D   III. W$R
   1) None is true   2) Only I is true   3) Only III is true
   4) Only either I or III is true   5) All are true

8. Statements: M&R, R%D, D@N

Conclusions: I. M&N   II. N$R   III. M&D
1) Only I and II are true   2) Only II and III are true
3) Only I and III are true   4) All are true   5) None of these

9. Statements: H$V, V%M, K&M
Conclusions: I. K&V   II. M@H   III. H&K
1) Only I and III are true   2) Only II and III are true
3) Only I and II are true   4) All are true   5) None of these

Directions (10-14): In the following questions, the symbols @, #, %, $ and& are used with the following meanings as illustrated below.
'P@Q' means 'P is not greater than Q'
'P#Q' means 'P is neither greater than nor smaller than Q'
'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'
Give answer 1) if only conclusion I is true.
Give answer 2) if only conclusion II is true.
Give answer 3) if either conclusion I or conclusion II is true.
Give answer 4) if neither conclusion I nor conclusion II is true.
Give answer 5) if both conclusions I and II are true.

10. Statements: F$W, W#T, T&K Conclusions: I. F&K   II. W$K
11. Statements: R@M, M%D, D$H Conclusions: I. R@H   II. D&R
12. Statements: J$L, L#B, B@E Conclusions: I. E$L   II. E%L
13. Statements: A$V, V#R, R@U Conclusions: I. U&R   II. U#R
14. Statements: F%G, G@H, H&J Conclusions: I. F@H   II. G@J

Directions (15-20): In the following questions, the symbols @,#,%,$ and © are used with the following meanings as illustrated below.
'A$B' means 'A is not smaller than B'
'A#B' means 'A is not greater than B'
'A@B' means 'A is neither smaller than nor equal to B'
'A©B' means 'A is neither smaller than nor greater than B'
'A%B' means 'A is neither greater than nor equal to B'.

15. Statements: H%J, J©N, N@R
Conclusions: I. R%J   II. H@J   III. N@H
1) Only II is true   2) Only I and III are true   3) Only I is true
4) Only III is true   5) None is true

16. Statements: M@J, J$T, T©N
Conclusions: I. N#J   II. T%M   III. M@N
1) Only I and II are true   2) Only II and III are true   3) Only I and III are true
4) None is true   5) All are true

17. Statements: D©K, K#F, F@P
Conclusions: I. P@D   II. K#P   III. F$D
1) Only II is true   2) Only I and II are true   3) Only III is true   4) Only II and III are true
5) None of these

18. Statements: R#D, D$M, M©N
Conclusions: I. R#M   II. N#D   III. N$R
1) Only I is true   2) Only II is true   3) Only III is true   4) None is true   5) All are true

19. Statements: K#N, N$T, T%J
Conclusions: I. J©N   II. K@T   III. T@K
1) None is true   2) Only I and II are true   3) Only II and III are true
4) Only I and III are true   5) None of these.

20. Statements: K©P, P@Q, Q$R
    Conclusions: I. K@R   II. R%P   III. Q%K
 1) Only I and II are true   2) Only II is true   3) Only III is true   4) All are true   5) None

Model 2: Direct Inequalities
Directions (21-25): In these questions, the relationship between different elements
is shown in the statements. The statements are followed by two conclusions.
Mark answer 1) if only conclusion I follow.
Mark answer 2) if only conclusion II follow.
Mark answer 3) if either conclusion I or II follow.
Mark answer 4) if neither conclusion I nor II follow.
Mark answer 5) if both conclusions I and II follow.
21. Statements: T < R ≤ U;   L > U ≤ K;   P ≥ R Conclusions: I. K ≥ R   II. L > R
22. Statements: D > H ≥ N;   S > I ≤ H Conclusions: I. N ≤ S   II. I < D
23. Statements: H = I ≤ R;   M ≥ R < S Conclusions: I. M = I   II. M > I
24. Statements: P ≤ O < I;   P > Y > M Conclusions: I. Y ≤ I II. O > M
25. Statements: A ≥ B > C ≥ F;   Z < C ≤ D < E Conclusions: I. A > Z   II. F < E
Directions (26-30): In these questions, the relationship between different element sis
shown in the statements. These statements are followed by two conclusions.
Mark answer 1) if only conclusion I follow.
Mark answer 2) if only conclusion II follow.
Mark answer 3) if either conclusion I or II follow.
Mark answer 4) if neither conclusion I nor II follow.
Mark answer 5) if both conclusions I and II follow.
26. Statements: A ≥ B = C;   B < D ≤ E Conclusions: I. D > A   II. E > C
27. Statements: L > U ≥ K: Z < U < R Conclusions: I. L > Z   II. K < R
28. Statements: Y < J = P ≥ R > I Conclusions: I. J > I   II. Y < R
29. Statements: V ≥ K > M = N;   M > S; T < K Conclusions: I. T < N   II. V = S
30. Statements: F ≤ X < A,   R < X ≤ E Conclusions: I. F ≤ E   II. R < F

Answers

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

Part 2 - Advanced
1. **Statement:** R = S ≠ T = U ≤ V < W
   Conclusion: I. R > T   II. U > S
2. Find the expression definitely satisfies P > Q and H > Q?
   1) P = R ≥ Q ≤ S < H   2) P ≥ R = Q > S ≤ H   3) P > R = Q ≤ S ≤ H
   4) P = R > Q ≤ S < H   5) None of the above

Directions (3-4): In the questions given below, certain symbols are used with the following meanings.

P @ Q means P is neither equal nor smaller than Q.

P × Q means P is not smaller than Q.

P – Q means P is neither greater nor smaller than Q.

P ÷ Q means P is neither greater than nor equal to Q.

P + Q means P is not greater than Q.

P © Q means P is not equal to Q.

3. **Statements: T © O, O © P, P – A, A × Z**
   Conclusions: I. P © T   II. O © A
   1) Only conclusion I is true   2) Only conclusion II is true
   3) Either conclusion I or II is true   4) Neither conclusion I nor II is true
   5) Both conclusions I and II are true

4. **Statements: T ÷ R, P @ A, R + A, L – T**
   Conclusions: I. L ÷ P   II. A @ L
   1) Only conclusion I is true   2) Only conclusion II is true
   3) Either conclusion I or II is true   4) Neither conclusion I nor II is true
   5) Both conclusions I and II are true

5. **Statements: R > B ≥ S ≥ D, S ≥ D, S ≥ O ≥ U**
   Conclusions:
   I. B > U   II. D ≤ O   III. U = B   IV. R > O
   1) Only II is true   2) Only III is true
   3) Only IV and either I or III are true   4) Only either II or III are true   5) Only IV is true

Directions (6 – 10): Read the information/ statement given in each question carefully and answer the questions.

6. In which of the following expressions will the expression 'H < J' be definitely true?
   1) G < H ≥ I = J   2) H > G ≥ I = J
   3) J = I ≥ G > H   4) H ≥ G > I < J   5) None of these

7. Which of the following expressions will be true if the expression 'K ≥ L> M ≥ N' is definitely true?
   1) N ≤ K   2) K = M   3) K < N   4) L ≥ N   5) None is true

8. Which of the following expressions will be true if the expression 'M ≥ K < T = Q' is definitely true?
   1) Q < K   2) M ≥ T   3) M < Q   4) T = M   5) None is true

9. Which of the following expressions may not be true if the expression 'Z ≥ Y = W ≤ Y ≤ X' is definitely true?
   1) W ≤ Z   2) X ≤ Z   3) Y ≤ X
   4) Only (2) and (3)   5) All are true

10. In which of the following expressions does the expression 'A > D' hold true?
    1) A = B < C ≤ D   2) D ≥ B > C > A   3) B = D > C ≥ A
    4) A ≥ C > B = D   5) D ≤ B > A > C

11. Which of the following symbols should be placed in blank spaces respectively (in the same order from left to right) in order to complete the given expression in such a manner that either 'W > R' or 'E > S' definitely hold true?
    W_E_A_R_S
    1) ≥, =, ≥,≥   2) ≥,≥, =,<   3) ≤, ≥,=, ≥   4) ≤,=, >,≥   5) ≥, < ,≥, =

12.   Which of the following symbols should be placed in blank spaces respectively (in the same order from left to right) in order to complete the given expression in such a manner that both the expression 'E ≤ G' and 'T ≥ R' hold definitely true?

G _ R _ E _ A _ T

1) ≥, =, ≥, ≥   2) >, ≥, =, <   3) ≥, =, =, ≤   4) ≤, =, >, ≥   5) ≥, <, ≥, =

13.   'congress is sinking' is coded as '4G1U 4Q61Q 4G13J 4L46K' 'woman priest held' is coded as '3Q33T 3J13G 3Y22Q'

'back on global table' is coded as '4Y33N 4M1P 4A13C 4J22C'

'the court relied on' is coded as '4P22Q 4C33G 4M1P 4F6'

1) What is the code for 'sinking'?

2) What is the code for 'priest'?

3) What is 'back' stands for?

4) What is the code for relied in that language?

5) What is the code for table in that language?

Answers

1. Neither conclusion I nor II is true
2. P = R > Q $\leq$ S < H
3. Only conclusion II is true
4. Both conclusions I and II are true
5. Only IV and either I or III are true
6. -J = I ≥ G > H
7. None is true
8. None is true
9. X ≤ Z
2.10. A ≥ C > B = D
3.11. ≤,=, >,≥
4.12. ≥, =, ≥, ≥
5.13. 1) 4L46K   2) 3Q33T   3) 4A13C   4) 4C33G   5) 4J22C