Reasoning

Inequality

Level-2

Q1 If the expression **B < C < A < D, E > F > D > H = M** is definitely true then, which of the following expressions will be false?

(A) A < E (B) F > C
(C) H < B (D) E > C
(E) None of these

Q2 If the expression **R = F < I < T < B ≤ G < A > V > M** is definitely true then, which of the following expressions will be true?

(A) A > B
(B) R < V
(C) G > F
(D) G > M
(E) Both (a) and (c)

Q3 If the expression X > B > Z > K > H = M < J< Y is definitely true then, which of the following expressions will be false?

(A) H < X (B) B > M
(C) Z > M (D) A > K
(E) Both b) and d)

Q4 If the expression, M > K = B > L > E > X, A < B ≤ Z is definitely true then, which of the following expressions will be true?

(A) X > A (B) Z > E
(C) M > A (D) Both b) and c)
(E) Both a) and c)

Q5 Directions: In each question below are given statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read the statements and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts.

Statement

T < J ≤ M = W > F ≥ S

Conclusion:-

i) T > F
ii) W > S
(A) Only conclusion I follows
(B) Only conclusion II follows
(C) Neither I nor II follow
(D) Both I and II follow
(E) Either I or II follow

Q6 Directions: Study the following data carefully and answer the questions accordingly.

What will come in _ , _ respectively to make the expression

* < $ and $ > @ are definitely true?

$ > & ≥ # _ (; (≥ * _ % ≥ ! ≥ @

(A) >, ≤ (B) ≤, >
(C) = , < (D) >, ≥
(E) None of these

Q7 Directions:In each of the following questions, the relationship between different elements is shown in the statements followed by conclusions. Find the conclusion which logically follows.

Statements:

$X \geq N > R = A$
$P \leq D < L < X$
$P > S = Z$
Conclusions:
I: $S < X$
II: $X > A$
III: $D < N$
(A) Only I follows.
(B) Only II follows.
(C) Only III follows.
(D) Only I & II follow.
(E) Only II & III follow

Q8 **Directions: Analyze the data carefully and answer the questions accordingly.**
Statements: $H \geq L > M \leq R > I \geq P = U \leq T < B$
Conclusion:
I. $I \leq L$
II. $R > U$
(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 conclusions I and II follow

Q9 **Directions:In each of the following questions, the relationship between different elements is shown in the statements followed by three conclusions. Find the conclusion which logically follows.**

Statements:
$A \geq M > T$
$P < O < R < T$
$P > N = Z$
Conclusions:
I: $A > Z$
II: $N < M$
III: $T \geq P$
(A) Only I follows.
(B) Only II follows.
(C) Only III follows.
(D) Only I & II follow.
(E) Only II & III follow.

Q10 **Directions:In each of the following questions, the relationship between different elements is shown in the statements followed by conclusions. Find the conclusion which is true.**

Statements:
$L > P \leq M \leq R$
$H > M \geq Q$
$P \leq K > Y$
Conclusions:
I: $R > Y$
II: $Q < K$
III: $K \leq Q$
(A) Only I and II are true.
(B) Only I is true.
(C) Either II or III is true.
(D) Only I and either II or III are true.
(E) None is true

Q11 **Directions: Analyze the data carefully and answer the questions accordingly.**
Statements: $A \geq Y > G < R = Q > O \leq P = I > H$
Conclusion:
I. $R > O$
II. $O \geq Y$
(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 conclusions I and II follows

Q12 **For each of the following questions, there are statements that show the relationship between different elements, followed by three possible**

conclusions. Determine the conclusion that logically follows.

Statement:
G ≥ P > S = M > L = N
Y ≤ T < V < U < R < O
I > K = J > R = L
Conclusion:
I. I > V
II. N > P
III. L > Y
(A) Only I follows
(B) Only II follows
(C) Only III follows
(D) Both I and III follow
(E) Both II and III follow

Q13 **Directions: Study the following data carefully and answer the questions accordingly.**
Statement:
$ > * > ^ = &; & < % < @
Conclusion:

1. $ ≥ %
2. @ > ^

(A) Only conclusion I follow
(B) Only conclusion II follow
(C) Either conclusion I or II follow
(D) Neither conclusion I nor II follow
(E) None of these

Q14 **Directions: For each of the following questions, there are statements that show the relationship between different elements, followed by three possible conclusions. Determine the conclusion that logically follows.**

Statements:
D ≤ N < R < W
T > Y ≥ Z < D
J < G < T
Conclusions:
I. G < W
II. T < R
III. Y > N
(A) Only I follows
(B) Only II follows
(C) Both I and III follow
(D) Either I or III follow
(E) None follows

Q15 **Directions:In each of the following questions, the relationship between different elements is shown in the statements followed by conclusions. Find the conclusion which logically follows.**

Statements:
M ≤ G < V > R
T ≥ P > R > L
A < B = T
Conclusions:
I. B > L
II. G < P
(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

Q16 **In each of the following questions, the relationship between different elements is shown in the statements followed by three conclusions. Find the conclusion which logically follows.**

Statements:
D ≤ M < R < Y
P > C ≥ Z < D
K < G < P

Conclusions:
I: G < Y
II: P < R
III: C > M
(A) Only I follows.
(B) Only II follows.
(C) Only I and III follow.
(D) Either I or III follows.
(E) None follows

Q17 **In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.**

Statement:- B>D=A<R<T≤Z>M
Conclusion:- 1. D<Z 2. M>A
(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 follows

Q18 **In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.**

Statement:-D>R≥T=W>H≤S<B
Conclusion:- 1. R> W 2. R= W
(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 follows

Q19 **In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.**

Statements: C < O ≤ D = S > A ≥ P ≥ Q
Conclusions:
I. Q < D
II. C < A
(A) If only conclusion I follow
(B) If only conclusion II follow
(C) If either conclusion I or II follow
(D) If neither conclusion I nor II follow
(E) If both conclusion I and II follow

Q20 **In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.**
Statements: C ≤ L = E ≤ R ≤ K = P ≥ O
Conclusions:
I. P = C
II. C < P
(A) If only conclusion I follow
(B) If only conclusion II follow
(C) If either conclusion I or II follow
(D) If neither conclusion I nor II follow
(E) If both conclusion I and II follow

Q21 **In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.**

Statements: F ≤ B = I ≤ C = A ≥ S > E
Conclusions:
I. S ≥ B
II. F > E
(A) If only conclusion I follow

(B) If only conclusion II follow
(C) If either conclusion I or II follow
(D) If neither conclusion I nor II follow
(E) If both conclusion I and II follow

Q22 **In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.**

Statements: I ≥ N = T ≥ E > L ≥ G > M
Conclusions:
I. G < N
II. I ≥ L
(A) If only conclusion I follow
(B) If only conclusion II follow
(C) If either conclusion I or II follow
(D) If neither conclusion I nor II follow
(E) If both conclusion I and II follow

Q23 **In each of the question, relationships between some elements are shown in the statements. These statements are followed by conclusions numbered I and II. Read the statements and give the answer.**

Statements: W > A = S ≥ H < I ≤ N ≤ G
Conclusions:
I. H < W
II. G > H
(A) If only conclusion I follow
(B) If only conclusion II follow
(C) If either conclusion I or II follow
(D) If neither conclusion I nor II follow
(E) If both conclusion I and II follow

Q24 **In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I , II , III and IV is/are definitely true and give your answer accordingly.**

Statements:
A > B ≥ C > D ≤ E ≤ F < H
Conclusions:
I. A > D
II. H > D
III. E < H
IV. B > F
(A) Only I, II and III are true.
(B) Only II is true
(C) Only I and II are true.
(D) Only I and either II or IV are true.
(E) All I, II, III and IV are true.

Q25 In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I, II , III and IV is/are definitely true and give your answer accordingly.
Statements:
N > F > O ≤ M; O ≥ B > Z
Conclusions:
I. B < M
II. N > M
III. M = B
IV. N > Z
(A) Only IV is true.
(B) Only IV and either I or III are true.
(C) Only I and III are true.
(D) Only I is true.

Q26 **In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I and II is/are definitely true and give your answer accordingly.**

Statements:
L ≥ M < N ≤ O = P < Q

Conclusions:
I. L ≥ O
II. M < Q
(A) Only conclusion I true
(B) Only conclusion II true
(C) Either conclusion I or conclusion II true
(D) Neither conclusion I nor conclusion II true
(E) Both conclusion I and conclusion II true

Q27 **In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I and II is/are definitely true and give your answer accordingly.**

Statements:
N ≤ M ≤ I = Q < P = O
Conclusions:
I. Q > N
II. N = Q
(A) Only conclusion I true
(B) Only conclusion II true
(C) Either conclusion I or conclusion II true
(D) Neither conclusion I nor conclusion II true
(E) Both conclusion I and conclusion II true

Q28 **In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I and II is/are definitely true and give your answer accordingly.**

Statements:
O ≥ U > P = K < J ≤ V < E
Conclusions:
I. K ≥ E
II. K < O
(A) Only conclusion I true
(B) Only conclusion II true
(C) Either conclusion I or conclusion II true
(D) Neither conclusion I nor conclusion II true
(E) Both conclusion I and conclusion II true

Q29 **In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I and II is/are definitely true and give your answer accordingly.**

Statements:
P ≤ Q ≤ R = S ≥ T > U
Conclusions:
I. P ≤ S
II. R > U
(A) Only conclusion I true
(B) Only conclusion II true
(C) Either conclusion I or conclusion II true
(D) Neither conclusion I nor conclusion II true
(E) Both conclusion I and conclusion II true

Q30 In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I and II is/are definitely true and give your answer accordingly.
Statements:
Q > Z < J ≤ C ≤ K = G ≤ S
Conclusions:
I. S ≥ J
II. Z < G
(A) Only conclusion I true
(B) Only conclusion II true
(C) Both conclusion I and conclusion II are true
(D) Neither conclusion I nor conclusion II true

Q31 **In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I and II is/are definitely true and give your answer accordingly.**

Statements:
R ≥ W ≤ U = P > F
Conclusions:
I. R ≥ F
II. R < F
(A) Only conclusion I true
(B) Only conclusion II true
(C) Either conclusion I or conclusion II true
(D) Neither conclusion I nor conclusion II true
(E) Both conclusion I and conclusion II true

Q32 In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I and II is/are definitely true and give your answer accordingly.
Statement:
Z ≤ Y ≤ X = W ≥ U > T
Conclusions:
I. W > Z
II. T < X
(A) Only conclusion I true
(B) Only conclusion II true
(C) Both conclusion I and conclusion II true
(D) Neither conclusion I nor conclusion II true

Q33 **In the given questions, assuming the given statements to be true. Find which of the given two conclusions number I and II is/are definitely true and give your answer accordingly.**

Statements:
Z ≥ Y > X < W ≥ V
Conclusions:
I. V ≤ Z
II. Z < V
(A) Only conclusion I true
(B) Only conclusion II true
(C) Either conclusion I or conclusion II true
(D) Neither conclusion I nor conclusion II true
(E) Both conclusion I and conclusion II true

Q34 **Directions: Study the following data carefully and answer the questions accordingly.**
Statement:
$ > ^ = % > *; @ = & < *
Conclusion:

1. $ > &
2. @ > *

(A) Only conclusion I follow
(B) Only conclusion II follow
(C) Either conclusion I or II follow
(D) Neither conclusion I nor II follow
(E) None of these

Answer Key

Q1	(C)
Q2	(E)
Q3	(D)
Q4	(D)
Q5	(B)
Q6	(D)
Q7	(D)
Q8	(B)
Q9	(D)
Q10	(C)
Q11	(A)
Q12	(D)
Q13	(B)
Q14	(E)
Q15	(A)
Q16	(E)
Q17	(A)
Q18	(C)
Q19	(A)
Q20	(C)
Q21	(D)
Q22	(A)
Q23	(E)
Q24	(A)
Q25	(B)
Q26	(B)
Q27	(C)
Q28	(B)
Q29	(E)
Q30	(C)
Q31	(C)
Q32	(B)
Q33	(C)
Q34	(A)

Hints & Solutions

Q1 Text Solution:

Given-

B< C<A < D, E ≥ F > D > H = M

Which of the following will be false

E ≥ F > D > A > C >B

B < C < A < D > H = M

a) A < E (True)

b) F > C (True)

c) H < B (False)

d) E > C (True)

Q2 Text Solution:

Given

R = F < I< T < B ≤ G < A > V > M

Which of the following will be true

A > B (True)

R < V (False)

G > F (True)

G > M (False)

a) and c)

Q3 Text Solution:

Given-

X > B≥ Z > K ≥ H = M < J< Y<A < Z

Which of the following will be false-

a) H < X (False)

b) B > M (False)

c) Z > M (False)

d) A > K (True)

e) Both b) and d) (False)

Q4 Text Solution:

Given-

M > K = B ≥ L > E > X, A < B ≤ Z

which of the following expressions will be true

i. X > A (A < B ≥ L > E > X) Fales

ii. Z ≥ E (Z ≥ B ≥ L > E) True

iii. M > A (M > K = B > A) True

iv. Both b) and c) True

v. Both a) and c) False

Q5 Text Solution:

Given statement:-

T < J ≤ M = W > F ≥ S

i) T > F = (False, As, T < J ≤ M = W > F. So no relation between T and F can be determined thus, it is definitely false.)

ii) W > S = (True, As, W > F ≥ S. Hence, W > S it is definitely true)

Thus, Only conclusion ii follows.

Hence, the correct answer is option B.

Q6 Text Solution:

Final answer:

$ > & ≥ # > (; (≥ * ≥ % ≥ ! ≥ @

Hence, option D is the correct answer.

Q7 Text Solution:

Considering conclusion:

I) S < X

Since, S < P ≤ D < L < X

Hence true.

II) X > A

Since, X ≥ N > R = A

Hence true.

III) D < N

Since, D < L < X ≥ N

Hence false.

Therefore, Only I & II follow.

Q8 Text Solution:

H ≥ L > M ≤ R > I ≥ P = U ≤ T < B

Conclusion:

I. I ≤ L: False

II. R > U: True

Only conclusion II follows

Q9 Text Solution:

Considering conclusion:

I) A > Z

Since, A ≥ M > T > R > O > P > N = Z

Hence true.

II) $N < M$

Since, M > T > R > O > P > N

Hence true.

III) T ≥ P

Since, T > R > O > P

Hence false.

Therefore, only I & II follow.

Q10 Text Solution:

Considering conclusion:

I) R > Y

Since, R ≥ M ≥ P ≤ K > Y

Hence false.

II) Q < K

Since, K ≥ P ≤ M ≥ Q

Hence false.

III) K ≤ Q

Since, K ≥ P ≤ M ≥ Q

Hence false.

Therefore, either II or III is true.

Q11 Text Solution:

A ≥ Y > G < R = Q > O ≤ P = I > H True

So, only conclusion I follows

Q12 Text Solution:

Considering conclusions,

I. I > V

Since, I > K = J > R > U > V

Hence, true.

II. N > P

Since, P > S = M > L = N

Hence, false.

III. L > Y

Since, L = R > U > V > T ≥ Y

Hence, true.

Both conclusions I and III are true.

Q13 Text Solution:

1. $ ≥ %

$ > * > ^ = &; & < % (False)

1. @ > ^

^ = &; & < % < @ (True)

Q14 Text Solution:

Considering conclusions,

I. G < W

Since, G < T > Y ≥ Z < D ≤ N < R < W

Hence, false.

II. T < R

Since, T > Y ≥ Z < D ≤N < R

Hence, false.

III. Y > N

Since, Y ≥ Z < D ≤ N

Hence, false.

Hence, none follow.

Q15 Text Solution:

I) B > L

Since, B = T ≥ P > R > L

Hence true

II) G < P

Since, G < V > R < P

Hence false

Therefore, only conclusion I follows.

Q16 Text Solution:

Considering conclusion:

I) G < Y

Since, G < P > C ≥ Z < D ≤ M < R < Y

Hence false.

II) P < R

Since, P > C ≥ Z < D ≤ M < R

Hence false.

III) C > M

Since, C ≥ Z < D ≤ M

Hence false.
Therefore, none follows.

Q17 Text Solution:
B>D=A<R<T≤Z>M
1. D<Z (True)
2. M>A (False)

Q18 Text Solution:
D>R≥T=W>H≤S<B
1. R> W (False)
2. R= W (False)
Either 1 or 2

Q19 Text Solution:
Given statement: C < O ≤ D = S > A ≥ P ≥ Q
Conclusion I: Q < D
D = S > A ≥ P ≥ Q
So, this conclusion is true.
Conclusion II: C < A
C < O ≤ D = S > A
So, this conclusion is not true.
Only I follow.

Q20 Text Solution:
Given statement: C ≤ L = E ≤ R ≤ K = P ≥ O
Conclusion I: P = C
C ≤ L = E ≤ R ≤ K = P
So, this conclusion is not true.
Conclusion II: C < P
C ≤ L = E ≤ R ≤ K = P
So, this conclusion is not true.
As both conclusions are false and both have same variables and all possible relations between them are visible. So, we can say that this is an either-or case.
Either I or II follow.

Q21 Text Solution:
Given statement: F ≤ B = I ≤ C = A ≥ S > E
Conclusion I: S ≥ B
F ≤ B = I ≤ C = A ≥ S
So, this conclusion is not true.
Conclusion II: F > E
F ≤ B = I ≤ C = A ≥ S > E
So, this conclusion is not true.
Neither I nor II follow.

Q22 Text Solution:
Given statement: I ≥ N = T ≥ E > L ≥ G > M
Conclusion I: G < N
N = T ≥ E > L ≥ G
So, this conclusion is true.
Conclusion II: I ≥ L
I ≥ N = T ≥ E > L
So, this conclusion is not true.
Only I follow.

Q23 Text Solution:
Given statement: W > A = S ≥ H < I ≤ N ≤ G
Conclusion I: H < W
W > A = S ≥ H
So, this conclusion is true.
Conclusion II: G >H
H < I ≤ N ≤ G
So, this conclusion is true.
Both I and II follow.

Q24 Text Solution:
Conclusion 1: A > D It is true.
In the statement relation between A and D is A > B ≥ C > D this so, A > D it is true.
Conclusion 2: H > D It is true.
In the statement relation between H and D is D ≤ E ≤ F < H this so, H > D it is true.

Conclusion 3: E < H It is true.
In the statement relation between E and H is E ≤ F < H this so, E < H it is true.
Conclusion 4: B > F It is not true.
In the statement relation between B and F is B ≥ C > D ≤ E ≤ F here opposite symbols are present between B and F, so B > F it is not true.

Q25 Text Solution:

- Conclusion 1: It is not true.

N > F > O ≤ M; O ≥ B > Z

From the statement relation between B and M is - M ≥ B.

So, B < M is not true.

- Conclusion 2: It is not true.

N > F > O ≤ M; O ≥ B > Z

From the statement relation between N and M is - No direct relation because opposite symbols are present between N and M.

So, N >. M is not true.

- Conclusion 3: It is not true.

N > F > O ≤ M; O ≥ B > Z

From the statement relation between M and B is - M ≥ B.

So, M = B is not true.

- Conclusion 4: It is true.

N > F > O ≤ M; O ≥ B > Z

From the statement relation between N and Z is - N > Z.

So, N > Z is true.

In conclusion 1 and 3 either or case occurs.

So the complete answer is : **Only IV and either I or III are true.**

Q26 Text Solution:

Conclusion 1: L ≥ O It is not true.

In the statement relation between L and O is L ≥ M < N ≤ O here opposite symbols are present between L and O, so L ≥ O it is not true.

Conclusion 2: M < Q It is true.

In the statement relation between M and Q is M < N ≤ O = P < Q this so, M < Q it is true.

Q27 Text Solution:

Conclusion 1: It is not true.

N ≤ M ≤ I = Q < P = O

From statement relation between Q and N is - N ≤ Q

So , Q > N is false.

Conclusion 2: It is not true.

N ≤ M ≤ I = Q < P = O

From statement relation between Q and N is - N ≤ Q

So, N = Q is not true.

Here either or case occurs.

Q28 Text Solution:

Conclusion 1: It is not true.

K < J ≤ V < E

From statement relation between K and E is - K < E

So , K ≥ E is false.

Conclusion 2: It is true.

O ≥ U > J = K

So, K < O is true.

Q29 Text Solution:

Conclusion 1: P ≤ S It is true.

In the statement relation between P and S is P ≤ Q ≤ R = S this so, P ≤ S it is true.

Conclusion 2: R > U It is true.

In the statement relation between R and U is R = S ≥ T > U this so, R > U it is true.

Q30 Text Solution:

Given Statement :

Q > Z < J ≤ C ≤ K = G ≤ S

- Conclusion 1: S ≥ J It is true.

In the statement relation between S and J is J ≤ C ≤ K = G ≤ S this so, S ≥ J It is true.

- Conclusion 2: Z < G It is true.

In the statement relation between Z and G is Z < J ≤ C ≤ K = G this so, Z < G It is true.

Hence, "Both conclusion I and conclusion II are true" is the correct answer.

Q31 Text Solution:

Conclusion 1: R ≥ F It is not true.
In the statement relation between R and F is R ≥ W ≤ U = P > F here opposite symbols are present between R and F, so R ≥ F it is not true.
Conclusion 2: R < F It is not true.
In the statement relation between R and F is R ≥ W ≤ U = P > F here opposite symbols are present between R and F, so R < F it is not true.
But here Either or case occurs.

Q32 Text Solution:

Given Statement:

Z ≤ Y ≤ X = W ≥ U > T
Conclusion 1: W > Z It is not true.
In the statement relation between W and Z is Z ≤ Y ≤ X = W this so, W ≥ Z but conclusion asks W > Z It is not true.
Conclusion 2: T < X It is true.
In the statement relation between X and T is X = W ≥ U > T this so, T < X it is true.

Hence, "Only conclusion II true" is the correct answer.

Q33 Text Solution:

Conclusion 1: V ≤ Z It is not true.
In the statement relation between V and Z is Z ≥ Y > X < W ≥ V here opposite symbols are present between V and Z, so V ≤ Z it is not true.
Conclusion 2: Z < V It is not true.
In the statement relation between V and Z is Z ≥ Y > X < W ≥ V here opposite symbols are present between V and Z, so Z < V it is not true.
But here Either or case occurs.

Q34 Text Solution:

1. $ > &

$ > ^ = % > *; & < * (True)
2. @ > *
@ = & < * (False)