

### Inequalities questions for IBPS PO Pre, IBPS SO Pre, IBPS Clerk, SBI PO Pre and SBI Clerk

**INEQUALITIES QUIZ 13** 

Directions: In these questions, relationship between different elements is shown in the various statements which is followed by three conclusions. Choose the correct answer on the basis of information given below.

#### (1). Statements: $M \ge S$ , K < A, S = T, A > Y, K > M, $Y \le O$ , $T \ge E$ Conclusions: M > E, M = E, O > S

- A. Only conclusion I follows
- B. Both conclusions I and III follow
- C. Only conclusion III follows
- D. Either conclusion I or II follows
- E. All the conclusions follow

### Statements: $A < B, C = D, E < F, B > D, G \ge C, A > F, H = E$ (2). **Conclusions:** G > B A > H C = H

- B. Both conclusions (I) and (III) follow
- C. Only conclusion (II) follows
- D. Either conclusion (I) or (II) follows
- E. None of the conclusions follow

### (3). Statements: S < U, $N \ge V$ , U = Q, R > N, $S \le G$ , Q > T, V = GConclusions: U > T R > S R = S

- A. Only conclusion (I) follows
- B. Both conclusions (I) and (II) follow
- C. Only conclusion (II) follows
- D. Either conclusion (I) or (II) follows
- E. None of the conclusions follow

### (4). Statements: $M \ge P$ , U < K, K < A, G = J, P < U, G > AConclusions: P < G J > K U < G

A. Only conclusion (I) follows

- B. Both conclusions (I) and (II) follow
- C. Only conclusion (II) follows
- D. Either conclusion (I) or (II) follows
- E. All the conclusions follow

### (5). Statements: B < A, G = H, O > A, H < I, J = I, G < O Conclusions: J > A B > H I < O

- A. Only conclusion (I) follows
- B. Both conclusions (I) and (II) follow
- C. Only conclusion (II) follows
- D. Either conclusion (I) or (II) follows
- E. None of the conclusions follow

### (6). Statements: $G \le S = Q \le P$ , $R > G \ge I = A$ , N < M < A < BConclusions: Q > R, S > B, M < G

- A. None of the conclusions follows
- B. Only conclusion III follows
- C. Either conclusion I or II follows
- D. Only conclusion III and either conclusion I or II follows
- E. All the conclusions follow
- (7). Statements:  $A \ge T > V = U$ ,  $M < V < Q \le O$ ,  $J < Q = R \ge S$ Conclusions: U < Q, A > M, V < R

he Question Bank

- A. None of the conclusions follow
- B. Only conclusion I follows
- C. Either conclusion I or III follows
- D. Only conclusion III and either conclusion I or II follows
- E. All the conclusions follow

### (8). Statements: $Y \ge I > S$ , $H \le A \le I$ , K > J > A, Z = H < WConclusions: Z < Y, $J \ge W$ , Z = Y

- A. None of the conclusions follow
- B. Only conclusion I follows
- C. Either conclusion I or III follows
- D. Only conclusion III and either conclusion I or II follow
- E. All the conclusions follow

## (9). Statements: L > A = B, T < M > K, X < B < T, L > B > C Conclusions: K < A, M > C, L > X

A. None of the conclusions follows

B. Only conclusions I and III follow

- C. Either conclusion I or II follows
- D. Only conclusions II and III follow
- E. All the conclusions follow

### (10). Statements: $H = V \le Y$ , $Y \ge F < Z$ , $H \ge P = R$ , Z = M > XConclusions: Y > R, M < F, Y = R

A. Both conclusions I and III follow

- B. Either conclusion I or III follows
- C. Only conclusion III follows
- D. All conclusions follow
- E. None of the conclusions follows

# - Smartkeeda The Question Bank

### **Correct answers:**

1	2	3	4	5	6	7	8	9	10
D	С	В	Е	Е	В	Е	С	D	В

### **Explanations:**

1.

Statements:  $M \ge S$ , K < A, S = T, A > Y, K > M,  $Y \le O$ ,  $T \ge E$ 

Conclusions: (I) M > E (II) M = E (III) O > S

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

 $O \ge Y < A > K > M \ge S = T \ge E$ 

For conclusion (I): M > E

keeda Here, the common sign between M and E is ' $\geq$ '. Thus M  $\geq$  E.

Hence conclusion (I) does not follow individually.

For conclusion (II): M = E

Here, the common sign between M and E is  $\geq$ '. Thus M  $\geq$  E.

Thus conclusion (II) does not follow individually.

On combining conclusions I and II we get " $M \ge E$ ".

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.

Hence option D is correct.

2.

Statements: A < B, C = D, E < F, B > D,  $G \ge C$ , A > F, H = E

Conclusions: G > B A > H C = H

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

 $G \ge C = D < B > A > F > E = H$ 

For conclusion (I): G > B

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

Hence conclusion (I) does not follow. nartkeeda

For conclusion (II): A > H

Here, the common sign between A and H is '>'. Thus A > H.

Thus conclusion (II) follows.

For conclusion (III): C = H

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

Therefore conclusion (III) does not follow.

Hence option C is correct.

### 3.

Statements: S < U,  $N \ge V$ , U = Q, R > N,  $S \le G$ , Q > T, V = G

Conclusions: U > T R > S R = S

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

 $R > N \ge V = G \ge S < U = Q > T$ 

For conclusion (I): U > T

Here, the common sign between U and T is '>'. Thus U > T.

Hence conclusion (I) follows.

For conclusion (II): R > S

Here, the common sign between R and S is '>'. Thus R > S.

Thus conclusion (II) follows.

For conclusion (III): R = S

Here, the common sign between R and S is '>'. Thus R > S. Therefore conclusion (III) does not follow. Hence option B is correct.

### 4.

Statements:  $M \ge P$ , U < K, K < A, G = J, P < U, G > A

Conclusions:  $P < G \quad J > K \quad U < G$ 

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

 $\mathsf{M} \ge \mathsf{P} < \mathsf{U} < \mathsf{K} < \mathsf{A} < \mathsf{G} = \mathsf{J}$ 

For conclusion (I): P < G

Here, the common sign between P and G is '<'. Thus P < G.

Hence conclusion (I) follows.

For conclusion (II): J > K

Here, the common sign between K and J is '<'. Thus K < J or J > K.

Thus conclusion (II) follows.

For conclusion (III): U < G

Here, the common sign between U and G is '<'. Thus U < G.

Therefore conclusion (III) follows.

Hence option E is correct.

### 5.

Statements: B < A, G = H, O > A, H < I, J = I, G < O

Conclusions: J > A B > H I < O

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

$$J = I > H = G < O > A > B$$

For conclusion (I): J > A

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

The Question Bank

Hence conclusion (I) does not follow.

For conclusion (II): B > H

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

Thus conclusion (II) does not follow.

For conclusion (III): I < O

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

Therefore conclusion (III) does not follow.

Hence option E is correct.

### 6.

Statements:  $G \le S = Q \le P$ ,  $R > G \ge I = A$ , N < M < A < B

Conclusions: Q > R, S > B, M < G

For conclusion I: Q > R

From statements I and II, we get:

 $R > G \le S = Q$ 

Here, we can see the common sign between Q and R, thus no relationship can be established between them.

Hence conclusion I does not follow.

For conclusion II: S > B

From statements I, II and III, we get:

 $S \ge G \ge I = A < B$ 

Here, we can see the common sign between S and B, thus no relationship can be established between them.

Hence conclusion II does not follow.

For conclusion III: M < G

From statements II and III, we get:

 $G \ge I = A > M$ 

Here, common sign between G and M is '>'. Thus G > M or M < G.

Hence conclusion III follows.

Therefore Conclusion III follows.

Hence option B is correct.

7.

Statements:  $A \ge T > V = U$ ,  $M < V < Q \le O$ ,  $J < Q = R \ge S$ 

Conclusions: U < Q, A > M, V < R

For conclusion I: U < Q

From statements I and II, we get:

U = V < Q

Here, common sign between U and Q is ' <'. Thus U < Q.

nartkeeda

Hence conclusion I follows.

For conclusion II: A > M

From statements I and II, we get:

 $A \ge T > V > M$ 

Here, common sign between A and M is ' >'. Thus A > M.

Hence conclusion II follows.

For conclusion III: V < R

From statements II and III, we get:

V < Q = R

Here, common sign between V and R is '<'. Thus V < R.

Hence conclusion III follows.

Therefore, All conclusions follow.

Hence option E is correct.

8.

Statements:  $Y \ge I > S$ ,  $H \le A \le I$ , K > J > A, Z = H < W

Conclusions: Z < Y,  $J \ge W$ , Z = Y

For conclusion I: Z < Y

From statements I, II and IV, we get:

 $Y \ge I \ge A \ge H = Z$ 

Here, common sign between Y and Z is '  $\geq$ '. Thus Y  $\geq$  Z or Z  $\leq$  Y.

nartkeeda

Hence conclusion I does not follow individually.

For conclusion II:  $J \ge W$ 

From statements II, III and IV, we get:

 $J > A \ge H < W$ 

Here, we can see that there is opposite sign between J and W, thus no relationship can be established between them.

Hence conclusion II does not follow.

For conclusion III: Z = Y

From statements I, II and IV, we get:

### $Y \ge I \ge A \ge H = Z$

Here, common sign between Y and Z is ' $\geq$ '. Thus Y  $\geq$  Z or Z  $\leq$  Y.

Hence conclusion III does not follow individually.

Combining conclusions I and III:

While combining conclusion I i.e. Z < Y and conclusion III i.e. Z = Y, we'll get  $Z \le Y$ , which is the actual relationship between them.

Therefore, Either conclusion I or conclusion III follows.

Hence option C is correct.

### 9.

Statements: L > A = B, T < M > K, X < B < T, L > B > CConclusions: K < A, M > C, L > XFor conclusion I: K < A

From statements I, II and III, we get:

A = B < T < M > K

Here, there are opposite sign between A and K. Thus no relationship can be established between them.

Hence conclusion I does not follow.

For conclusion II: M > C

From statements II, III and IV, we get:

M > T > B > C

Here, the common sign between M and C is '>'. Thus M > C.

Hence conclusion II follows.

For conclusion III: L > X

From statements I and III, we get:

L > B > X

Here, the common sign between L and X is '>'. Thus L > X.

Hence conclusion III follows.

Therefore conclusions II and III follow.

Hence option D is correct.

### 10.

Statements:  $H = V \le Y$ ,  $Y \ge F < Z$ ,  $H \ge P = R$ , Z = M > XConclusions: Y > R, M < F, Y = RFor Conclusion I: Y > R

From statements I and III, we get:

 $Y \ge V = H \ge P = R$ 

Here, the common sign between Y and R is  $\geq'$ . Thus  $Y \geq R$ .

Hence conclusion I does not follow individually.

For Conclusion II: M < F

From statements II and IV, we get:

Here, we the common sign between F and M is '<'. Thus F < M or M > F.

Hence conclusion II does not follow.

For Conclusion III: Y = R

From statements I and III, we get:

 $Y \geq V = H \geq P = R$ 

Here, the common sign between Y and R is  $\geq$ '. Thus Y  $\geq$  R.

Hence conclusion III does not follow individually.

Combining conclusion I and III

Since conclusion I is that "Y > R" and conclusion III is that "Y = R" and we have the true relationship as "Y  $\ge$  R", so if we combine both the conclusions, we will arrive at the conclusion that Y is either equal to or greater than R i.e. Y  $\ge$  R.

**The Question Bank** 

Thus either conclusion I or III follows.

Hence option B is correct.

