

Mathematical Inequality Questions Overview

Mathematical Inequality Questions have a good weightage in the Banking Exam and the type of question asked in Banking exam is similar to the question mentioned below. It has been solved and explained by Gargi.ai Experts and they have tried to elaborate the concept used in Mathematical Inequality Questions.

Mathematical Inequality Questions

Direction: In each of these questions the symbols @, &, %, #, and ^ are used with different meanings as follows. You have to decide which of the given conclusion/conclusions follows/follow the given statement. P@Q: P is neither greater nor equal to Q P&Q: P is greater than Q P%Q: P is not smaller than Q P#Q: P is smaller than and equal to Q P^Q: P is neither greater nor smaller than Q

Question

Statements : $A \% B \wedge C @ D @ E \# F, F \& G$ Conclusions: I. $B \& G$ II. $D \% A$ III. $C \# G$

Difficulty : Moderate

Average Time : 57 Seconds

Options :

1. I and II are true
2. II and III are true
3. I and III are true
4. I, II, and III are true
5. Either I or III is true

Solution

The correct answer is **Option 5** i.e. **Either I or III is true**

P@Q: P is neither greater nor equal to Q

P&Q: P is greater than Q

P%Q: P is not smaller than Q

P#Q: P is smaller than and equal to Q

$P \wedge Q$: P is neither greater nor smaller than Q

Symbols	@	&	%	#	^
Meaning		>			=

Statements: $A \% B \wedge C @ D @ E \# F, F \& G$

$A \% B \wedge C @ D @ E \# F \quad A B = C D E F$

$F \& G \quad F > G$

Conclusions:

I. $B \& G \quad B > G$: **False** ($B = C D E F > G$, opposite signs are there between the elements)

II. $D \% A D A$: **False** ($A B = C D$, opposite signs are there between the elements)

III. $C \# G C G$: **False** ($C D E F > G$, opposite signs are there between the elements)

Here, Conclusion I and III form complementary pairs.

As, there are opposite signs are there between the elements B and G. Also, $B = C$ so, C can be replaced by B in conclusion III.

Therefore, there are 3 different signs between B and G which are $>, , =$.

Hence, the correct answer is "**Either I or III is true**".