

Coded Relations

In Coded Relations, common algebraic or mathematical relations will be asked but the symbols will be changed. For example in **coded relations**, the symbol for addition may be % or the symbol for greater than will be @. You will be given a set of **statements** that contain these “coded relations” and will be asked to find the relation between another set of values. Fortunately, we have a pattern for such questions for SBI PO and SO exams. Let us see more and try to get acquainted with the concept. The more you practice here, the sharper and quicker you will get.

Coded Relations

The section will look something like what follows. This is a general template form of the form in which the questions may appear. Let us see:

Directions (Q. 1 – 10 {say}): In the following questions, the symbols !, @, #, \$ and * are used with different meanings as follows:

- $A ! B$ means “A is not smaller than 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 smaller than nor equal to B”.
- $A * B$ means “A is neither greater than nor smaller than B”.

In the following questions, assuming that the statements above are true no matter what, can you find which of the two conclusions, I and II, given below them is/are definitely true. The conclusions I and II will follow each question

- If only conclusion I is true.
- If only conclusion II is true.
- If either conclusion I or II is true.
- If neither conclusion I nor II is true.
- If conclusions I and II both are true.

Q 1: A) $R ! P$ B) $P @ S$ C) $S \$ R$ D) $R @ Q$

I: $S ! Q$

II: Q * R

Answer: First let us see what the third option is i.e. (c) If either conclusion I or II is true. What does it mean? Well, this means that the evidence is inconclusive and the situations are such that either I or II may be true but the evidence is not conclusive enough. Coming back to the question, the answer here is (a).

The Dissection Method

We are calling it the dissection method because what we shall do here is to analyze each option one by one. Let us see, option A) says that R is not smaller than P. In other words, $R > P$ — (1)

Similarly, from option B) $P @ S$, we see that P is not greater than S. In other words, we can say that $P < S$ or $S > P$ — (2)

Moving on, the third option is $S \$ R$ and we conclude that S is neither smaller than nor equal to R. this means

that S is larger or greater than R. So, our third **equation** is $S > R$ ——— (3)

Now in the last point, we see that $R @ Q$ or put into words, we can see that R is not greater than Q. In other words, $R < Q$ ——— (4). Now we have all the information that can be extracted from the given set of conditions. To arrive at the **solution**, a trick is to draw a number line and mark the given points as per the equations.

After you have done that, you will see that the answer to this question is (a) or the statement that S is not smaller than Q is correct while the second statement Q is neither greater than nor smaller than R is non-conclusive from the given data.

Other Forms of the Question

The coded relations can be asked with reference to the blood relations. These are actually the easier collection or group of questions. Just as in the previous section, symbols were used to determine mathematical relations,

here the symbols are used to represent blood relations.
Let us see a few examples:

Directions (Q. 1 – 10 {say}): In the following questions, the symbols !, @, #, \$ and * are used with different meanings as follows:

- A ! B means “A is the brother of B”.
- A @ B means “A is the sister of B”.
- A # B means “A is the father of B”.
- A \$ B means “A is the mother of B”.

- A % B means “A is the husband of B”.

In the following questions, assuming that the statements above are true no matter what, can you find which of the two conclusions, I and II, given below them is/are definitely true. The conclusions I and II will follow each question

- (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 conclusions I and II both are true.

Q 1: A) A # B. B) C \$ D. C) B @ D.
D) D ! B.

I: A % C

II: B % A.

Answer: Let us use the dissection method. The first option says that A is the father of B. Write down that A is male. The second option says that C is the mother of D. So, C is a female. Also, the third option suggests that B is the sister of D and the fourth option means that D is the brother of B.

So we see that A and C are the parents of B and D. A is the father and C is the mother, also, B and D are siblings.

The answer is (a).

