Blood Relations

In this section, problems are based on blood relations.
The process of solving these problems (puzzles) depends upon the deeply knowledge of blood relations.
The common relations are: Father, Mother, Grandparents, Wife, Husband, Son, Daughter, Grandchild, Sister, Brother etc.

Remarks:
1. Relatives on the mother's side are called 'maternal'. For example, mother's brother is called maternal uncle.
2. Relatives on the father's side are called 'paternal'. For example, father's brother is called paternal uncle.
3. Assume a relation as paternal relation, unless stated otherwise.

HOW TO SOLVE PROBLEMS
Usually two types of problem are asked: (i) Uncoded   (ii) Coded.
(i) To solve uncoded problems, find right gender of required relation and eliminate all wrong choices if any. Also find generation gaps to solve quickly.
(ii) To solve coded problems, just take two suitable persons under consideration and move forward or backward as per question with mentioning their gender and relations.

EXAMPLE

1.   **Read the following information carefully and answer the question that follow:**
        '$A + B'$ means 'A is the sister of B',
        '$A - B'$ means 'A is the father of B',
        '$A \div B'$ means 'A is the brother of B' and '$A \times B'$ means 'A is the mother of B'.
        What does $P - Q \times R \div S + T$ mean?
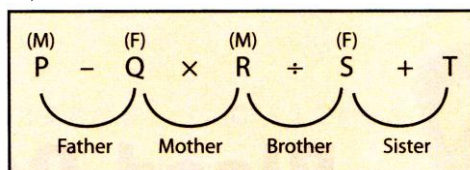   (a) T is the maternal grandfather of P
        (b) P is the maternal grandfather of T
        (c) T is the uncle of P
        (d) P is the uncle of T

Explanation (b):
Let us commence with S and T, that is, from right to the left of '$P - Q \times R \div S + T'$.

$S + T \Rightarrow S$ is the sister of T
So, 'S' must be female.

We placed F for female and M for male above the members.
$R \div S \Rightarrow R$ is brother of S means R is male $\Rightarrow$ R, S, T are siblings
$Q \times R \Rightarrow Q$ is mother of R means Q is female Q is the mother of R, S, T
$P - Q \Rightarrow P$ is father of Q

Clearly, T's mother is Q who is daughter of P.
So, P is maternal grandfather of T.
Hence option (b) is correct.

2.   Pointing out to a lady, Rajan said, "She is the daughter of the woman who is the mother of the husband of my mother." Who is the lady to Rajan?
        (a) Aunt   (b) Grand-daughter   (c) Daughter   (d) Sister

Explanation (a):
The relations may be analysed as follows:
Mother's husband - Father; Father's mother - Grandmother; Grandmother's daughter - Father's sister; Father's sister - Aunt.
So, the lady is Rajan's aunt.