

## 13. Blood Relations

In this section, problems are based on blood relations. The process of solving these problems (puzzles) depends upon the deep knowledge of blood relations. The common blood 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 problems are asked ; (i) Uncoded (ii) Coded.

- (i) To solve uncoded problems, find right gender of the required relation and eliminate all wrong choices if any. Also find generation gaps to solve quickly.

You can solve by drawing a generation diagram. For this put lower generation below the upper generation and mention m (or m) and F (or f) within brackets for male and female respectively.

- (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 relation.

### Solved Examples

**Ex.1** If 'A+B' means 'A' is the brother of 'B'; 'A % B' means 'A' is the father of 'B' and 'A×B' means 'A' is the sister of 'B'. Which of the following means 'M' is the uncle of 'P'?

- (1)  $M + K \% T \times P$       (2)  $N \times P \% M$       (3)  $M + S \% R \% P$       (4)  $M \% N \times P$

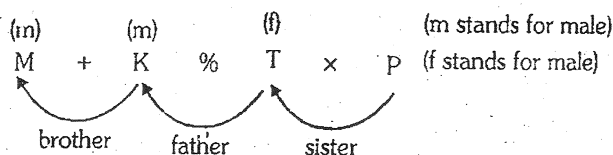
**Sol.** (1): Let us consider option (1) which is  $M + K \% T \times P$

'M + K' means, 'M' is the brother of 'K'

T means; K is the father of T.

'T × P' means, 'T' is the sister of 'P'

Therefore, we arrive:



Moving right to left, we obtain T is sister of P and K is father of T. So K is the father of P. Further M is the brother of K. Consequently M is the uncle of P.

So the correct options is (1).

**Ex.2** A is B's sister. C is B's mother. D is C's father. E is D's mother. Then, how is A related to D?

- (1) Grandmother      (2) Grandfather      (3) Daughter      (4) Grand daughter

**Sol.** A is the sister of B and B is the son/daughter of C. So, A is the daughter of C. Also, D is the father of C. Thus, A is the grand daughter of D. Hence, the answer is (4).

**Ex.3** Pointing to a man in photograph, a man said to a women, "His mother is the only daughter of your father." How is the woman related to the man in the photograph?

- (1) Sister      (2) Mother      (3) Wife      (4) Daughter

**Sol.** From the information given in the question, it is clear that, the only daughter of the woman's father is the woman herself, and hence the man in the photograph is her son. Therefore, the woman is the mother of the man in the photograph. Therefore, the correct answer is (2).

## EXERCISE

1. A is B's brother, B is C's sister and C is D's father, D is A's?
 

(1) Brother
(2) Sister
(3) Nephew
(4) Can't determined
2. Q's mother is sister of P and daughter of M. S is daughter of P and sister of T. How is M Related to T?
 

(1) Father
(2) Grandfather

(3) Either Grandmother or Grandfather
(4) Grandmother
3. If A is the brother of the son of B's son, How is A related B?
 

(1) Son
(2) Brother
(3) Cousin
(4) grandson
4. If Y says that his mother is the only daughter of X's mother. How is X related to Y?
 

(1) Cousin
(2) Father
(3) Brother
(4) Can't determined
5. A is B are brothers. C and D are sisters. A's son is D's brother. How is B related to C?
 

(1) Father
(2) Mother
(3) Uncle
(4) Aunt
6. A and B are married couple. X and Y are the brothers. X is the brother of A. How is Y related to B?
 

(1) Brother
(2) Brother-in-law
(3) Son
(4) Son-in-law
7. If B's mother was A's mother's daughter, How A is related to B?
 

(1) Maternal Uncle
(2) Father
(3) Brother
(4) Can't determined
8. A and B both are children of C. If C is the mother of A. A is the son of C but B is not the daughter of C, how are A and B mutually related.
 

(1) A is the brother of B
(2) A is sister of B

(3) A is a cousin of B
(4) None of these
9. A party consists of grandmother, father, mother, four sons and their wives and one son and two daughters to each of the sons. How many females are there in all?
 

(1) 14
(2) 17
(3) 16
(4) 24
10. Read the information and answer the Questions given below.
 

If P+Q means P is the brother of Q

P\*Q means P is the mother of Q

P+Q means P is the sister of Q,

then which of the following would mean R is the uncle of S?

(1) R\*P+S
(2) R\*S+P
(3) R+P\*S
(4) None of these

**Directions (Q.11 & Q.12):** Read the information and answer the Questions given below.

$A + B$  means A is the daughter of B

$A * B$  means A is the son of B, and

$A - B$  means A is the wife of B

11. If  $Z * T - S * U + P$ , Which is U to Z?

- (1) Mother (2) Grand Mother (3) Father (4) None of these

12. If  $P * Q - S$ . Which of the following is true?

- (1) S is the wife of Q (2) S is the father of P  
(3) P is the daughter of Q (4) None of these

**Directions (Q.13 & Q.14) :** These questions are based on the following information.

- (I) ' $A * B$ ' means 'A is brother of B' (II) ' $A / B$ ' means 'B is mother of A'  
(III) ' $A - B$ ' means 'A is father of B' (IV) ' $A + B$ ' means 'B is sister of A'

13. Which of the following means L is daughter of H?

- (1)  $L + K / J - H$  (2)  $H - J * R + L$  (3)  $L - J * H / K$  (4)  $L + W * R / H$

14. How is S related to T in the Expression:  $T / P + S$ ?

- (1) Daughter (2) Sister (3) Niece (4) Aunt

**Direction (Q.15 & Q.16) :** These questions are based on the following information.

- (I) ' $A * B$ ' means 'A is father of B' (II) ' $A - B$ ' means 'A is sister of B'  
(III) ' $A + B$ ' means 'A is mother of B' (IV) ' $A / B$ ' means 'A is sister of B'

15. In the expression  $D + F * O / P$ , how is O related to D?

- (1) Granddaughter (2) Son (3) Grand son (4) Daughter

16. Which of the following represents 'J is son of F'?

- (1)  $J / R - T * F$  (2)  $J + R - T * F$  (3)  $J / M - N * F$  (4) None of these

**Directions (Q.17 to Q.19) :** P, Q, R, S, T, U, V & W are the family members. Q is the sister of V and V is the brother of R. T is the wife of P, whose father is W. S is the husbands of Q and U is the son of V. P is the father of Q.

17. How U is related with T?

- (1) Son (2) Mother (3) Grandson (4) Nephew

18. How S is related with R?

- (1) Son (2) uncle (3) Son (4) Brother

19. How W is related with R?

- (1) Grand father (2) uncle (3) Son (4) Brother

There are six children playing football namely A, B, C, D, E and F. A and E are brother. F is the sister of E. C is the only son of A's uncle. B and D are the daughters of the brother of C's father.

20. How is C related to F ?  
(1) Cousin (2) Brother (3) Son (4) Uncle
21. How many male players are there ?  
(1) One (2) Three (3) Five (4) Six
22. How many female players are there ?  
(1) Two (2) Three (3) Five (4) One
23. How C is related to A ?  
(1) Uncle (2) Sister (3) Niece (4) Cousin
24. Introducing a man, a woman said, "His wife is the only daughter of my father." How is that man related to the woman ?  
(1) Husband (2) Brother (3) Father-in-law (4) Maternal-uncle
25. Pointing to a lady, a man said. "The son of her only brother is the brother of my wife." How is the lady related to that man ?  
(1) Mother's sister (2) Grandmother (3) Sister of father-in-law (4) Mother-in-law

EXERCISE						ANSWER KEY														
Ques.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Ans.	4	3	4	4	3	2	4	1	1	3	2	2	2	4	3	4	3	3	1	1
Ques.	21	22	23	24	25															
Ans.	2	2	4	1	3															