

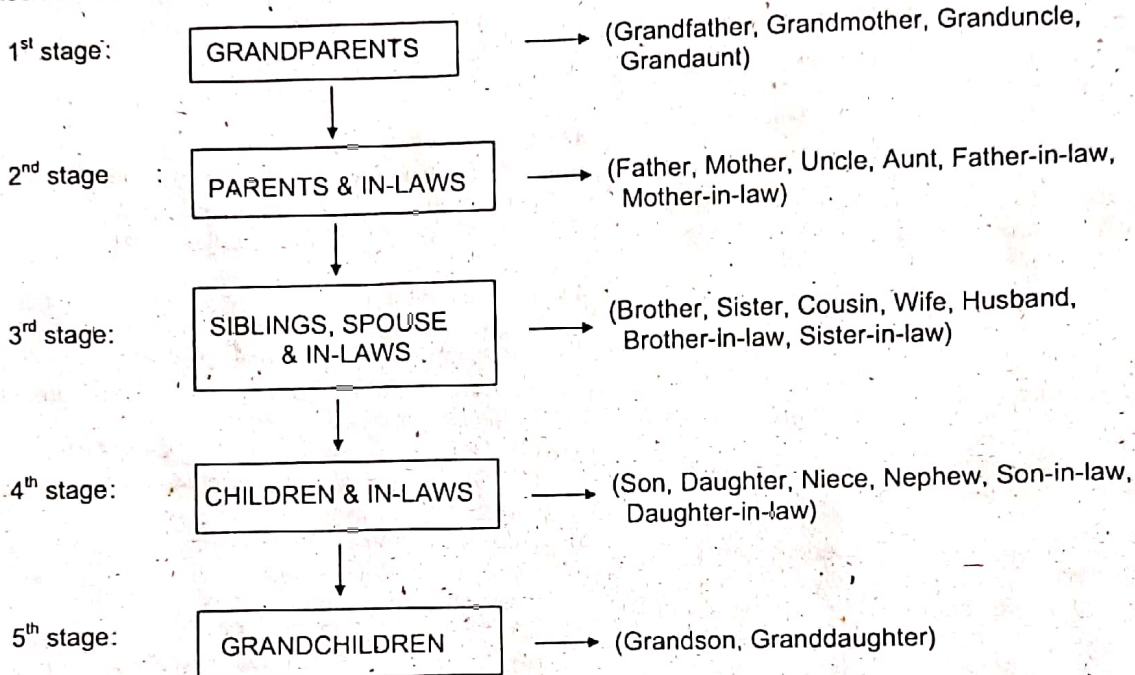
CHAPTER – VII

BLOOD RELATIONS

There are two types of questions based on blood relations that are given in different competitive examinations. For the sake of convenience we will refer to the two types of questions as Type I and Type II. (Please note that the questions on blood relationships are not categorised as above in the actual exam papers. It is being done purely from the point of better understanding).

In the exams, the success of a candidate in the questions on blood relations depends upon his knowledge about various blood relations. Some of the relationships given below help in solving the problems.

The easiest and non-confusing way to solve these types of problems would be to draw a family tree diagram and increase the levels in the hierarchy as shown below:



Mother's or Father's son	: Brother
Mother's or Father's daughter	: Sister
Mother's or Father's brother	: Uncle
Mother's or Father's sister	: Aunt
Mother's or Father's mother	: Grandmother
Mother's or Father's father	: Grandfather
Grandmother's brother	: Granduncle
Grandmother's sister	: Grandaunt
Grandfather's brother	: Granduncle
Grandfather's sister	: Grandaunt
Sister's or Brother's son	: Nephew
Sister's or Brother's daughter	: Niece
Uncle or Aunt's son or daughter	: Cousin
Son's wife	: Daughter-in-law
Daughter's husband	: Son-in-law
Husband's or Wife's sister	: Sister-in-law
Husband's or Wife's brother	: Brother-in-law
Sister's husband	: Brother-in-law
Brother's wife	: Sister-in-law
Children of same parents	: Siblings (could be all brothers, all sisters or some brothers and some sisters)
Children	: Son, Daughter
Children's Children	: Grandchildren
(Grandson, Granddaughter)	

In addition, remember the word spouse which means either husband or wife.

Grandfather and grandmother will come in the first stage; mother, father, uncle and aunt will come in the second stage; sister, brother and cousin will come at the third stage; son, daughter, niece and nephew will come in the fourth stage and finally, granddaughters and grandsons will come. The above stages are made from the point of view of an individual.

In Type – I questions, the relationship between two people is given through a roundabout way of relating them through other people. We have to go through the series of relationships and finally determine the relationship between the two people given in the question. The relationship can be given as a simple statement or as a statement made by a person. In the first example given below, a person is involved in making a statement whereas in the second question, there is no person involved in making a statement.

Worked out examples:

- A's father's mother-in-law's only daughter's son is B. How is A related to B?
 - (1) Brother
 - (2) Sister
 - (3) Nephew
 - (4) Niece
 - (5) Cannot be determined

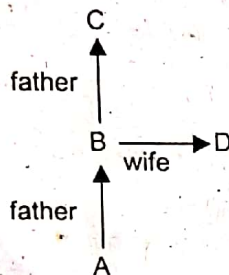
Sol. A's father's mother-in-law's only daughter is A's mother. A's mother's son is A's brother. But A can be either brother or sister to B.

Choice (5)

2. If A's father is B, C is the father of B and D is A's mother, then How is C related to D?

- (1) Father (2) Grandfather
(3) Father-in-law (4) Uncle
(5) Nephew

Sol. A's father is B and mother is D. Therefore D is B's wife and C is the father of B. Hence C is D's father-in-law.



Choice (3)

3. A + B means A is the son of B.
A - B means A is the daughter of B.
A × B means A is the father of B.
A ÷ B means A is the mother of B.

If $M \times N + O - P \div Q$, then how is M related to Q?

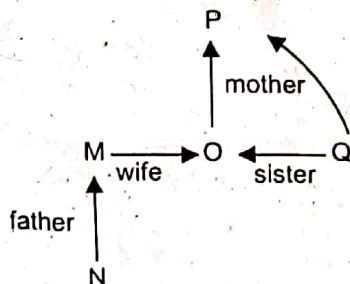
- (1) Husband (2) Cousin
(3) Brother-in-law (4) Uncle
(5) Father-in-law

Sol. $M \times N + O - P \div Q$ means M is the father of N, N is the son of O, O is the daughter of P, P is the mother of Q.

M is the father of N and N is the son of O means M is the husband of O.

O is the daughter of P and P is the mother of Q means O is the sister of Q.

M is the husband of O and O is the sister of Q means M is the brother-in-law of Q.



Choice (3)

4. A + B means A is the son of B.
A - B means A is the daughter of B.
A × B means A is the father of B.
A ÷ B means A is the mother of B.

Which of the following means S is the son-in-law of P?

- (1) $P + Q + R \times S - T$
(2) $P \times Q + R - S + T$
(3) $P + Q \times R - S + T$
(4) $P \times Q - R + S \times T$
(5) $P + Q - R \div S \times T$

Sol. $P + Q \div R \times S - T$ means P is the son of Q, Q is the mother of R, R is the father of S and S is the daughter of T. Hence S is the nephew of P.

$P \times Q \div R - S + T$ means P is the father of Q, Q is the mother of R, R is the daughter of S and S is the son of T. Hence S is the son-in-law of P.

$R + Q \times R - S \div T$ means P is the son of Q, Q is the father of R, R is the daughter of S and S is the mother of T. Hence S is the mother of P.

$P \times Q - R \div S \times T$ means P is the father of Q, Q is the daughter of R, R is the mother of S and S is the father of T. Hence S is the son of P.

Choice (2)

5. Pointing to a person, Raju said, "He is the only brother of my father's mother's daughter." How is the person related to Raju?

- (1) Brother (2) Father
(3) Uncle (4) Nephew
(5) Son

Sol: Raju's father's mother's daughter is Raju's father's sister. Raju's father's sister's only brother is Raju's father. Hence the person is Raju's father.

Choice (2)

6. A's mother's father is the husband of B's mother. How is A related to B, if A and B are both male.

- (1) Uncle (2) Father
(3) Nephew (4) Son
(5) Brother

Sol. A's mother's father is the husband of B's mother. That means A's mother is the sister of B. Hence all the nephew of B.

Choice (3)

Exercise - 7

Directions for questions 1 to 20: Select the correct alternative from the given choices.

1. A person who is the husband of my son's sister is my
(1) Nephew (2) Son-in-law (3) Son
(4) Brother (5) Father
2. Y is the daughter of X's brother's wife's father-in-law. Y is X's _____.
(1) Niece (2) Daughter
(3) Sister (4) Sister-in-law
(5) Mother
3. Showing a photograph P said, "She is my mother's mother's son's daughter". How is the person in the photograph related to P?
(1) Sister (2) Cousin (3) Niece
(4) Mother (5) None of these
4. How is my father's mother's only daughter-in-law's sister related to me?
(1) Aunt (2) Sister (3) Cousin
(4) Niece (5) Mother
5. How is my grandmother's only child's husband's mother related to me?
(1) Mother (2) Grandmother
(3) Aunt (4) Sister
(5) Cousin
6. How is Ramu's mother-in-law's only daughter's son related to Ramu?
(1) Nephew (2) Brother (3) Son
(4) Uncle (5) Father
7. How is my son's son's mother's daughter related to me?
(1) Niece (2) Granddaughter
(3) Daughter (4) Aunt
(5) Mother
8. How is my father's brother's only sibling's mother related to me?
(1) Mother (2) Cousin (3) Daughter
(4) Aunt (5) Grandmother
9. A is the father of B. C is the son of D. E is the brother of C while D is the sister of B. How is B related to E?
(1) Uncle (2) Aunt (3) Mother
(4) Father (5) Either (1) or (2)
10. My mother's sister's son's father's mother-in-law is related to me as
(1) Mother (2) Grandmother
(3) Mother-in-law (4) Aunt
(5) Sister
11. How is David's father's only daughter-in-law's son's wife related to David?
(1) Daughter (2) Daughter-in-law
(3) Niece (4) Granddaughter
(5) Mother
12. How is Ravi's mother's father's son related to Ravi's father?
(1) Cousin (2) Uncle
(3) Brother-in-law (4) Son-in-law
(5) Mother
13. Divya's father, pointing towards a person, said, "He is the brother of my father's only sibling". How is the person related to Divya?
(1) Father (2) Uncle
(3) Brother (4) Grandfather
(5) Nephew
14. Tinku, introducing a person to Rinku, said "He is the father of your sister's son and he is also my mother's husband". How is Tinku's father related to Rinku's mother?
(1) Nephew (2) Uncle
(3) Son-in-law (4) Father
(5) None of these
15. A is B's father, B is C's daughter, E is D's only sibling. C is D's only daughter. How is B related to E's niece?
(1) Niece (2) Granddaughter
(3) Daughter (4) Mother
(5) None of these
16. My father's only brother's wife's only daughter's paternal uncle is my mother's _____.
(1) Father-in-law (2) Husband
(3) Son (4) Uncle
(5) Father
17. My mother's brother's son's mother is related to my maternal aunt as
(1) Sister-in-law (2) Cousin
(3) Aunt (4) Mother-in-law
(5) Mother
18. Sanjana's brother-in-law is the son of Ramya. How is Sanjana's husband related to Ramya's husband if Sanjana had no siblings?
(1) Nephew (2) Son
(3) Son-in-law (4) Father-in-law
(5) Cannot be determined
19. How is my mother's mother's only son-in-law's sister related to me?
(1) Mother-in-law (2) Sister
(3) Aunt (4) Mother
(5) Cousin
20. A's mother's son's only sister is B. How is A related to C, if B is the mother of C's daughter?
(1) Brother (2) Brother-in-law
(3) Uncle (4) Nephew
(5) Cousin

Directions for questions 21 to 25: Use the relations defined below and answer the following questions.

A + B means A is the mother 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 son of B.
A = B means A is the brother of B.
A ≠ B means A is the daughter of B.

21. Which of the following means P is the aunt of Q?
(1) $P - R \div Q$ (2) $P + R \times Q$
(3) $P \neq R \times Q$ (4) $P - R + Q$
(5) $P \times R = Q$

22. Which of the following means S is the son of T's daughter?

- (1) $T \times M + S + N$ (2) $T \times M + S = N$
 (3) $T + M \times S - N$ (4) $S + M + T - N$
 (5) $T \times M + S \neq N$

23. Which of the following means W is the uncle of Z?

- (1) $W \times A - B + Z$ (2) $W = A + B - Z$
 (3) $W = A + B + Z$ (4) $W - A + B - Z$
 (5) $W \times A \times B = Z$

24. Which of the following means C is the grandfather of both D and E?

- (1) $C \times A + D - E$ (2) $C + A + D \neq E$
 (3) $C \div A \neq D = E$ (4) $C \times A \times D - E$
 (5) $C \div A \times D \times E$

25. Which of the following means I is the mother of L?

- (1) $I + B - C \neq D \times L$ (2) $I \neq B + C \times L$
 (3) $I + B \times C \neq D - L$ (4) $I + B - C \times L$
 (5) $I \times B \times C = D = L$

Directions for questions 26 to 30: Use the relationships given below and answer the questions followed.

$P \uparrow Q$ means P is the husband of Q

$P \$ Q$ means P is the father of Q.

$P \in Q$ means P is the mother of Q.

$P @ Q$ means P is the brother of Q.

$P \odot Q$ means P is the sister of Q.

$P \Delta Q$ means P is the son of Q.

$P \Rightarrow Q$ means P is the daughter of Q.

$P \downarrow Q$ means P is the wife of Q.

26. If $A \Delta B \in C \$ D$, then A is the _____ of D.

- (1) father (2) uncle
 (3) brother (4) son
 (5) None of the above

27. $E @ F \downarrow G \$ H$ means

- (1) H is the niece of E.
 (2) H is the nephew of E.
 (3) E is the paternal uncle of H.
 (4) H is the father of E.
 (5) Either (1) or (2)

28. $I \$ J \Rightarrow K \Rightarrow L \uparrow M$ means

- (1) I is the son of M.
 (2) I is the nephew of M.
 (3) M is the father-in-law of I.
 (4) I is the son-in-law of M.
 (5) M is the father of I.

29. If $P \odot Q \Delta R @ S$ and $T \downarrow S$, then which among the following is a true statement?

- (1) S is the aunt of P.
 (2) Q is the niece of S.
 (3) S is the father of P and Q.
 (4) P is the niece of S.
 (5) S is the father of P.

30. If $W \Rightarrow X \Delta Y \in Z$, then which among the following is definitely true?

- (1) Z is the uncle of W.
 (2) W is the niece of Z.
 (3) W is the daughter of Z.
 (4) W is the son of Z.
 (5) None of these.

Directions for questions 31 to 35: These questions are based on the information given below.

A, B, C, D, E and F are six members of a family. A is the mother of B, who is the husband of D. F is the brother of one of the parents of C. D is the daughter-in-law of E and has no siblings. C is the son of D.

31. How is C related to A?

- (1) Nephew (2) Son-in-law
 (3) Grandson (4) Father
 (5) None of the above

32. How is F related to D?

- (1) Cousin (2) Brother-in-law
 (3) Brother (4) Father
 (5) None of these

33. How is E related to F?

- (1) Mother (2) Mother-in-law
 (3) Father (4) Father-in-law
 (5) Sister

34. If F is married to G, then how is G related to B?

- (1) Sister (2) Sister-in-law
 (3) Cousin (4) Mother
 (5) None of these

35. How many male members are there in the family?

- (1) Two (2) Three
 (3) Four (4) Five
 (5) Cannot be determined

Directions for questions 36 to 40: These questions are based on the information given below.

A family of eight persons has three married couples. Amelie is the grandmother of Charles and is the mother-in-law of Floyd. Helen is the daughter of Bob, who is the brother of George. Diana is the only child of George and is the mother of Charles. Emma is the wife of Bob.

36. How is George related to Helen?

- (1) Uncle (2) Father
 (3) Brother (4) Cousin
 (5) None of these

37. How is Helen related to Diana?

- (1) Sister (2) Daughter
 (3) Cousin (4) Mother
 (5) Father

38. Diana's mother is

- (1) Emma (2) Amelie
 (3) Helen (4) Floyd
 (5) None of these

39. Who is the father of Floyd?

- (1) George (2) Bob
 (3) Charles (4) None of these
 (5) Data insufficient

40. How is Charles father related to George's daughter?

- (1) Son (2) Uncle
 (3) Husband (4) Father-in-law
 (5) Father

Directions for questions 41 to 45: These questions are based on the information given below.

In a family of three generations, there are eight members, M and N are brothers. R is the grandson of Q. T is the only niece of M, P is the sister-in-law of N. O is the mother-in-law of S. There are three married couples in the family. T is the daughter of S.

41. How is R related to T?
 (1) Cousin (2) Uncle
 (3) Brother (4) Father
 (5) Cannot be determined
42. How is Q related to S?
 (1) Grandfather (2) Uncle
 (3) Father-in-law (4) Father
 (5) None of these
43. How is P related to O?
 (1) Aunt (2) Mother
 (3) Daughter-in-law (4) Mother-in-law
 (5) Cousin
44. How is O related to R?
 (1) Uncle (2) Grandmother
 (3) Aunt (4) Grandfather
 (5) Father
45. In the family the ratio of number of male members to that of female members
 (1) 3 : 5 (2) 5 : 3
 (3) 1 : 1 (4) 2 : 3
 (5) None of these

Directions for question 46 to 50: These questions are based on the information given below.

In a family of eight members, there are two married couples and a widow. A, the engineer, is married to a doctor. C, an architect is the wife of D. E, a student is the only child of C.

G is the son of H and his sister F is the niece of the manager. B, a teacher, is the mother of only A and D.

46. Who is the manager?
 (1) G (2) D (3) H
 (4) A (5) C
47. Who is the mother of F?
 (1) A (2) B (3) H
 (4) C (5) Cannot be determined
48. B is related to G as _____
 (1) Mother-in-law (2) Mother
 (3) Grandmother (4) Daughter-in-law
 (5) None of these
49. The profession of H is _____
 (1) Manager (2) Engineer
 (3) Doctor (4) Teacher
 (5) None of these
50. The profession of G is _____
 (1) Manager (2) Engineer
 (3) Doctor (4) Teacher
 (5) Data insufficient

Key

1.	2	6.	3	11.	2	16.	2	21.	4	26.	2	31.	3	36.	1	41.	5	46.	2
2.	3	7.	2	12.	3	17.	1	22.	2	27.	5	32.	2	37.	3	42.	3	47.	5
3.	2	8.	5	13.	4	18.	2	23.	2	28.	4	33.	3	38.	2	43.	3	48.	3
4.	1	9.	5	14.	3	19.	3	24.	4	29.	4	34.	2	39.	5	44.	2	49.	3
5.	2	10.	2	15.	3	20.	2	25.	1	30.	2	35.	3	40.	3	45.	3	50.	5