

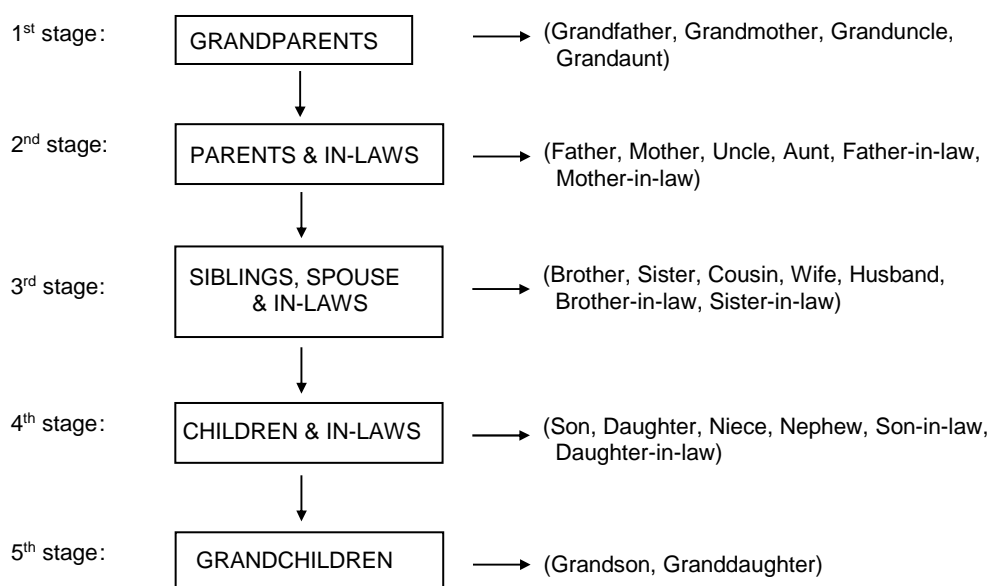
CHAPTER – 3

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.

While solving the questions in Blood relations, let us follow two symbols

□ Stands for males and ○ stands for females.

These are not universal symbols but for our convenience we are using these two symbols.

Worked Out Examples:

Directions for questions 3.01 to 3.06: Select the correct alternative from the given choices.

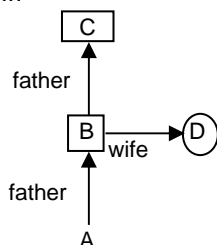
- 3.01.** A's father's mother-in-law's only daughter's son is B. How is A related to B?
 (A) Brother (B) Sister
 (C) Nephew (D) Cannot be determined

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 (D)

- 3.02.** 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?
 (A) Father (B) Nephew
 (C) Father-in-law (D) Uncle

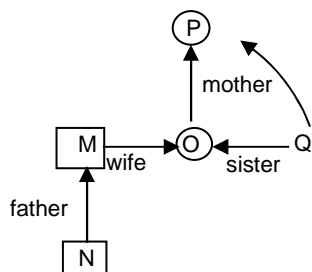
Sol. A's father is B and mother is D. Therefore D is B's wife and C is the father of B. Hence C is D's father-in-law.



Choice (C)

- 3.03.** 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?
 (A) Husband (B) Cousin
 (C) Brother-in-law (D) 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 (C)

- 3.04.** 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?

- (A) $P + Q \div R \times S - T$
 (B) $P \times Q \div R - S + T$
 (C) $P + Q \times R - S \div T$
 (D) $P \times Q - R \div S \times T$

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 (B)

- 3.05.** 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?
 (A) Brother
 (B) Father
 (C) Uncle
 (D) 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 (B)

- 3.06.** 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.
 (A) Brother
 (B) Father
 (C) Nephew
 (D) Son

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 (C)

Exercise – 3

Directions for questions 1 to 11: Select the correct alternative from the given choices.

1. How is Anil's mother's husband's mother's grand-daughter related to Anil?
(A) daughter
(B) cousin
(C) sister
(D) Cannot be determined
2. How is my mother's mother-in-law's only son related to me?
(A) father
(B) uncle
(C) grand father
(D) brother
3. How is my father's brother's only sibling related to me?
(A) brother
(B) cousin
(C) father
(D) uncle
4. How is my brother's grandfather's only son's only child related to me?
(A) brother
(B) cousin
(C) Nephew
(D) mother
5. How is my mother's mother's daughter-in-law's daughter related to me?
(A) sister
(B) cousin
(C) niece
(D) aunt
6. Rohit goes to visit his sister, who has a daughter Sheela. Sheela was playing chess with Namit. How is Rohit related to Namit?
(A) cousin
(B) uncle
(C) nephew
(D) Cannot be determined
7. Mrs. X meets a man at a party who is the brother of the sister of her husband. How is the man related to X?
(A) brother-in-law
(B) brother
(C) cousin
(D) father
8. A man goes to a park and sees a girl who he recognised to be his relative. The girl was the daughter of his sister's husband's wife. How is the girl related to the man?
(A) sister
(B) niece
(C) wife
(D) sister-in-law
9. B is the only son of A who is the only daughter of C. E is the mother of F and daughter-in-law of A. How is F related to A?
(A) grand-daughter
(B) grandson
(C) daughter
(D) Cannot be determined
10. How is my father's sister's son's sister related to me?
(A) cousin
(B) sister
(C) aunt
(D) nephew
11. A is the husband of B. E is the daughter of C. A is the father of C. How is B related to E?
(A) mother
(B) grandmother
(C) aunt
(D) cousin

Directions for questions 12 to 16: Use the relations defined below to solve these questions.

- $S * T$ means S is sister of T.
 $S + T$ means S is the brother of T.
 $S - T$ means S is the son of T.
 $S \div T$ means S is the daughter of T.
 $S = T$ means S is the father of T.
 $S \times T$ means S is the mother of T.
12. Which of the following means A is the uncle of B?
(A) $B + D \times A$
(B) $A + C = B$
(C) $B + D \div A$
(D) $A + D \div B$
 13. Which of the following means X is the grand-father of Y?
(A) $X = Z = Y$
(B) $X = Z \times Y$
(C) Both (A) and (B)
(D) $X * Z = Y$
 14. Which of the following means P is the mother of Q and R?
(A) $Q * R \div P$
(B) $Q \div P \times R$
(C) $Q + P = R$
(D) $P = R + Q$
 15. Which of the following means D is the son of A?
(A) $E = D + A$
(B) $D - E + A$
(C) $E \times D - A$
(D) $D = E + A$
 16. Which of the following means P is the sister of Q?
(A) $Q + R - P$
(B) $Q * R - P$
(C) $P = Q + R$
(D) $P * R + Q$

Directions for questions 17 to 21: Use the relationships defined below to solve these questions.

- $A () B$ means B is the mother of A.
 $A \text{ of } B$ means B is the father of A.
 $A \div B$ means B is the sister of A.
 $A \times B$ means B is the brother of A.
 $A + B$ means B is the daughter of A.
 $A - B$ means B is the son of A.
17. If $T - P \div Q$ is given, then how is Q related to T?
(A) nephew
(B) brother
(C) aunt
(D) None of these
 18. What does $L () M \div N$ means
(A) M is the sister of N.
(B) N is the sister of M.
(C) M is the niece of N.
(D) Both (A) and (B)
 19. If P of $Q + R$ then which of the following is true?
(A) P and R are sister's to each other.
(B) P is the mother of Q.
(C) R is the sister of P.
(D) Q is the mother of R.
 20. If $Y \times Z () K$ is given, how is Z related to K?
(A) Z and Y are brother's to each other.
(B) K is the aunt of Y.
(C) Z is the son of K.
(D) None of these
 21. If $S \times J + T$ is given then which of the following is true?
(A) T is the aunt of S.
(B) T is the niece of S.
(C) S is the uncle of T.
(D) S is the aunt of T.

Directions for questions 22 to 25: These questions are based on the following information.

Celina, the only daughter of Brian was celebrating her tenth birthday. A total of 6 members attended the party. All except Gerhard who was a close friend of Celina, were her close relatives. Anna was the daughter-in-law of Freda who was the wife of Emanuel. Dimitri was the son of Anna and brother of Celina.

22. How is Freda related to Brian?
 (A) mother-in-law (B) mother
 (C) aunt (D) grand-mother
23. How is Gerhard related to Dimitri?
 (A) brother (B) father
 (C) brother-in-law (D) Not related
24. Who is the grandfather of Celina?
 (A) Brian (B) Freda
 (C) Dimitri (D) None of these
25. How is Anna related to Emanuel?
 (A) daughter-in-law (B) daughter
 (C) grand-daughter (D) sister

Directions for questions 26 to 30: These questions are based on the following information.

A family consists of eight persons which has three married couples. L is the grandfather of D. C is the mother of D and sister-in-law of B. Y is the cousin of D. A is the mother of M and grandmother of Y. Y is the niece of X, who is the son-in-law of L. All the relationships given here pertain to A, B, C, D, L, M, X and Y.

26. Who is the mother of Y?
 (A) M (B) B
 (C) C (D) Cannot be determined
27. What is D to A?
 (A) grandson (B) son
 (C) grandchild (D) daughter

28. Who is the wife of L?
 (A) M (B) B (C) A (D) C
29. What is Y to L?
 (A) daughter (B) son
 (C) grandson (D) grand-daughter

30. Who is the spouse of B?
 (A) M (B) C (C) X (D) A

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

Eight persons A, B, C, D, E, F, G and H, all belonging to the same family and related to each other, go for a picnic. A is a student and is the youngest person in the group. C is a writer and is the wife of B, who is a doctor. G is the father-in-law of E, an engineer. C and F are the daughters of the salesman. H is the wife of G and grandmother of A and D. A is the cousin of D and the son of the doctor. There is a lecturer in the group whose mother is a teacher. All relations and professions given here pertain to one of A, B, C, D, E, F, G and H.

31. Who is the salesman?
 (A) H (B) G (C) F (D) B
32. Who is the wife of E?
 (A) F (B) H
 (C) A (D) None of these
33. Who is the teacher?
 (A) B (B) G (C) A (D) H
34. How is D related to C?
 (A) nephew
 (B) daughter
 (C) niece
 (D) Cannot be determined
35. How is the engineer related to A?
 (A) uncle (B) father
 (C) grand father (D) son

Key

Exercise – 3

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|------|-------|-------|-------|-------|-------|-------|
| 1. D | 6. D | 11. B | 16. D | 21. B | 26. D | 31. B |
| 2. A | 7. A | 12. B | 17. D | 22. B | 27. C | 32. A |
| 3. C | 8. B | 13. C | 18. D | 23. D | 28. C | 33. D |
| 4. B | 9. D | 14. B | 19. C | 24. D | 29. D | 34. D |
| 5. B | 10. A | 15. C | 20. C | 25. A | 30. A | 35. A |