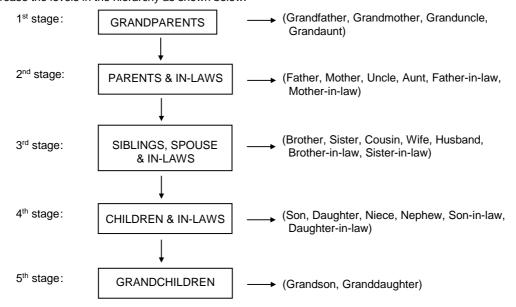
## CHAPTER - 9

## **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?
  - (A) Brother
  - (B) Sister
  - (C) Nephew
  - (D) Niece
  - (E) Cannot be determined

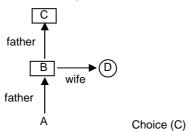
Sol: A's father's mother-in-law's only daughter is A's mother. A's mother's son is A's brother. But A can be either brother or sister to B.

Choice (E)

- 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?
  - (A) Father
- (B) Grandfather
- (C) Father-in-law
- (D) Uncle
- (E) 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.

Here, indicates that the person is male

and O indicates that the person is female



- 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?

- (A) Husband
- (B) Cousin (D) Uncle
- (C) Brother-in-law
- (E) 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.

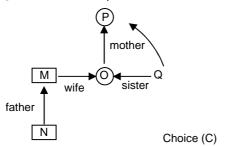
O is the daughter of P and P is the mother of Q means O is the sister of Q.

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

Here, indicates that the person is male

.

and O indicates that the person is female



- 4. A + B means A is the son of B.
  - A B means A is the daughter of B.
  - $A \times B$  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  $\mathsf{P}$ ?

- (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)  $P \times Q R \div S \times T$
- (E)  $P+Q-R \div S \times T$
- 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 (B)

- **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?
  - (A) Brother
- (B) Father
- (C) Uncle
- (D) Nephew
- (E) 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)
- 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.
  - (A) Uncle
- (B) Father
- (C) Nephew
- (D) Son
- (E) Brother
- Sol: A's mother's father is the husband of B's mother.
  That means A's mother is the sister of B.
  Hange all the perhaps of B.
  Chaice (C)

Hence all the nephew of B. Choice (C)

## Exercise – 9

	ections for questions 1 to 20: Select the correct ernative from the given choices.	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.	A person who is the husband of my son's sister is my (A) Nephew (B) Son-in-law (C) Son (D) Brother (E) Father	(A) Father (B) Uncle (C) Brother (D) Grandfather (E) Nephew
2.	Y is the daughter of X's brother's wife's father-in-law. Y is X's  (A) Niece (B) Daughter (C) Sister  (D) Sister-in-law (E) Mother	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? <ul> <li>(A) Nephew</li> <li>(B) Uncle</li> <li>(C) Son-in-law</li> <li>(D) Father</li> <li>(E) None of these</li> </ul>
3.	mother's son's daughter". How is the person in the photograph related to P?  (A) Sister (B) Cousin (C) Niece  (D) Mother (E) None of these	<ul> <li>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?</li> <li>(A) Niece</li> <li>(B) Granddaughter</li> <li>(C) Daughter</li> <li>(D) Mother</li> </ul>
4.	How is my father's mother's only daughter-in- law's sister related to me?  (A) Aunt (B) Sister (C) Cousin  (D) Niece (E) Mother	<ul><li>(E) None of these</li><li>16. My father's only brother's wife's only daughter's paternal uncle is my mother's</li></ul>
5.	How is my grandmother's only child's husband's mother related to me?  (A) Mother (B) Grandmother (C) Aunt	(A) Father-in-law (B) Husband (C) Son (D) Uncle (E) Father
6.	(D) Sister (E) Cousin  How is Ramu's mother-in-law's only daughter's son	<ul><li>17. My mother's brother's son's mother is related to my maternal aunt as</li><li>(A) Sister-in-law</li><li>(B) Cousin</li></ul>
•	related to Ramu? (A) Nephew (B) Brother (C) Son (D) Uncle (E) Father	(C) Aunt (D) Mother-in-law (E) Mother
7.	How is my son's son's mother's daughter related to me?  (A) Niece (B) Granddaughter  (C) Daughter (D) Aunt  (E) Mother	<ul> <li>18. Sanjana's brother-in-law is the son of Ramya. How is Sanjana's husband related to Ramya's husband it Sanjana had no siblings?</li> <li>(A) Nephew</li> <li>(B) Son</li> <li>(C) Son-in-law</li> <li>(D) Father-in-law</li> <li>(E) Cannot be determined</li> </ul>
8.	How is my father's brother's only sibling's mother related to me?  (A) Mother (B) Cousin (C) Daughter (D) Aunt (E) Grandmother	19. How is my mother's mother's only son-in-law's sister related to me?  (A) Mother-in-law (B) Sister (C) Aunt (D) Mother
	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?  (A) Uncle (B) Aunt (C) Mother (D) Father (E) Either (A) or (B)  My mother's sister's son's father's mother-in-law	(E) 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?  (A) Brother  (B) Brother-in-law  (C) Uncle  (D) Nephew  (E) Cousin
	is related to me as (A) Mother (B) Grandmother (C) Mother-in-law (D) Aunt (E) Sister	Directions for questions 21 to 25: Use the relations defined below and answer the following questions.
11.	How is David's father's only daughter-in-law's son's wife related to David?  (A) Daughter  (B) Daughter-in-law  (C) Niece  (D) Granddaughter  (E) Mother	<ul> <li>A + B means A is the mother of B.</li> <li>A - B means A is the sister of B.</li> <li>A × B means A is the father of B.</li> <li>A ÷ B means A is the son of B.</li> <li>A = B means A is the brother of B.</li> <li>A ≠ B means A is the daughter of B.</li> </ul>
12.	How is Ravi's mother's father's son related to Ravi's father?  (A) Cousin  (B) Uncle  (C) Brother-in-law  (D) Son-in-law  (E) Mother	21. Which of the following means P is the aunt of Q? (A) $P - R \div Q$ (B) $P + R \times Q$ (C) $P \ne R \times Q$ (D) $P - R + Q$ (E) $P \times R = Q$

22.	daughter?			based on the information given below.			
22	(C) $T + M \times S - N$ (E) $T \times M \div S \neq N$	(B) $T \times M + S = N$ (D) $S \div M \div T - N$	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.				
<b>23</b> .	Which of the following means (A) $W \times A - B + Z$ (		unc	That he didnings. O is the	3011 OF D.		
		(D) W – A + B – Z	31.	How is C related to A? (A) Nephew (C) Grandson	(B) Son-in-law (D) Father		
24.	Which of the following mea both D and E?	ans C is the grandfather of		(E) None of the above			
	` ,	(B) C + A + D ≠ E	32.	How is F related to D? (A) Cousin	(B) Brother-in-law		
	(C) $C \div A \neq D = E$ (E) $C \div A \times D \times E$	(D) C × A × D – E		(C) Brother (E) None of these	(D) Father		
25.	Which of the following means	I is the mother of L?	22	How is E related to F?			
		(B) $I \neq B + C \times L$	55.	(A) Mother	(B) Mother-in-law		
	(C) $I + B \times C \neq D - L$ (E) $I \times B \times C = D = L$	(D) I + B – C × L		(C) Father (E) Sister	(D) Father-in-law		
	ections for questions 26 to en below and answer the que		34.	If F is married to G, then (A) Sister	how is G related to B? (B) Sister-in-law		
_ ^				(C) Cousin	(D) Mother		
	Q means P is the husband			(E) None of these	,		
	Q means P is the father of Q means P is the mother of						
	Q means P is the brother of		35.	How many male membe			
	Q means P is the sister of			(A) Two (C) Four	(B) Three (D) Five		
РΔ	Q means P is the son of Q.			(E) Cannot be determine			
	Q means P is the daughte			(L) Carmot be determine			
	Q means P is the wife of Q			ections for questions 36 sed on the information give	<b>6 to 40:</b> These questions are en below.		
26.	If A $\triangle$ B $\pounds$ C \$ D, then A is to (A) father (B) uncle						
		e (C) brother e of the above	Am	elie is the grandmother of	has three married couples f Charles and is the mother daughter of Bob, who is the		
27.	. E @ F ↓ G \$ H means				the only child of George and		
	(A) H is the niece of E.		is the mother of Charles. Emma is the wife of Bob.				
	(B) H is the nephew of E.						
	(C) E is the paternal uncle	of H.	36.	How is George related to			
	(D) H is the father of E. (E) Either (A) or (B)			<ul><li>(A) Uncle</li><li>(C) Brother</li><li>(E) None of these</li></ul>	(B) Father (D) Cousin		
28.	$I \$ J \Rightarrow K \Rightarrow L \uparrow M \text{ means}$			(L) None of these			
	(A) I is the son of M.		37.	How is Helen related to I	2:0		
	(P) Lie the perhaw of M				Jiana?		
	(B) I is the nephew of M.			(A) Sister	iana? (B) Daughter		
	(C) M is the father-in-law of			(C) Cousin			
				` '	(B) Daughter		
20	<ul><li>(C) M is the father-in-law of</li><li>(D) I is the son-in-law of M</li><li>(E) M is the father of I.</li></ul>	l.	38.	(C) Cousin (E) Father  Diana's mother is	(B) Daughter (D) Mother		
29.	<ul><li>(C) M is the father-in-law of (D) I is the son-in-law of M</li><li>(E) M is the father of I.</li><li>If P ⊙ Q Δ R @ S and T</li></ul>	l. 「↓ S, then which among	38.	(C) Cousin (E) Father Diana's mother is (A) Emma	<ul><li>(B) Daughter</li><li>(D) Mother</li><li>(B) Amelie</li></ul>		
29.	<ul> <li>(C) M is the father-in-law of (D) I is the son-in-law of M</li> <li>(E) M is the father of I.</li> <li>If P ⊙ Q Δ R @ S and T the following is a true state</li> </ul>	l. 「↓ S, then which among	38.	(C) Cousin (E) Father Diana's mother is (A) Emma (C) Helen	(B) Daughter (D) Mother		
29.	<ul><li>(C) M is the father-in-law of (D) I is the son-in-law of M</li><li>(E) M is the father of I.</li><li>If P ⊙ Q Δ R @ S and T</li></ul>	l. 「↓ S, then which among	38.	(C) Cousin (E) Father Diana's mother is (A) Emma	<ul><li>(B) Daughter</li><li>(D) Mother</li><li>(B) Amelie</li></ul>		
29.	<ul> <li>(C) M is the father-in-law of (D) I is the son-in-law of M</li> <li>(E) M is the father of I.</li> <li>If P ⊙ Q Δ R @ S and T the following is a true state</li> <li>(A) S is the aunt of P.</li> <li>(B) Q is the niece of S.</li> <li>(C) S is the father of P and</li> </ul>	l. <sup>-</sup> ↓ S, then which among ment?		(C) Cousin (E) Father  Diana's mother is (A) Emma (C) Helen (E) None of these	<ul><li>(B) Daughter</li><li>(D) Mother</li><li>(B) Amelie</li><li>(D) Floyd</li></ul>		
29.	<ul> <li>(C) M is the father-in-law of (D) I is the son-in-law of M</li> <li>(E) M is the father of I.</li> <li>If P ⊙ Q Δ R @ S and T the following is a true state (A) S is the aunt of P.</li> <li>(B) Q is the niece of S.</li> <li>(C) S is the father of P and (D) P is the niece of S.</li> </ul>	l. <sup>-</sup> ↓ S, then which among ment?		(C) Cousin (E) Father Diana's mother is (A) Emma (C) Helen	<ul><li>(B) Daughter</li><li>(D) Mother</li><li>(B) Amelie</li><li>(D) Floyd</li></ul>		
29.	<ul> <li>(C) M is the father-in-law of (D) I is the son-in-law of M</li> <li>(E) M is the father of I.</li> <li>If P ⊙ Q Δ R @ S and T the following is a true state</li> <li>(A) S is the aunt of P.</li> <li>(B) Q is the niece of S.</li> <li>(C) S is the father of P and</li> </ul>	l. <sup>-</sup> ↓ S, then which among ment?		(C) Cousin (E) Father  Diana's mother is (A) Emma (C) Helen (E) None of these  Who is the father of Floy (A) George (C) Charles	<ul><li>(B) Daughter</li><li>(D) Mother</li><li>(B) Amelie</li><li>(D) Floyd</li><li>d?</li></ul>		
	<ul> <li>(C) M is the father-in-law of (D) I is the son-in-law of M</li> <li>(E) M is the father of I.</li> <li>If P ⊙ Q Δ R @ S and T the following is a true state (A) S is the aunt of P.</li> <li>(B) Q is the niece of S.</li> <li>(C) S is the father of P and (D) P is the niece of S.</li> </ul>	l. T↓S, then which among ment? dQ.	39.	(C) Cousin (E) Father  Diana's mother is (A) Emma (C) Helen (E) None of these  Who is the father of Floy (A) George (C) Charles (E) Data insufficient	(B) Daughter (D) Mother  (B) Amelie (D) Floyd  d? (B) Bob (D) None of these		
	<ul> <li>(C) M is the father-in-law of (D) I is the son-in-law of M</li> <li>(E) M is the father of I.</li> <li>If P ⊙ Q Δ R @ S and T the following is a true state (A) S is the aunt of P.</li> <li>(B) Q is the niece of S.</li> <li>(C) S is the father of P and (D) P is the niece of S.</li> <li>(E) S is the father of P.</li> <li>If W ⇒ X Δ Y £ Z, then white definitely true?</li> <li>(A) Z is the uncle of W.</li> </ul>	l. T↓S, then which among ment? dQ.	39.	(C) Cousin (E) Father  Diana's mother is (A) Emma (C) Helen (E) None of these  Who is the father of Floy (A) George (C) Charles (E) Data insufficient  How is Charles father	(B) Daughter (D) Mother  (B) Amelie (D) Floyd  d? (B) Bob (D) None of these		
	<ul> <li>(C) M is the father-in-law of (D) I is the son-in-law of M</li> <li>(E) M is the father of I.</li> <li>If P ⊙ Q Δ R @ S and T the following is a true state (A) S is the aunt of P.</li> <li>(B) Q is the niece of S.</li> <li>(C) S is the father of P and (D) P is the niece of S.</li> <li>(E) S is the father of P.</li> <li>If W ⇒ X Δ Y £ Z, then white definitely true?</li> <li>(A) Z is the uncle of W.</li> <li>(B) W is the niece of Z.</li> </ul>	I.	39.	(C) Cousin (E) Father  Diana's mother is (A) Emma (C) Helen (E) None of these  Who is the father of Floy (A) George (C) Charles (E) Data insufficient	<ul><li>(B) Daughter</li><li>(D) Mother</li><li>(B) Amelie</li><li>(D) Floyd</li><li>d?</li><li>(B) Bob</li></ul>		
	<ul> <li>(C) M is the father-in-law of (D) I is the son-in-law of M</li> <li>(E) M is the father of I.</li> <li>If P ⊙ Q Δ R @ S and T the following is a true state (A) S is the aunt of P.</li> <li>(B) Q is the niece of S.</li> <li>(C) S is the father of P and (D) P is the niece of S.</li> <li>(E) S is the father of P.</li> <li>If W ⇒ X Δ Y £ Z, then whice definitely true?</li> <li>(A) Z is the uncle of W.</li> <li>(B) W is the niece of Z.</li> <li>(C) W is the daughter of Z.</li> </ul>	I.	39.	(C) Cousin (E) Father  Diana's mother is (A) Emma (C) Helen (E) None of these  Who is the father of Floy (A) George (C) Charles (E) Data insufficient  How is Charles fath daughter? (A) Son (C) Husband	(B) Daughter (D) Mother  (B) Amelie (D) Floyd  d? (B) Bob (D) None of these  her related to George's		
	<ul> <li>(C) M is the father-in-law of (D) I is the son-in-law of M</li> <li>(E) M is the father of I.</li> <li>If P ⊙ Q Δ R @ S and T the following is a true state (A) S is the aunt of P.</li> <li>(B) Q is the niece of S.</li> <li>(C) S is the father of P and (D) P is the niece of S.</li> <li>(E) S is the father of P.</li> <li>If W ⇒ X Δ Y £ Z, then white definitely true?</li> <li>(A) Z is the uncle of W.</li> <li>(B) W is the niece of Z.</li> </ul>	I.	39.	(C) Cousin (E) Father  Diana's mother is (A) Emma (C) Helen (E) None of these  Who is the father of Floy (A) George (C) Charles (E) Data insufficient  How is Charles fath daughter? (A) Son	(B) Daughter (D) Mother  (B) Amelie (D) Floyd  d? (B) Bob (D) None of these  her related to George's		

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

 ${\sf G}$  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?
  - (A) G (D) A
- (B) D (E) C
- (C) H
- 47. Who is the mother of F?
  - (A) A
- (B) B
- (C) H
- (D) C
- (E) Cannot be determined
- 48. B is related to G as
  - (A) Mother-in-law
- (B) Mother
- (C) Grandmother
- (D) Daughter-in-law
- (E) None of these
- 49. The profession of H is
  - (A) Manager
- (B) Engineer(D) Teacher
- (C) Doctor
- (E) None of these
- 50. The profession of G is
  - (A) Manager
- (B) Engineer(D) Teacher
- (C) Doctor(E) Data insufficient
  - nt

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1.	В	11.	В
2.	С	12.	С
3.	В	13.	D
4.	Α	14.	С
5.	В	15.	С
6.	С	16.	В
7.	В	17.	Α
8.	E	18.	В
9.	E	19.	С
10.	В	20.	В

21. D 22. В 23. В 24. D 25. Α 26. В 27. Ε 28. D 29. D 30. В

31. С 32. B 33. С 34. В 35. С 36. Α 37. С 38. В 39. Ε 40.

41. E С 42. 43. С 44. В С 45. 46. В 47. E 48. C 49. С 50. Ε