



Parul University
Faculty of Engineering and Technology
Department of Applied Science &
Humanities Academic Year 2024-25
Subject: Quant and Reasoning
(303105311) Branch: CSE/ IT

UNIT 10 – BLOOD RELATIONS

Introduction:

The questions which are asked in this section depend upon *Relation*. You should have a sound knowledge of the blood relation in order to solve the questions.

To remember easily the relations may be divided into two sides as given below:

Relations of Paternal side:

1. Father's father → Grandfather
2. Father's mother → Grandmother
3. Father's brother → Uncle
4. Father's sister → Aunt
5. Children of uncle → Cousin
6. Wife of uncle → Aunt
7. Children of aunt → Cousin
8. Husband of aunt → Uncle

Relations of Maternal side:

1. Mother's father → Maternal grandfather
2. Mother's mother → Maternal grandmother
3. Mother's brother Maternal uncle
4. Mother's sister → Aunt
5. Children of maternal uncle → Cousin
6. Wife of maternal uncle → Maternal aunt

Blood Relation: Sides

There are two main sides to blood relations:

Paternal Blood Relation: This pertains to relationships on the father's side, including siblings, uncles, aunts, cousins, and grandparents (dada, dadi).

Maternal Blood Relation: This involves relationships on the mother's side, comprising similar familiar relationships such as siblings, uncles, aunts, cousins, and grandparents (nana, nani).

Blood Relation: Types

Blood relation reasoning questions assess the ability to analyze information about family connections and draw logical conclusions. The various types of questions for Blood Relation Reasoning are as follows:

Direct Statements: These questions provide clear statements about relationships between family members. Candidates need to analyze these statements and answer a question based on the information provided.

Example: John is the son of Mary. Mary is the sister of David. How is John related to David?

Coded Relationships: These questions use symbols or codes to represent family members (A, B, C etc.) and their relationships (+ for father-son, * for sister-brother etc.). Aspirants need to decipher the code based on the given statements and solve the question.

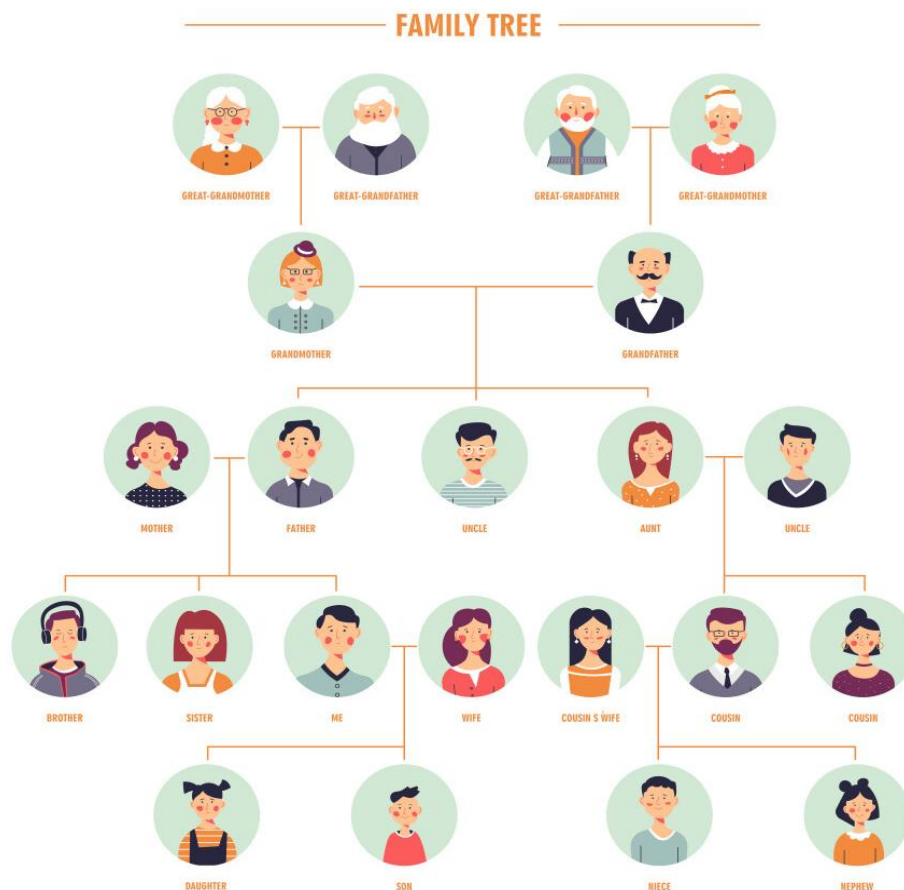
Example: A + B means A is the father of B. C * D means C is the sister of D. Statement 1: P + Q. Statement 2: S * T. Question: How is P related to T?

Pointing/Introducing: These questions involve a person introducing or pointing to another family member. you need to understand the description and analyze the generation and gender differences to determine the relationship.

Example: Pointing to a photo, a lady says, “This is the daughter of my husband’s son.” How is the lady related to the person in the photo?

Family Tree: Sometimes, a question might provide a basic family tree with some relationships filled in. You need to use the given information to deduce the remaining relationships.

These questions can get more complex by involving multiple generations, marriages, and in-laws. But by understanding the basic family structure and practising these different formats, you can develop strong reasoning skills to tackle any blood relation question thrown your way.



Relation Symbol Representation	
Relation/ Denote	Symbol
Male	+ / □
Female	- / ○
Married Couple	≡
Siblings	—
Generation Gap/ Difference	

• Questions

Directions (1-3): Study the information carefully and answer the questions given below.

Eight persons are in three generations of family and two married couples. P is the son-in-law of H who has three children. M is the nephew of L. W is the father of K who is the sister-in-law of U. U is the only daughter of H who is the father of N. L is unmarried. N and K don't have any children.

Q1. Who among the following is the son-in-law of W?

- (a) U
- (b) P
- (c) N
- (d) K
- (e) None of these

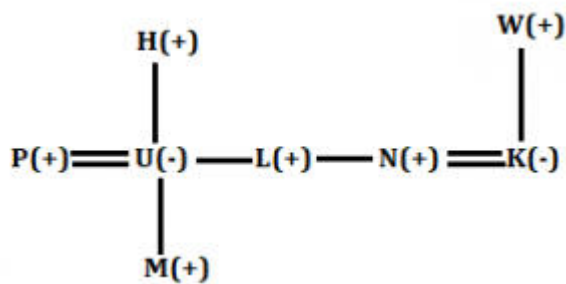
Q2. Who among the following is the sister of N?

- (a) P
- (b) U
- (c) K
- (d) N
- (e) None of these

Q3. How many male members in the family?

- (a) Four
- (b) Five
- (c) Three
- (d) Six
- (e) Two

Solution :



S1. Ans. (c) S2. Ans. (b) S3. Ans. (d)

Directions (4-6): Study the information carefully and answer the questions given below.

There are eight members in a family consisting of three generation and equal number of males and females. D does not belong to the youngest generation. F is father-in-law of J's daughter. J is married to the daughter of N. M is maternal grandfather of B who is son-in-law of C. A is the daughter of C.

Q4. How is B related to C?

- (a) son
- (b) daughter
- (c) son-in-law
- (d) mother
- (e) none of these

Q5. How is N related to A?

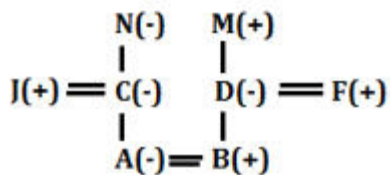
- (a) father
- (b) mother

- (c) grandfather
- (d) grandmother
- (e) aunt

Q6. How many members are in the youngest generation?

- (a) Two
- (b) One
- (c) Three
- (d) Four
- (e) None of these

Solution :



S4. Ans. (c) S5. Ans. (d) S6. Ans. (a)

Directions (7-8): Study the given information carefully and answer the given questions.

H has only two children-B and C. B is the sister of C. D is the son of C. E is the brother of D. F is the mother of E. G who is sister of D, is the granddaughter of A who is the mother of B.

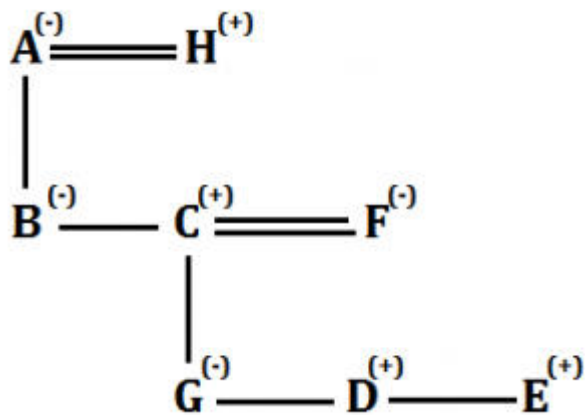
Q7. How is A related to E?

- (a) Grandmother
- (b) Son
- (c) Mother
- (d) Cousin Brother
- (e) None of these

Q8. How is G related to A's daughter-in-law?

- (a) Sister
- (b) Mother
- (c) Son
- (d) Daughter
- (e) None of these

Solution :



S7. Ans.(a) S8. Ans.(d)

Directions (9-12): Study the following information and answer the given questions.

There are nine members in three generations and three married couples in the family. There are only four male members in the family. Q is son of T who is the daughter-in-law of P. X is father of V. R is mother of S who is father of U. S is son-in-law of W. V is unmarried and aunt of U. X is not married to R.

Q9. Who among the following is Son-in-law of X?

- (a) P
- (b) S
- (c) Q
- (d) R
- (e) U

Q10. How R is related to Q?

- (a) Grandfather
- (b) Father
- (c) Sister
- (d) Grandmother
- (e) Brother

Q11. Who among the following is the nephew of V?

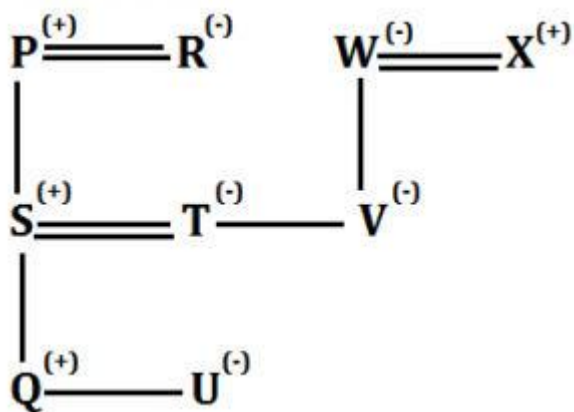
- (a) Q

- (b) S
- (c) R
- (d) P
- (e) T

Q12. Which of the statement is false with respect to T?

- (a) T is mother of U
- (b) P is the father-in-law of T
- (c) X is mother of T
- (d) T is sister of V
- (e) All are true

Solution :



S9. Ans.(b) S10. Ans.(d) S11. Ans.(a) S12. Ans.(c)

Directions (13-14) : Study the following information carefully and answer the below questions

A family of three generations consists of eight members and three married couples. P is the only daughter of the one who is the mother-in-law of S. Q is the only daughter of S who is the daughter in-law of U. U is the father-in-law of N who is the brother-in-law of R. V is the maternal grandmother of O who is the same gender of R.

13) How N is related to V?

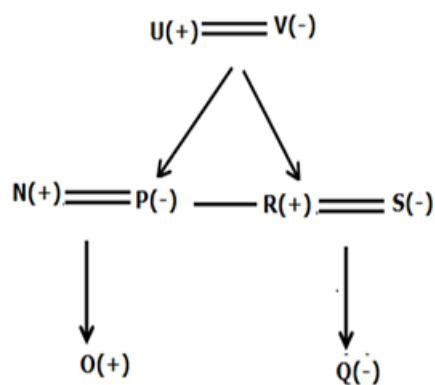
- a) Brother-in-law
- b) Son-in-law

- c) Son
d) Brother e) Uncle

14) Which of the following statement is true?

- a) N and S are Siblings
b) R is the mother of Q
c) P is the sister of R
d) V is the mother of N
e) All are true

Solution :



13) Answer: B 14) Answer: C

Directions (15-17): Study the following information carefully and answer the below questions

A family of three generations consists of nine members and three married couples. U is the brother of G who is the uncle of X. X is not a child of U. M is the mother of X and sister-in-law of G. S is the daughter-in-law of T who is the mother-in-law of the one who is the spouse L. Neither S nor M has siblings. V is the son of the one who is the brother-in-law of M. G is an unmarried person in the family. I is the father-in-law of S and spouse of T who is the paternal grandmother of V. X and V are of opposite gender.

15) Who among the following person is the nephew of G?

- a) S b) X c) V d) T e) I

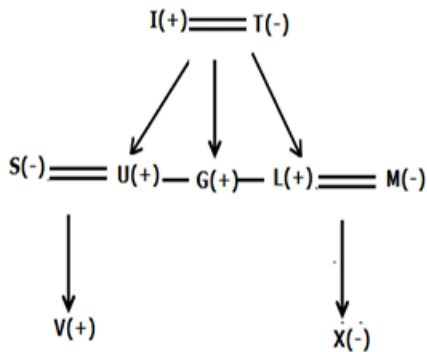
16) How many male members are there in the family?

- a) 6 b) 3 c) 4 d) 5 e) Can't be determined

17) Four of the following are alike in a certain way. Which of the following does not belong to the group?

- a) LX b) SV c) UT d) TL e) IV

Solution :



15) Answer: C 16) Answer: D 17) Answer: E

Directions (19-21): Study the following information carefully and answer the below questions

A family consists of eight members and three married couples. Q is the father of R who is the grandson of L. T is the brother-in-law of Q. Neither T nor O has siblings. M is the only daughter of F who is the mother-in-law of O. B is the father-in-law of T. L is the mother of O.

19) How M is related to O?

- a) Sister b) Brother c) Sister-in-law d) Brother-in-law
e) Can't be determined

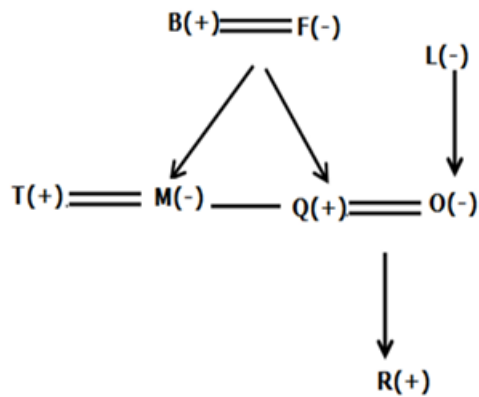
20) Who is the paternal grandfather of R?

- a) M b) T c) F d) L e) B

21) Who among the following is not belongs to the same gender?

- a) FL b) OM c) QR d) BT e) MR

Solution :



19) Answer: C 20) Answer: E 21) Answer: E

Directions (22-23): Study the following information carefully and answer the below questions

A family consists of seven members and two married couples. P is the father of T who is the spouse of M. G is the daughter of M. K is the grandchild of S. S is the mother of V who is the brother-in-law of M. S does not have a daughter. P does not have a grandson.

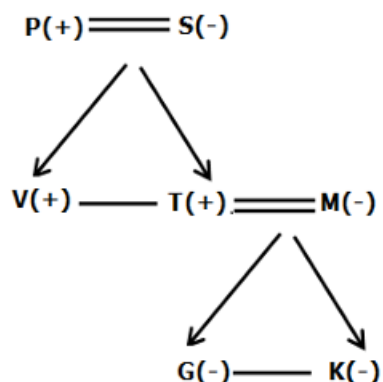
22) How T is related to P?

- a) Daughter-in-law b) Son-in-law c) Daughter d) Son
e) Can't be determined

23) Find the odd one out?

- a) P b) M's spouse c) V d) V's brother e) K

Solution :

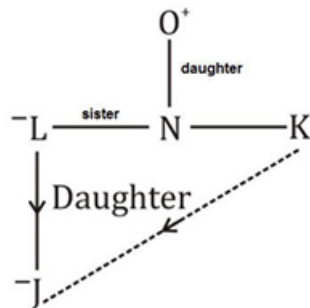


22) Answer: D 23) Answer: E

24. If 'P 3 Q' means 'P is daughter of Q', 'P 5 Q' means 'P is father of Q', 'P 7 Q' means 'P is mother of Q' and 'P 9 Q' means 'P is sister of Q', then how is J related to K in J 3 L 9 N 3 O 5 K?

(a) Mother (b) Wife (c) Niece (d) Daughter

Solution :

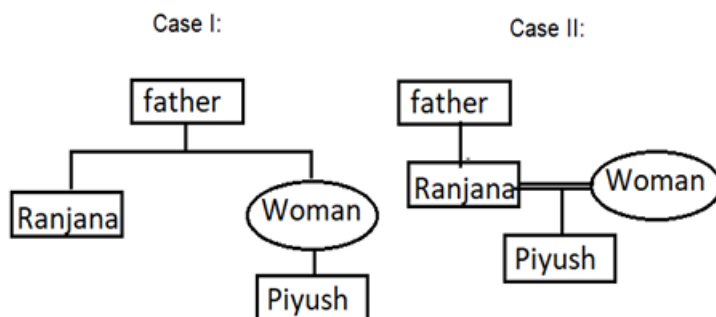


J is the niece of K

25. Ranjana said to a woman, “My father is the paternal grandfather of your son Piyush”. How is Piyush related to Ranjana?

(a) Cousin (b) Grandson (c) Brother (d) Nephew

Solution :



Case I: Piyush is Nephew of Ranjana.

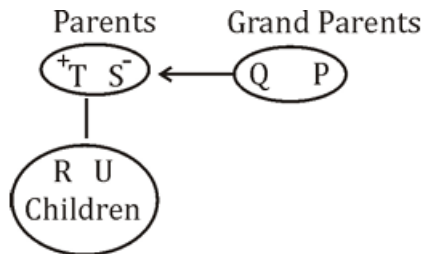
Case II: Piyush is son of Ranjana.

In the options, Nephew is given, so it is clear that Piyush is the nephew of Ranjana.

26 .P, Q, R, S, T, U are 6 members of a family in which there are two married couples. T, a teacher is married to a doctor who is mother of R and U. Q, the lawyer is married to P - P has one son and one grandson. Of the two married ladies one is a house wife. There is also one student and one male engineer in the family. Which of the following is true about the grand-daughter of the family?

- (a) She is a lawyer. (b) She is an engineer.
 (c) She is a student. (d) She is a doctor.

Solution :



T = Teacher – Male

S = Doctor – Female.

Q = Lawyer – Male

P = House Wife – Female

R, U → Son and daughter of T S

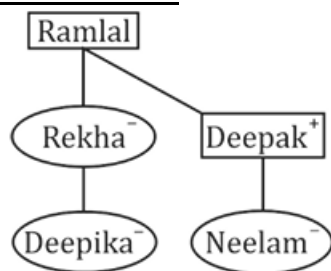
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Male engineer Student

27. Neelam, who is deepak's daughter, says to Deepika, "your mother Rekha is the younger sister of my father who is the third child of Ramlal." How is Ramlal related to Deepika?

- (a) Grandfather (b) Father (c) Uncle (d) Can't be determined

Solution : Gender of Ramlal is not mention in question statement.



28. 'A # B' means 'A is the father of B'. 'A % B' means 'A is the mother of B'.

'A @ B' means 'A is the sister of B'. 'A & B' means 'A is the son of B'. If 'G # M # T % S @ H & R & W @ U', then which of the following statements is NOT correct?

- (a) G is the paternal grandfather of T.
 (b) W is the maternal grandmother of H.
 (c) M is the maternal grandfather of S.
 (d) R is the husband of T

Solution : W is the maternal grandmother of H → False (As S is sister of H and H is the son of R and R is the son of W so, W is the paternal grandmother of H hence W is the maternal grandmother of H is false)

29. 'MN' means 'M is the daughter of N' 'MN' means 'M is the brother of N' 'MN' means 'M is the mother of N' 'MN' means 'M is the son of N' If QR P S T, then how is Q related to S?

- (a) Maternal Grandfather (b) Grandson
(c) Grand daughter (d) Paternal Grandfather

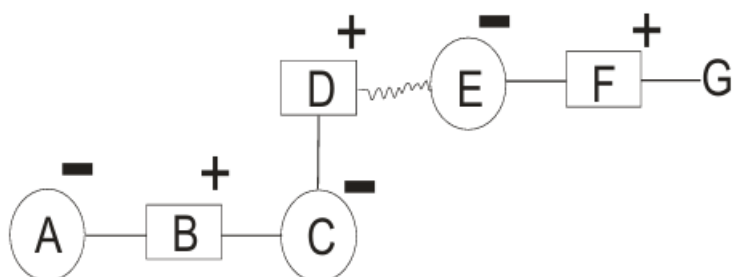
Solution :



30. 'P+Q', means 'P is the sister of Q' 'P-Q', means 'P is the daughter of Q' 'P×Q', means 'P is the brother of Q' 'P÷Q', means 'P is the husband of Q' If A+B×C-D÷E+F×G, then how is F related to A?

- (a) Maternal Uncle (b) Maternal Aunt
(c) Paternal Uncle (d) Paternal Aunt

Solution :



31. If $A + B$ means A is the brother of B; $A - B$ means A is the sister of B and $A \times B$ means A is the father of B. Which of the following means that C is the son of M?

- (a) $M - N \times C + F$
- (b) $F - C + N \times M$
- (c) $N + M - F \times C$
- (d) $M \times N - C + F$

Solution : $M \times N \rightarrow$ M is the father of N

$N - C \rightarrow$ N is the sister of C

and $C + F \rightarrow$ C is the brother of F.

Hence, M is the father of C or C is the son of M.

32. If $A + B$ means A is the mother of B; $A - B$ means A is the brother of B; $A \% B$ means A is the father of B and $A \times B$ means A is the sister of B, which of the following shows that P is the maternal uncle of Q?

- (a) $Q - N + M \times P$
- (b) $P + S \times N - Q$
- (c) $P - M + N \times Q$
- (d) $Q - S \% P$

Solution : $P - M \rightarrow$ P is the brother of M

$M + N \rightarrow$ M is the mother of N

$N \times Q \rightarrow$ N is the sister of Q

Therefore, P is the maternal uncle of Q.