



14. Blood Relations

PART-A

Model 1

1. D is the brother of B. M is the Brother B. K is the father of M. T is the wife of K. How is B related to T?
 1) Son 2) Daughter 3) Son or Daughter 4) Data Inadequate 5) None of these
2. B is the sister of D. M is the father of D. N is the sister of M. How is B related to N?
 1) Brother 2) Aunt 3) Niece 4) Data Inadequate 5) None of these
3. K is brother of T. M is mother of K. W is brother of M. how is W related to T?
 1) Maternal Uncle 2) Paternal Uncle 3) Grandfather
 4) Data Inadequate 5) None of these
4. M is sister of K. D is brother of K. F is mother of M. how is K related to F?
 1) Son 2) Daughter 3) Son or Daughter 4) Data Inadequate 5) None of these

Model 2



Directions(5-7): Read the following information carefully and answer the questions given below

P/Q means P is father of Q

P+Q means P is the mother of Q

P-Q means P is the brother of Q

P*Q means P is the sister of Q

5. If A+B/C-D, then A is D's _____?
 1) Sister 2) Grandfather 3) Grandmother 4) Father 5) None of these
6. If A*B/C-D+E, then A is E's
 1) Grand-aunt 2) Brother 3) Maternal uncle 4) Mother 5) None of these
7. Which of the following shows that A is aunt of E?
 1) A-B+C/D*E 2) A*B/C*D-E 3) A/B*C+D-E 4) A+B-C*D/E 5) None of these

Directions(8-10): Read the following information carefully and answer the questions given below

A+B means A is the daughter of B.


A-B means A is the husband of B.

A*B means A is the brother of B.

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8. If $P+Q-R$, which of the following is true?
1) R is the mother of P 2) R is the sister in law of P
3) R is the aunt of P 4) R is the mother in law of P 5) None of these
9. If $P*Q+R$, which of the following is true?
1) P is the brother of R 2) P is the uncle of R 3) P is the son of R
4) P is the father of P 5) None of these
10. If $P+Q*R$, which of the following is true?
1) P is the niece of R 2) P is daughter of P 3) P is the cousin of R
4) P is the daughter in law of R 5) None of these
11. If $A \$ B$ means 'A is father of B', $A \# B$ means 'A is daughter of B', $A @ B$ means 'A is sister of B', then how is K related to M in $H @ K \$ L \# M$?
1) Husband 2) Uncle 3) Father 4) Cannot be determined 5) None
12. If $A+B$ means A is the sister of B; $A-B$ means A is the brother of B; $A*B$ means A is the daughter of B, which of the following shows the relation that E is the maternal uncle of D?
1) $D+F*E$ 2) $D-F*E$ 3) $D*F+E$ 4) $D*F-E$ 5) None of these
13. $P-Q$ means Q is son of P and $P*Q$ means P is brother of Q, P/Q means Q is sister of P, and $P+Q$ means P is mother of Q. Which of the following is definitely true about $N*K-M/L$?
1) K is father of L and M
2) L is the daughter of K and is the niece of her uncle N
3) K is the father of M and L-his son and daughter respectively
4) M is the uncle of K's brother N
5) None of these

Model 3

14. Pointing a girl, Arun said, "She is the only daughter of my grandfather's son." How is the girl related to Arun?
 1) Daughter 2) Sister 3) Cousin/sister 4) Data Inadequate 5) None
15. Nandini is the only daughter of Madan's sister Sangita's brother. How is Nandini related to Madan?
1) Daughter 2) Niece 3) Cousin 4) Niece/Daughter 5) None

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16. Pointing to a boy, Meena said, "He is the only grandson of grandfather." How is the boy related to Meena?

- 1) Brother 2) Cousin 3) Uncle 4) Data Inadequate 5) None

17. Pointing a woman Nirmal said "She is the only daughter of my wife's grandfather's only child." How is the woman related to Nirmal?



- 1) Wife 2) Sister-in-law 3) Sister 4) Data Inadequate 5) None

18. Pointing a photograph, Rasika said "He is the grandson of my grandmother's only son." How is the boy in photograph related to Rasika?

- 1) Son 2) Nephew 3) Brother 4) Cannot be determined 5) None

19. Pointing a woman, Suresh said "she is the daughter of my grandfather's only daughter". How is the Suresh related to the woman?

- 1) Brother 2) Cousin 3) Uncle 4) Cannot be determined 5) None

20. Pointing a boy, Divya said, "He is the son of my father's only brother." How is Divya related to that boy?

- 1) Sister 2) Cousin/Sister 3) Daughter 4) Data Inadequate 5) None

Directions(21-25): Read the following information carefully and answer the questions given below

P, Q, R, S, T and X are members of a family. There are two married couples. Q is an engineer and father of T. X is the grandfather of R and is a lawyer. S is the grandmother of T and is a housewife. There is one engineer, one lawyer, one teacher, one housewife and two students in a family.

21. Who is the husband of P?

- 1) R 2) X 3) Q 4) S 5) T

22. Which of the following two are married couples?

- 1) XS, QP 2) XS, QT 3) XS, RP 4) TS, RX 5) None of these

23. Which of the following is definitely a group of male members?

- 1) Q,X,T 2) X,T 3) Q,X,P 4) Q,X 5) None of these

24. Who is the sister of T?

- 1) R 2) S 3) P 4) Data inadequate 5) None of these

25. Which of the following can be P's profession?

- 1) Housewife 2) Engineer 3) Teacher
4) Engineer or teacher 5) Housewife or teacher

Reasoning Workbook**Answers:**

1 - 3	2 - 3	3 - 1	4 - 3	5 - 3	6 - 1	7 - 2	8 - 1	9 - 3	10 - 1
11 - 1	12 - 5	13 - 2	14 - 3	15 - 4	16 - 4	17 - 1	18 - 4	19 - 2	20 - 2
21 - 3	22 - 1	23 - 4	24 - 4	25 - 3					

PART-B

- Ranjini who is Sahil's daughter, tells Anjali, "Your mother Rekha is the younger sister of my father, who is the third daughter of Captain Rathore". How is Captain Rathore related to Anjali?
1) Father 2) Grandfather 3) Father-in-law 4) Brother 5) None of these
- R told S that T is his father's nephew. U is R's cousin but not brother of T. How is U related to T?
1) Mother 2) Father 3) Aunt 4) Sister 5) None of these
- A lady while looking at a photograph said, "This person is the brother of the daughter of the wife of my brother". How is the person in the photograph related to the lady?
1) Sister 2) Brother 3) Nephew 4) Niece 5) None of these

Directions (4-7): Read the following information and answer the questions that follow.

A family consists of eight persons P, Q, R, S, T, U, V and W. P is a doctor. R is a Computer Engineer and is the wife of Q, who is a Mechanical Engineer. V is the father-in-law of T, a teacher. R and U are the daughters of V, a scientist. W is the wife of V and Grandmother of P and S. P is the cousin of S and the son of the Mechanical Engineer. U is the wife of the Teacher. S is a Student.

- How is the student related to the Computer Engineer?
1) Nephew 2) Son 3) Niece 4) Cannot be determined 5) None of these
- How is the Scientist related to S?
1) Father 2) Grandfather 3) Cousin 4) Cannot be determined 5) None of these
- How many female members are there in the family?
1) 4 2) 2 3) 3 4) Either (1) or (3) 5) None of these

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7. How is T related to R?

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

8. If D is the brother of B, how B is related to C? To answer this question which of the statements is/are necessary?

1. The son of D is the grandson of C.

2. B is the sister of D.

- 1) Only 1 2) Only 2 3) Both 1 & 2
4) Either (1) or (2) 5) None of these

9. Introducing Salma, Aamir says, "She is the wife of the only nephew of the only brother of my mother." How Salma is related to Aamir?

- 1) Wife 2) Cousin 3) Sister 4) Mother 5) None of these

10. A's son B is married to C whose sister D is married to E, the brother of B. How D is related to A?

- 1) Daughter-in-law 2) Father-in-law 3) Brother-in-law
4) Either (2) or (3) 5) None of these

Answers:

1 - 2	2 - 4	3 - 3	4 - 4	5 - 2	6 - 4	7 - 3	8 - 1	9 - 1	10 - 1
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15.Coded Inequalities

Model 1

Directions (1-5): In the following questions, the symbols @, #, \$, * and ^ are used with the following meanings as illustrated below.

'A@B' means 'A is neither smaller than nor equal to B'

'A#B' means 'A is not greater than B'

'A\$B' means 'A is neither greater than nor equal to B'

'A*B' means 'A is neither greater than nor smaller than B'

'A^B' means 'A is not smaller than B'

1. Statements: L#V, V\$E, E^U, U@B



Conclusions: I. B\$E II. L\$E III. B*L

1) Only I and II are true 2) Only III is true 3) Only either I or II is true

4) All are true 5) None of these

2. Statements: M\$T, T*R, R@H, H#G



Conclusions: I. M\$H II. R@G III. M#R

1) Only I is true 2) Only II is true 3) Only III is true 4) All are true

5) None is true

3. Statements: T#W, W\$Q, Q^D, D@J



Conclusions: I. J\$T II. T#J III. T\$Q

1) Only I and III are true 2) Only either II or II is true

3) Only II and III are true 4) Only III and either I or II are true

5) None of these

4. Statements: F@J, J#R, R*L, L^M

Conclusions: I. F\$R II. M#R III. M^J

1) None is true 2) Only I is true 3) Only II is true

4) Only either II or III is true 5) All are true

5. Statements: H^R, R@W, W*F, J\$F

Conclusions: I. H@F II. J\$W III. R@J

1) Only I and II are true 2) Only II and III are true 3) Only III is true.

4) Only either I or III is true 5) All are true

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Directions (6-9): In the following questions, the symbols @, #, %, \$ and & are used with the following meanings as illustrated below.

'P#Q' means 'P is neither greater than nor equal to Q'

'P&Q' means 'P is neither equal to nor smaller than Q'

'P%Q' means 'P is neither smaller than nor greater than Q'

'P\$Q' means 'P is not smaller than Q'

'P@Q' means 'P is not greater than Q'

6. Statements: K#T, T\$B, B@F

Conclusions: 1. F\$T II. K#B III. T\$F

1) None is true 2) Only I is true 3) Only I and II are true

4) Only II and III are true 5) All are true

7. Statements: R@D, D&W, B\$W

Conclusions: I. W#R II. B&D III. W\$R

1) None is true 2) Only I is true 3) Only III is true

4) Only either I or III is true 5) All are true

8. Statements: M&R, R%D, D@N

Conclusions: I. M&N II. N\$R III. M&D

1) Only I and II are true 2) Only II and III are true 3) Only I and III are true

4) All are true 5) None of these

9. Statements: H\$V, V%M, K&M

Conclusions: I. K&V II. M@H III. H&K

1) Only I and III are true 2) Only II and III are true 3) Only I and II are true

4) All are true 5) None of these

Directions (10-14): In the following questions, the symbols @, #, %, \$ and & are used with the following meanings as illustrated below.

'P@Q' means 'P is not greater than Q'

'P#Q' means 'P is neither greater than nor smaller than

Q' 'P\$Q' means 'P is not smaller than Q'

'P&Q' means 'P is neither smaller than nor equal to Q'

'P%Q' means 'P is neither greater than nor equal to Q'

Give answer 1) if only conclusion I is true.

Give answer 2) if only conclusion II is true.

Give answer 3) if either conclusion I or conclusion II is true.

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Give answer 4) if neither conclusion I nor conclusion II is true.

Give answer 5) if both conclusions I and II are true.

10. Statements: F\$W, W#T, T&K

Conclusions: I. F&K II. W\$K

11. Statements: R@M, M%D, D\$H

Conclusions: I. R@H II. D&R

12. Statements: J\$L, L#B, B@E

Conclusions: I. E\$L II. E%L

13. Statements: A\$V, V#R, R@U

Conclusions: I. U&R II. U#R

14. Statements: F%G, G@H, H&J

Conclusions: I. F@H II. G@J

Directions (15-20): In the following questions, the symbols @, #, %, \$ and © are used with the following meanings as illustrated below.

'A\$B' means 'A is not smaller than B'

'A#B' means 'A is not greater than B'

'A@B' means 'A is neither smaller than nor equal to B'

'A©B' means 'A is neither smaller than nor greater than B'

'A%B' means 'A is neither greater than nor equal to B'.

15. Statements: H%J, J©N, N@R

Conclusions: I. R%J II. H@J III. N@H

- 1) Only II is true 2) Only I and III are true 3) Only I is true
4) Only III is true 5) None is true

16. Statements: M@J, J\$T, T©N

Conclusions: I. N#J II. T%M III. M@N

- 1) Only I and II are true 2) Only II and III are true 3) Only I and III are true
4) None is true 5) All are true

17. Statements: D©K, K#F, F@P

Conclusions: I. P@D II. K#P III. F\$D

- 1) Only II is true 2) Only I and II are true 3) Only III is true
4) Only II and III are true. 5) None of these

Reasoning Workbook

18. Statements: $R\#D$, $D\$M$, $M\odot N$

Conclusions: I. $R\#M$ II. $N\#D$ III. $N\$R$

- 1) Only I is true 2) Only II is true 3) Only III is true
4) None is true 5) All are true

19. Statements: $K\#N$, $N\$T$, $T\%J$

Conclusions: I. $J\odot N$ II. $K@T$ III. $T@K$

- 1) None is true 2) Only I and II are true 3) Only II and III are true
4) Only I and III are true 5) None of these.

20. Statements: $K\odot P$, $P@Q$, $Q\$R$

Conclusions: I. $K@R$ II. $R\%P$ III. $Q\%K$

- 1) Only I and II are true 2) Only II is true 3) Only III is true
4) All are true 5) None of these

Model 2

Directions (21-25): In these questions, the relationship between different elements is shown in the statements. The statements are followed by two conclusions.

Mark answer 1) if only conclusion I follow.

Mark answer 2) if only conclusion II follow.

Mark answer 3) if either conclusion I or II follow.

Mark answer 4) if neither conclusion I nor II follow.

Mark answer 5) if both conclusions I and II follow.

21. Statements: $T < R \leq U$; $L > U \leq K$; $P \geq R$



Conclusions: I. $K \geq R$ II. $L > R$

22. Statements: $D > H \geq N$; $S > I \leq H$



Conclusions: I. $N \leq S$ II. $I < D$

23. Statements: $H = I \leq R$; $M \geq R < S$



Conclusions: I. $M = I$ II. $M > I$

24. Statements: $P \leq O < I$; $P > Y > M$

Conclusions: I. $Y \leq I$ II. $O > M$

25. Statements: $A \geq B > C \geq F$; $Z < C \leq D < E$

Conclusions: I. $A > Z$ II. $F < E$

Reasoning Workbook

Directions (26-30): In these questions, the relationship between different elements is shown in the statements. These statements are followed by two conclusions.

Mark answer 1) if only conclusion I follows.

Mark answer 2) if only conclusion II follows.

Mark answer 3) if either conclusion I or II follows.

Mark answer 4) if neither conclusion I nor II follows.

Mark answer 5) if both conclusions I and II follow.

26. Statements: $A \geq B = C$; $B < D \leq E$
Conclusions: I. $D > A$ II. $E > C$

27. Statements: $L > U \geq K$; $Z < U < R$
Conclusions: I. $L > Z$ II. $K < R$

28. Statements: $Y < J = P \geq R > I$
Conclusions: I. $J > I$ II. $Y < R$

29. Statements: $V \geq K > M = N$; $M > S$; $T < K$
Conclusions: I. $T < N$ II. $V = S$

30. Statements: $F \leq X < A$, $R < X \leq E$
Conclusions: I. $F \leq E$ II. $R < F$

Answers:

1 - 1	2 - 5	3 - 4	4 - 3	5 - 5	6 - 1	7 - 4	8 - 2	9 - 3	10 - 1
11 - 2	12 - 1	13 - 3	14 - 4	15 - 2	16 - 5	17 - 3	18 - 2	19 - 1	20 - 4
21 - 5	22 - 2	23 - 3	24 - 2	25 - 5	26 - 2	27 - 5	28 - 1	29 - 4	30 - 1

