Ch 5 BLOOD RELATION
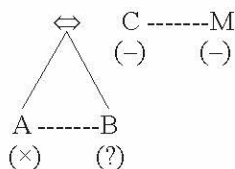
ANSWERS AND EXPLANATIONS

## EXERCISE 1

1. (c) Shraddha's mother's father's son ⇒ Shraddha's maternal uncle. Shraddha's maternal uncle is husband of Deepika's sister. Deepika is 'aunt' of Shraddha.

2. (d) C is the wife of D and D is the son of A. Hence, A is either father-in-law or mother-in-law.

3. (e) Photograph is of Mrinalini.

4. (c) According to question,

   From above diagram it is clear that
    M is the aunt of B.

5. (c) $R \xleftarrow{\text{daughter}} Q \xrightarrow{\text{son}} B \xrightarrow{\text{sister}} M$

    ∴ M, R's sister.

6. (b) The father of his sister is the husband of Vijay's wife's mother means Vijay's mother-in-law and mother-in-law's daughter's brother means Vijay's brother-in-law.

7. (b) S, is D's mother and M's aunty. Therefore, D is M's cousin.

8. (e) The lady is the grandmother of Sachin's father's sister's son. Hence, she is Sachin's grandmother

9. (a) P(+) ⇔ S (-)
    | |
    J – N(+) B(+) – C(–)

    The gender of J is unknown, therefore J may be brother or sister of C.

10. (c)
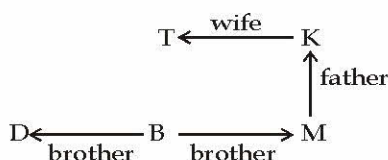
11. (d) Grandfather's only child means either father or mother. So the woman is either Nirmal's wife or sister - in - law.

12. (a) As X is the son of Y's father and Y is the sister of X he has to be the brother of Y.

13. (b) Neha is the sister (because Rajesh's grandfather is the same as Neha's).

14. (a) One's brother's son's wife's daughter implies paternal grand-daughter of one's brother. Now, the mother of paternal grand-daughter of one's brother implies wife of one's nephew.

    Thus, we can conclude that Arun is the paternal uncle of the female's husband.

15. (c) The sister of one's mother is one's maternal aunt. Hence the man is the husband of the boy's maternal aunt.

16. (c) Rohit + Lakshmi & Meena

17. (b)
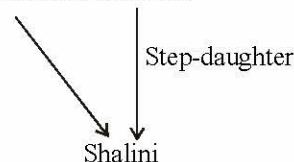
18. (d) Clearly, the grandson of Anil's mother is son of Anil and wife of Anil's son is daughter in-law of Anil. Thus, Anil is the father-in-law of the girl.

19. (c) Woman's Mother's husband
                ↓
         Woman's father

    Woman's father's sister ⟶ Woman's Aunt.
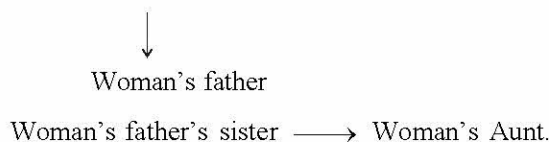
Since, woman's aunt is man's aunt

∴ woman is sister of man.

20. (a) Father of Ramprakash's brother is the father of Ramprakash. Ramprakash's father is the only son of Nilama's grandfather. Hence, Ramprakash's father is Nilama's father. So, Nilama is the sister of Ramprakash.

21. (c)
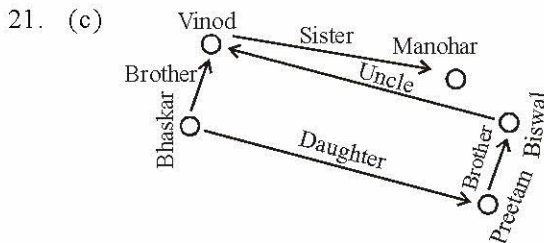
Thus, Vinod will be uncle of Biswal.

22. (d) The only sister of the brother of the woman will be the woman herself and she is the mother of that man. Thus, the woman is the daughter of the maternal grandmother of that man.

23. (b) Since the narrator has no brother, his father's son is he himself. So, the man who was talking is the father of the man in the photograph, i.e. the man in the photograph is his son.

24. (b) Clearly, the speaker's brother is Pramod's maternal uncle. So, the speaker is Pramod's mother or his father's wife.

25. (b) Clearly, only daughter of her mother is woman herself. So, that woman is the wife of man.

26. (b) Father's wife — Mother; Mother's daughter — Sister; Sister's younger brother — His brother. So, the boy is Deepak's brother.

27. (d)
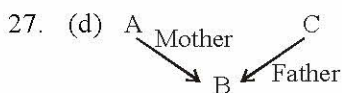
∵ C has three children but we can't say that he has three daughters or three sons.

So, options (a) and (b) are incorrect.

Also, we don't know that B is a boy or girl.

So, option (c) is also incorrect.

28. (c) Clearly, the lady is the grandmother of man's sister's son i.e., the mother of the mother of man's sister's son i.e., the mother of man's sister.

So, the lady is man's mother.

29. (d) Without knowing the sex of C, we can't be determined whether B is sister of C or B is brother of C. Similarly without knowing the sex of B we can't be determined whether C is sister of B or C is brother of B. Therefore, both (i) and (ii) are necessary.

30. (d) X and Y are brothers and

X is brother of A ⟹ Y is brother of A.

⟹ Y is brother-in-law of B.

31. (a) D is the brother of E and E is the daughter of B. This means that D is the son of B. Also, A is the mother of B. So, A is the grandmother of D.

32. (b) Only daughter of grandfather's only child means father's daughter. So the girl is Mihir's sister.

33. (b) Girl's Father's only son— Girl's brother Grandmother of Girl's brother – Girl's Grandmother; Daughter-in-law of girl's grandmother — Girls' mother.

34. (d) Studying the statements carefully, was find that B is the brother of A and A's son is the brother of D, so D is the daughter of A. Since C and D are sister, so C is also the daughter of A. The B is the uncle of C. The answer is (d)
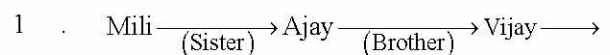
35. (a) Father's wife means mother ; mother's only son means himself and thus the girls is the daughter of the man.

36. (d) The relationship chart, based on the given problem can be worked out as given below.
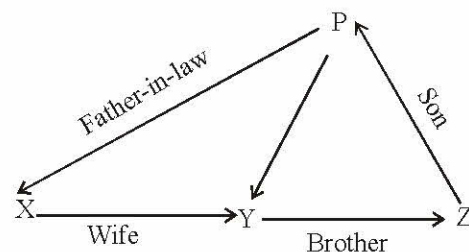
'Y' is the brother of 'Z' who is son of "P' So. Z' is also the son of 'P' When 'P' is the father of 'Y' and 'X' is the wife of 'Y' then 'P' is the father-in-law of 'X'

37. (d)

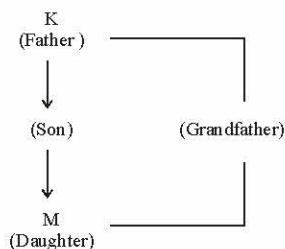1 . Mili ——(Sister)——→ Ajay ——(Brother)——→ Vijay ——→ Mehul

(daughter)

2. Sanjay $\xrightarrow[\text{(brother)}]{}$ Rahul

There are two sets of relationship information given is incomplete and no relation can be established between the two sets.

38. (b) M + J means 'M' is the daughter of 'J' J + K means 'J' is the son of 'K'

K
(Father)

(Son)   (Grandfather)

M
(Daughter)

39. (c) P − M — P is the brother of M

M + N — M is the mother of N

N × Q — N is the sister of Q

Therefore, P is the maternal uncle of Q.

40. (b) Father of shilpa's son— Shilpa's husband.

So, kapil is the son of sister of shilpa's husband. Thus, Kapil is shilpa's nephew.

41. (b) B is the daughter of C and C is the daughter in law of P. So P is the grandfather of B. Also, A is uncle of B i.e, A is the brother of B's father. Thus, A is the son of P.

42. (d) C is B's daughter and D is B's son. So, D is the brother of C. E is a male married to C so, E is the husband of C, whose brother is D. Thus, D But D is the brother in-law of E.

43. (b) It is clear that C is the Brother of B but how B is related to C depends on the sex of B.

44. (d) The father of his brother means " his father" is the only son of my mother means " my brother" It means lady's is the father's sister of the man's father.

45. (d) M is the uncle of P means M is the brother of the father (say K) of the sister (say T) of P, i.e. M + K ÷ T × P.

46. (c) S is the niece of T means T is the brother of the father (say M) of S, i.e. T + M × S.
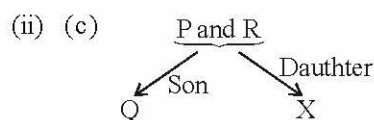
47. (c) S is the aunt of T means S is the sister of the father (say M) of T. i.e. S × M + T.

48. (i) (b) Q is the son of R but R is not mother of Q ⇒ R is father of Q.

P and R are couple ⇒ P is female

↓ His brother

Z, who is the brother-in-law of R

(ii) (c)

P and R

Son   Dauthter

Q   X

∴ Q is brother of X.

49. (d) As S is female in option (a) and (b), they can be rejected directly. The sex of S in option (c) is not known, hence it can also be eliminated. Now, check option (d).

P × Q ÷ R − S + T means P is wife of Q, Q is father of R, R is sister of S and S is brother of T. i.e. S is son of P.

50. (d) N is mother of M, M is husband of Q, Q is mother of P ⇒ N is grandmother of P. i.e. P # Q @ M # N.

51. (d) P ÷ Q + R − T × K means P is mother of Q, Q is father of R, R is the brother of T and T is the daughter of K.

⇒ Q is the husband of K and therefore P is mother-in-law   of K.

52. (b) N × K − M ÷ L

⇒ N is brother of K, M is son of K, L is sister of M.

Since, we don't know the sex of K, therefore, option (a) and option (c) are not definitely true.

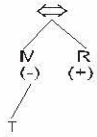Since M is son of K, therefore, option (d) is not true.

Now, since L is sister of M, therefore, L is daughter of K. Also, N is brother of K, therefore L is niece of N.

53. (d) Reject (a) because the equation does not tell about sex of R. Reject (b) and (c) also on the same basis.
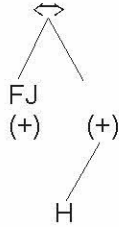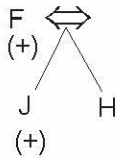
EXERCISE 2
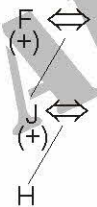
1. (a) R - M × T :

Hence, R is the maternal uncle of T.

2. (c) I. F - J ÷ H :

II. F ÷ J ÷ H :

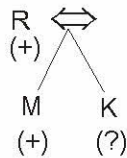
III. F ÷ J ÷ H :
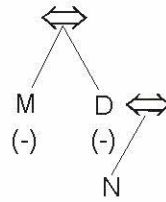

Hence, F is the paternal grandfather of H.

3. (d) R ÷ M - K :
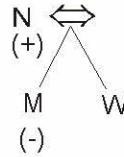

Sex of K is not clear

4. (b) I. M + D × N
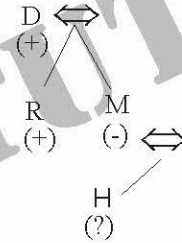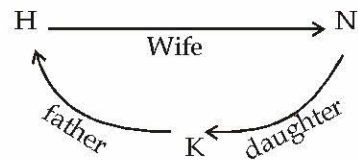

II. N ÷ M + W

Hence, M is the daughter of N.
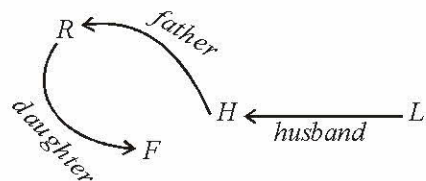
5. (c) D ÷ R - M × H:

The gender of H is unknown, therefore H may be grand son or granddaughter of D

6. (c)

So, N is wife of H and mother of K.

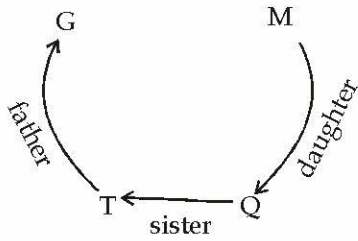7. (b)
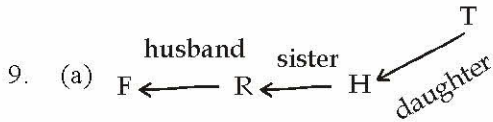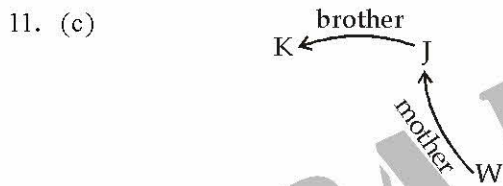

So, H is brother of F.

8. (e)

G   M

father   daughter

T ← Q
sister

So, M is wife of G.

9. (a)

husband   sister   T
F ← R ← H
               daughter

So, F is son-in-law of T.

10. (d)

R
mother
M ← T
sister

So, M is daughter of R.

11. (c)

brother
K ← J
mother
W

So, K is maternal uncle of W.

12. (d)

sister
N ← K
father
M ← T
brother

So, M is nephew of N

13. (e)

H
father
T
mother
R ← D
sister

So, T is mother of D.

14. (c)

W
father
R ← F ← T
brother   sister
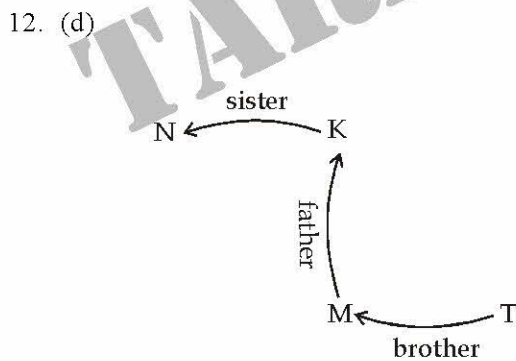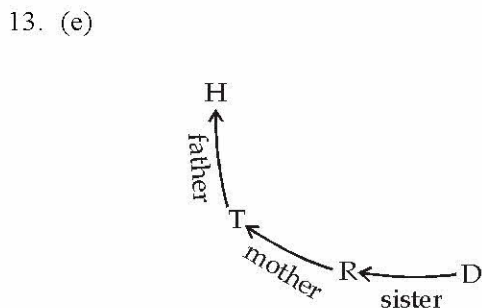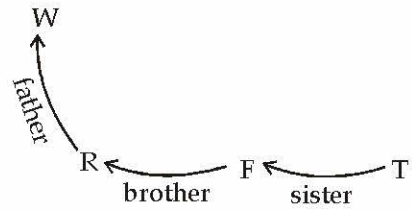
So, F is daughter of W.

15. (c) R x S ? T means R is the daughter of S whose mother is T i.e, R is the granddaughter of T.

P = Q. ? R means R is the mother of Q who is the father of P i.e, R is the grandmother of P.

L$M * O means L is the brother of M who is the sister of O i.e, L is the brother of O i.e, O is the brother of sister of L.

M * O L P = Q means Q is the father of the son (P) of O i.e, Q is the father and O is the mother of P i.e Q and O are husband and wife.

16. (d) The sex of Q is not given hence the exact relation ship between N & Q cannot be established.

17. (c) 'S + Q' & 'P + S' means R is the grandfather of Q. Now P ÷ R means P is daughter of R. This clearly means P is aunt of Q.

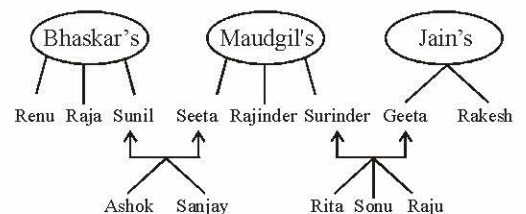18. (a) P – R ÷ Q, represents R is the father of Q, and P is the wife of R. ∴ P is the mother of Q

19. (d) R is the daughter of Q & P is brother of R.
∴ P is son of Q

20. (a) Clearly, P is related as brother in law to Q

21. (b) P is the daughter of V, who is spouse of T. T is the daughter of S. So, T is the mother and V is the father of P. Therefore, S is the grandfather of P.

22. (a) R and S are brother Q is the child of R and T is the child of S. So, cousin of Q. is T.

23. (b)

Bhaskar's   Maudgil's   Jain's

Renu   Raja   Sunil   Seeta   Rajinder   Surinder   Geeta   Rakesh

Ashok   Sanjay   Rita   Sonu   Raju

Raju is the son of Surinder who is the brother of

Rajinder. So, Rajinder is uncle of Raju.

24. (d) Ashok is the son of Seeta whose brother is Rajinder. So, Rajinder is maternal uncle of Ashok.

25. (c) Rakesh is the brother of Geeta and Rajinder's brother is Surinder who is the husband of Geeta.

26. (d) Rita is the daughter of Geeta whose brother is Rakesh.

27. (d) Sunil's wife – Seeta

Seeta's brother – Surinder

Surinder's brother-in-law – Rakesh.

There are in all four married couples.

28. (a) Since, Devika is wife of Aman and Krishna is sister of Aman, therefore, Krishna is the sister-in-law of Devika.

29. (d) Since, Anuj is son of Krishna and Romila is daughter of Aman and Aman is brother of Krishna, therefore Anuj and Romila are cousins.

30. (c) Since, Madhu is mother of Krishna who is wife of Sunil. Therefore, Madhu is Sunil's mother-in-law.

Relationship Diagram (Q. No. 28 to 30) :