MODULE 3 – BLOOD RELATIONS

1. J, K, L, M and N went for a trek. J is the son of K, but K is not the father of J. L is the son of M, who is the brother of J. N is the wife of M. How is J related to M?

(a) Nephew   **(b) Brother**   (c) Father   (d) None of these

Solution:

J is the son of K but K is not the father of J means that K must be the mother of J. Also, L is the son of M, who is the brother of J means that M and J must be brothers and L is M's son. Also, since N is the wife of M, L must be N's son also. Consolidating these relationships we get:

K mother of M and J (brothers). Also, M's wife is N and their son is L.

J is M's brother. Hence, (b) is correct option.

2. Sam's father is the only son of James's father. How is James related to Sam?

(a) Father   (b) Brother   (c) Can't be determined   (d) None of these

Solution:

Sam's father being the only son of James's father, means that James must be Sam's father. Option (a) is the answer.

James's Father

↓

James   (Only son of James's father should be James)

↓

Sam

3. 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

From the above information, if A @ B $ C @ D $ E @ F $ G, then what is the present generation of A? Assume that the oldest generation in this group is the first generation.

(a) 2nd (b) 3rd **(c) 4th** (d) None of these

Solution:

A @ B $ C @ D $ E @ F $ G means A is the daughter of B, B is the brother of C, C is the daughter of D, D is the brother of E, E is the daughter of F and F is the brother of G. Thus, if F and G are the first generation, D and E are the second, B and C are the third generation, A is the fourth generation. To solve this question in short, you only need to realize that the use of the @ sign signifies a generation change. Since the @ sign is used thrice, A must be the fourth generation. Hence, option (c) is the answer.

4. Andy is the brother of Binoy and Cindy. Daisy is Cindy's mother. Eliot is Andy's father. Which of the following statement cannot be definitely true?

(a) Eliot is Binoy's father (b) Daisy is Andy's Mother

(c) Binoy is Eliots's son (d) Andy is Daisy's son

Solution:

Gender of B is not there in the question. Therefore, (c) is the correct option.

5. Pointing to a lady, Harish said, "The son of her only brother is the brother of my wife." How is the lady related to Harish?

(a) Maternal aunt (b) Grandmother

(c) Sister of father-in-law (d) None of these

Solution:

Brother of Harish's wife → brother-in-law of Harish. Hence, the son of lady's brother is brother-in-law of Harish.
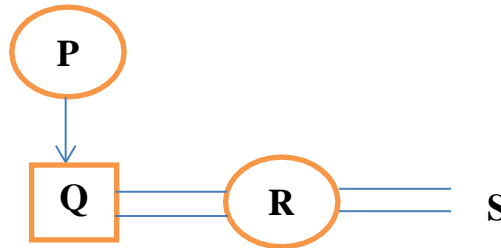
Therefore, the brother of the lady is the father-in-law of Harish. Hence, the lady is the sister of Harish's father-in-law.

Directions: Questions 6 and 7: If A ✦ B means A is the brother of B; A ◯ B means A is the sister of B; A ⧓ B means A is the daughter of B; A ⊘ B means A is the son of B; A ▢ B means A is the father of B; A ⊞ B means A is the mother of B.

6. According to P ⊞ Q ✦ R ◯ S, how is P related to S?

(a) Mother   (b) Daughter   (c) Aunt   (d) Cannot be determined

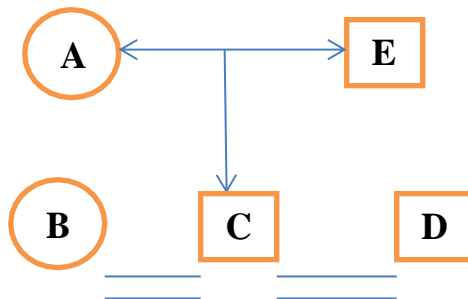**Solution:**

7. Deduce the relationship between E and A if 'A ⊞ B ◯ C ✦ D E'

(a) Brother – Sister   **(b) Husband – Wife**

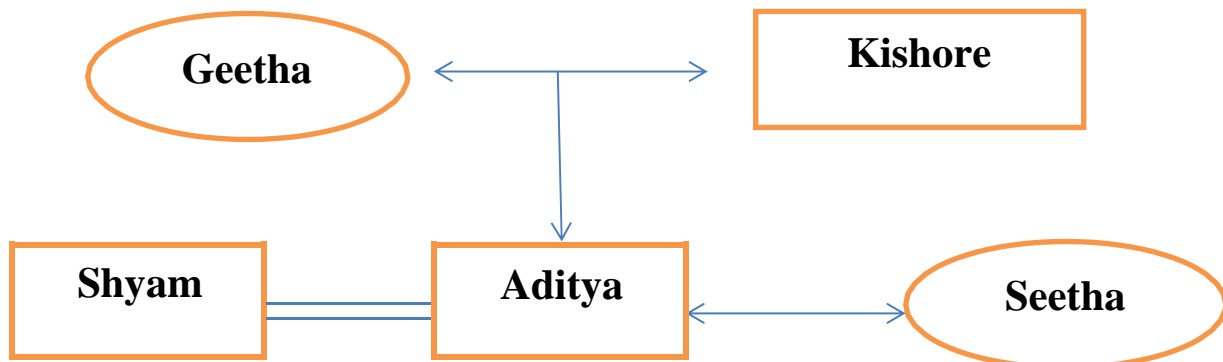(c) Uncle – Aunt   (d) Cannot be determined

Solution:

8. Geetha is the mother-in-law of Seetha who is the sister-in-law of Shyam. Kishore is father of Aditya, the only brother of Shyam. How is Geetha related to Shyam?

(a) Mother-in-law   (b) Aunt   (c) Wife   **(d) Mother**
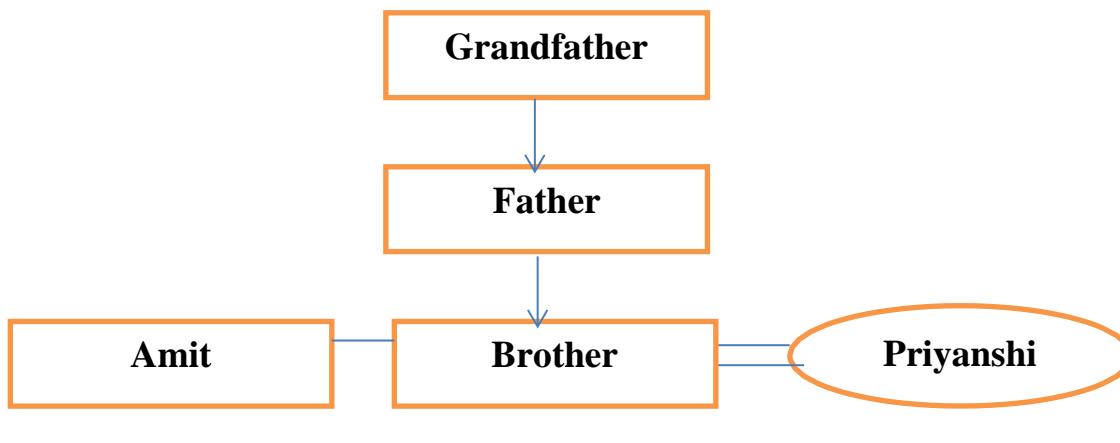
Solution:

9. Introducing Amit, Priyanshi said, "His brother's father is the only son of my grandfather". How is Priyanshi related to Amit?

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

Solution:

We have

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                    ┌──────────────┐
                    │ Grandfather  │
                    └──────┬───────┘
                           │
                           ▼
                    ┌──────────────┐
                    │   Father     │
                    └──────┬───────┘
                           │
                           ▼
┌──────────────┐    ┌──────────────┐    ╭──────────────╮
│    Amit      │────│   Brother    │────│   Priyanshi  │
└──────────────┘    └──────────────┘    ╰──────────────╯
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10. If A + B means A is the sister of B, A – B means A is the brother of B, A x B means A is the daughter of B, A & B means A is the mother of B.

Which of the following relationship shows that L and N are wife and husband?

(a) L – M x N   **(b) L & M x N**   (c) L + M x N   (d) None of these

Solution:

Go through the options, L & M means L is the mother of M. M x N means M is the daughter of N. Thus, M must be the daughter of L and N. Hence (b) is the correct option

11. Ram told Lakshman, "Yesterday, I met the only brother of the daughter of my grandmother." Whom did Ram meet?

(a) Cousin   (b) Brother   (c) Nephew   **(d) Father**

Solution:

The clue makes the man son of Ram's grandmother i.e., the man can be Ram's father or uncle. Since the options do not contain uncle, we have to conclude it is the father. So (d) is the right option.

Directions: Questions 12 to 14: Amitabh has a family of eight members. Prakash is the eldest male member of the family. Radhika is the daughter-in-law of Ramya and sister-in-law of Dhanush and Surya. Apart from Amitabh and Prakash, only Dhanush is a male member in the family. Surya is the aunt of Amitabh's two daughters Diya and Anu.

12. How is Anu related to Dhanush?

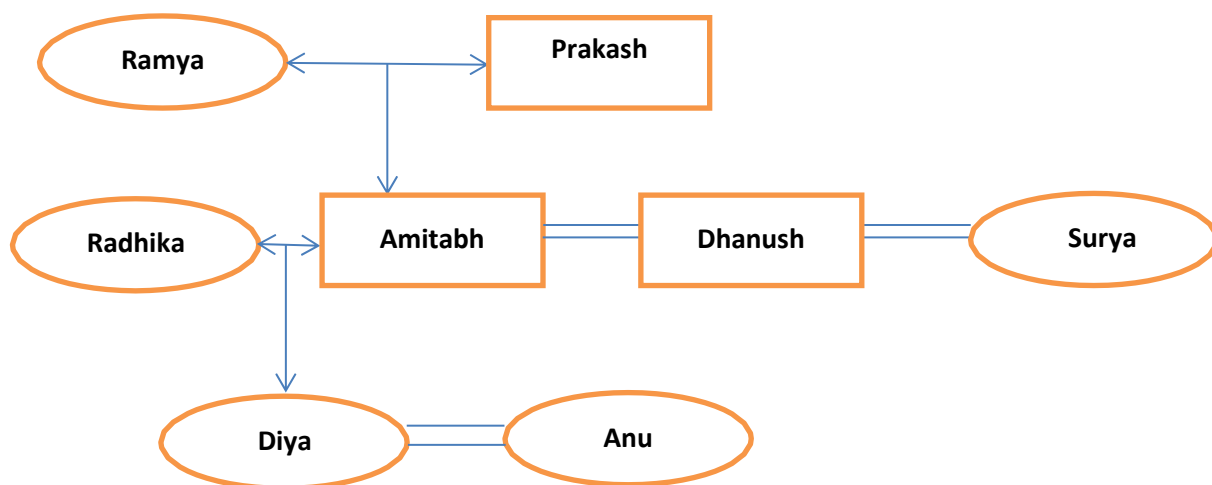(a) Grandmother   (b) Mother   **(c) Niece**   (d) Aunt

13. Find the relation between Radhika and Diya?

(a) Sister-in-law   (b) Aunt – Niece

(c)Grandmother – Granddaughter   **(d) Mother – Daughter**

14. Who is the husband of Radhika?

(a) Amitabh   (b) Dhanush   (c) Prakash   (d) Cannot be determined

Solution:

15. A ● B means A is the brother of B; A ★ B means A is the daughter of B; A ■ B means A the sister of B. If A ■ B ■ C ★ D ★ E ● F ● G, then how many males and females are there respectively?

(a) 4, 3   (b) 3, 4   (c) 5, 2   **(d) Cannot be determined**

Solution:

Here, G's sex is indeterminable. Hence, the answer cannot be determined. Option (d) is the answer.

HOME WORK:

Directions: Questions 16 and 17: L, M, N, O, P and Q are six members of a family. N is not the mother of M but M is the son of N. L and N are a married couple. P is the brother of N. Q is the brother of M. O is the daughter of L.
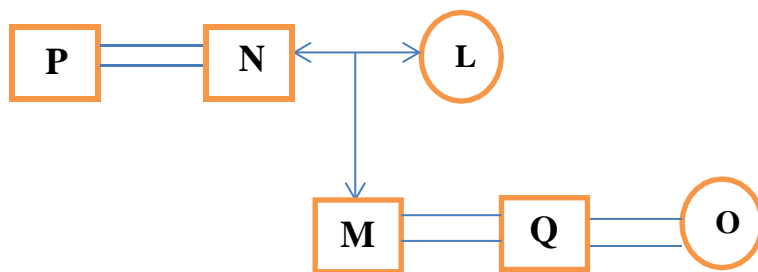
16. Which of the following is a pair of females?

(a) L, O   (b) M, O   (c) N, L   (d) M, L

17. P's wife is_____.

(a) L   (b) N   (c) Q   **(d) Cannot be determined**

Solution:

18. Pointing to man, Emily said, "He is the youngest son of my father-in-law's only son'. How is Emily related to this youngest son's father?

(a) Mother   **(b) Wife**   (c) Daughter   (d) Sister

Solution:

Looking at it from Emily's perspective, "my father-in-law's only son" would be my husband. Thus the youngest son of this person would also be Emily's son. Hence, this person's father would be Emily's husband and Emily would be the wife. Option (b) is the answer.

Directions for the Questions 19 and 20: Study the following information carefully and answer the questions given.

A, B, C, D, E, F and G are seven members in a family, out of which there are four males and three females. There are two singers, two dancers, one painter, one actor and one writer. No lady is either a painter or an actor. C is a dancer and is married to A, who is a painter. F, the actor, is married to D, who is neither a dancer nor a writer. No two ladies have the same profession. B is the sister of G, who is a singer.

19. What is E's profession?

(a) Singer   **(b) Dancer**   (c) Singer (or) Dancer   (d) Data Inadequate

20. Which of the following is the group of males?

(a) A, B, F and G   (b) E, F, D and G

(c) A, C, E and F   **(d) A, E, F and G**

Solution:

From the clues we can see that no lady is either a Painter or an Actor. Hence these have to be males. Now since A is a male, C is a female because C is a Dancer and is married to A. F the Actor is married to D. Hence F is a male and D is a female so D cannot be Painter or Actor. It is also given that she is neither a Dancer nor a Writer. Thus, she is a Singer.

Again, B is sister of G who is the Singer. G is a male because no two females have the same profession and D is a female and a Singer. On the same grounds, B cannot be Dancer hence she is a Writer. By elimination of clues E is a Dancer and a male.

Now let us tabulate all the conclusions in a table:

Person	Profession	Gender
A	Painter	Male
B	Writer	Female
C	Dancer	Female
D	Singer	Female
E	Dancer	Male
F	Actor	Male
G	Singer	Male