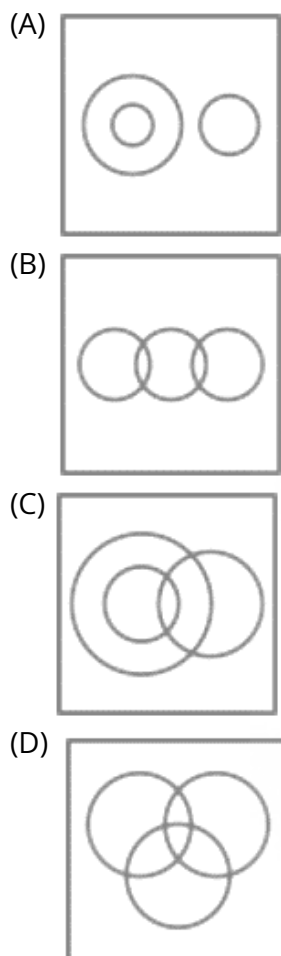


AFCAT Memory Based Paper - 27 Aug 2022

- Q1** Select the Venn diagram that best illustrates the relationship between the following classes.
Oak, Maple, and Furniture

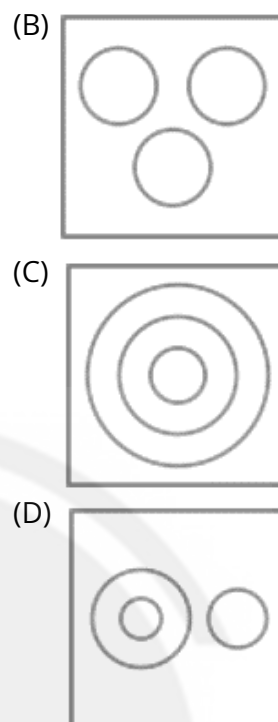
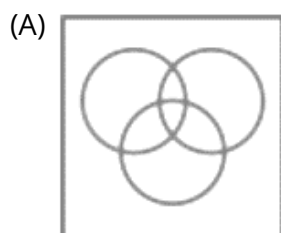


- Q2** Select the correct option to complete the following analogy.

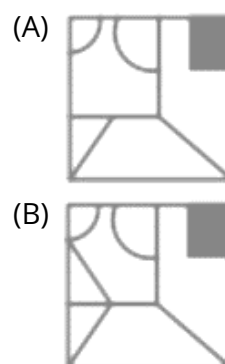
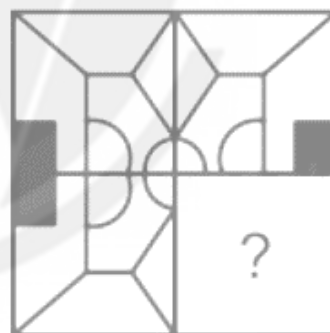
Rabbit : Hop :: Duck : ?

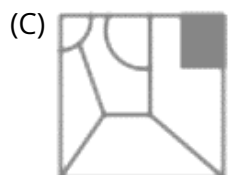
- (A) Waddle (B) Slither
(C) Creep (D) Crawl

- Q3** Which diagram correctly represents the relationship of pigeons, birds, dogs?



- Q4** Which answer figure will complete the pattern in the question figure?

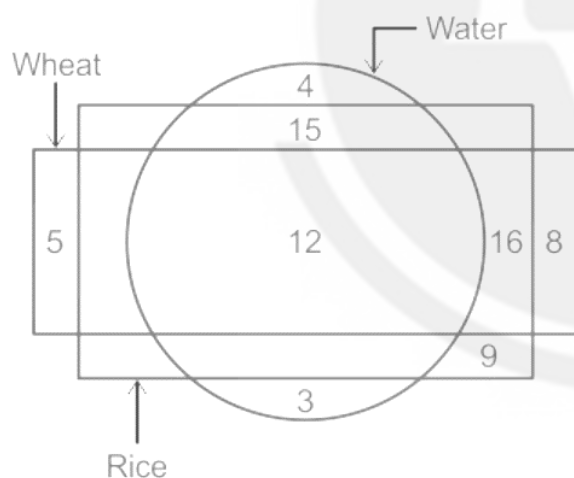




Q5 Divya travels 15 km south, turns left and travels 40 km to reach at the college gate. She then turns right and travels 50 km. Finally, she turns right and travels 40 km. How much minimum distance does she have to travel to go back to the starting point?

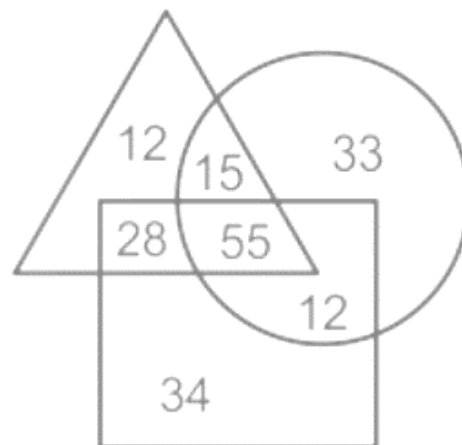
- (A) 65 km (B) 50 km
(C) 40 km (D) 45 km

Q6 In the given diagram, Circle represent Water, Rectangle represent Wheat and Square represent Rice. Find the number of rice which are not water.



- (A) 25 (B) 16
(C) 9 (D) 5

Q7 In the given Venn diagram, the square represents 'people having blue eyes', the triangle represents 'people having extra fingers', and the circle represents 'people having dimples'.



The number of people who have extra fingers and blue eyes and no dimples is A and if the number of people who have extra fingers and dimples and no blue eyes is B. What is the sum of A and B?

- (A) 40 (B) 67
(C) 70 (D) 43

Q8 Find the missing character.



- (A) V (B) P
(C) S (D) B

Q9 If P denotes 'Addition', Q denotes 'Division', R denotes 'Multiplication', and S denotes 'Subtraction', then which of the statements given below is/are correct.
Statement I : $32 \text{ Q } 4 \text{ P } 16 \text{ S } 4 \text{ R } 2 = 24$
Statements II : $27 \text{ Q } 3 \text{ R } 2 \text{ P } 5 \text{ S } 7 = 16$
(A) Only I
(B) Only II
(C) Both I and II
(D) Neither I nor II

Q10 Rearrange the jumbled-up letters in their natural sequence and find the odd one out.
(A) GEPONI (B) TOGA

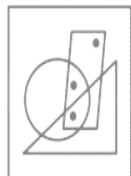


(C) LEEGA

(D) RARPOT

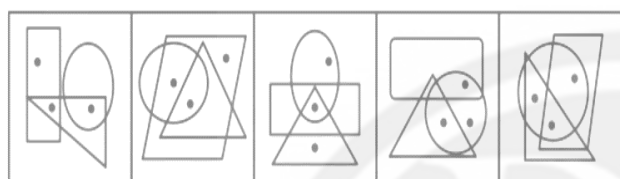
- Q11** From amongst the figures (A), (B), (C), (D), and (E), select the figure that satisfies the same conditions of placement of the dots as in figure (X)

Problem Figure



(X)

Answer Figure



(A)

(B)

(C)

(D)

(E)

(A) E

(B) C

(C) B

(D) D

- Q12** Four letter- clusters have been given out of which three are alike in some manner and one is different. Select the odd one.

(A) CNILPE

(B) ANNABA

(C) NGMAO

(D) APELP

- Q13** K walks 10km towards North. From there, he walks 6 km towards South. Then he walks 3 km towards East. How far and in which direction is he with reference to his starting point?

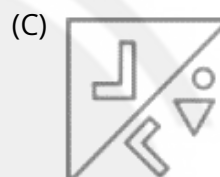
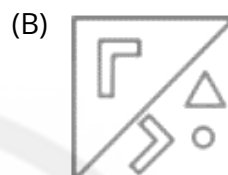
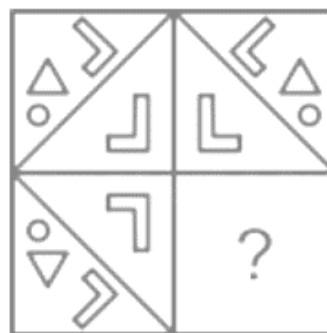
(A) 7 km South

(B) 7 km East

(C) 5 km West

(D) 5 km North- East

- Q14** Select a figure amongst the four alternatives that when placed in the blank space (?) of figure X will complete the pattern. (Rotation is not allowed)



- Q15** Point B is 3m North of point A. Point C is 3m West of point B. Point D is 5m South of point C. Point E is 7m East of point D. In which of the following directions is point E, with reference to point B?

(A) East

(B) South- East

(C) South

(D) West

- Q16** If 'L' means ' \times ', 'M' means ' $-$ ', 'N' means ' $+$ ', and 'O' means ' \div ', then what will be the value of the following expression?

$$6 L 25 M 15 N 45 O 5$$

(A) 150

(B) 134

(C) 144

(D) 145

- Q17** Select the figure from among the given options that can replace the question mark (?) in the



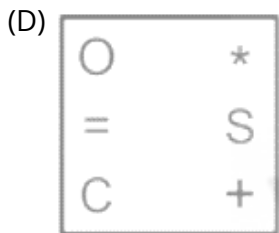
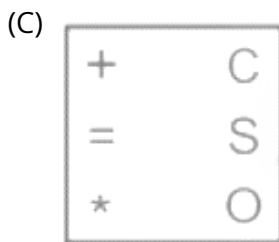
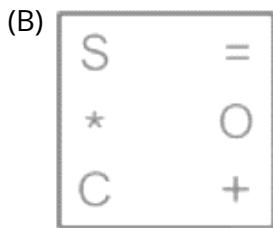
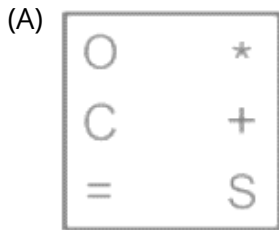
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following series.

=	S	C	+	+	C	O	*	*	O	
C	+	=	S	O	*	+	C	S	=	?
*	O	O	*	=	S	S	=	+	C	



Q18 In a certain code language, 'BREAD' is written as 'JGKXH' and 'DANCE' is written as 'KITGJ'. How will 'CROWN' be written in that language?

- (A) SCUXI (B) TCUXJ
(C) TCUXI (D) TDUXI

Q19 If Neelam says, "Anita's father RAJ is the only son of my father-in-law Sunil," then how is Kavita, who is the sister of Anita, related to Sunil?

- (A) Daughter -in- law
(B) Daughter
(C) Niece
(D) Grand Daughter

Q20 A is the brother-in-law of B. B is the daughter of M who is the wife of G. J is the father of N. N

is the only son -in-law of G. B is the daughter -in-law of C who is grandparent of F. Then how is A related to F?

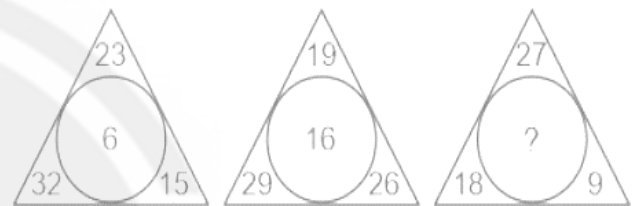
- (A) Maternal Uncle (B) Paternal Uncle
(C) Grandfather (D) Brother

Q21 Select the related word from the given alternatives.

School : Principal :: Newspaper : ?

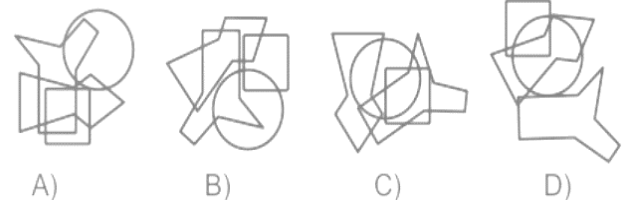
- (A) Reporter (B) Editor
(C) Distributor (D) Printer

Q22 Study the pattern in the first two pictures and then choose the number that can replace the question mark (?) in the third picture.



- (A) 22 (B) 16
(C) 18 (D) 26

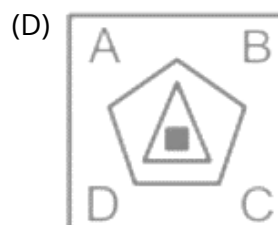
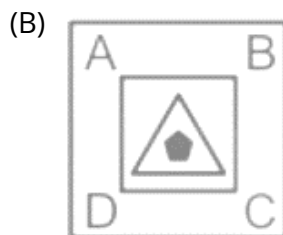
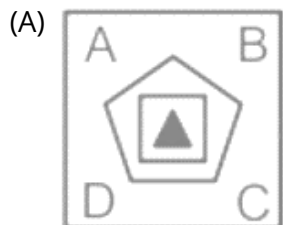
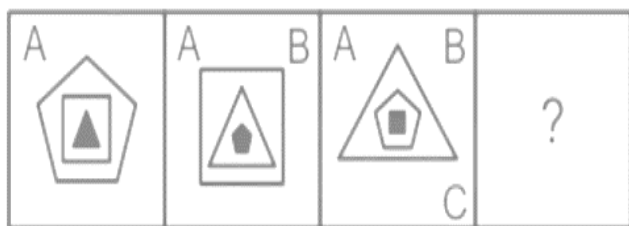
Q23 From the given options, select the option in which the dot can be placed in exactly the same way as shown in figure (X) below.



- (A) D (B) C
(C) B (D) A

Q24 Select the figure that will come next in the following figure series.





Q25 In a code language, the word MISTER is coded as SGWWNS and the word 'FOREST' is coded as 'UUHVTL', then the code for the word 'PERSON' , in the same code language is

(A) OQVVJV

(B) OQWVKV

(C) OPVUJW

(D) OPWUKW



Answer Key

Q1 B
Q2 A
Q3 D
Q4 D
Q5 A
Q6 A
Q7 D
Q8 C
Q9 B
Q10 B
Q11 C
Q12 A
Q13 D

Q14 D
Q15 B
Q16 C
Q17 B
Q18 C
Q19 D
Q20 B
Q21 B
Q22 C
Q23 D
Q24 A
Q25 A



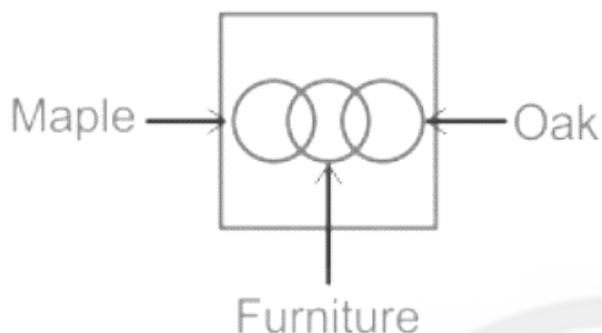
Hints & Solutions

Note: scan the QR code to watch video solution

Q1 Text Solution:

Explanation:

According to the given information, Venn diagram is given below:



Some Furnitures are made from Maple's tree wood

Some Furnitures are made from Oak's tree wood

Q2 Text Solution:

Explanation:

The logic followed here is:

The movement of Rabbits is Hop.

Similarly,

The movement of Duck is known as Waddle.

Q3 Text Solution:

Explanation:

Pigeons are a specific type of birds. Thus pigeons will be completely inside birds. And Birds and Dogs are mutually exclusive of each other that mean they will not intersect each other.

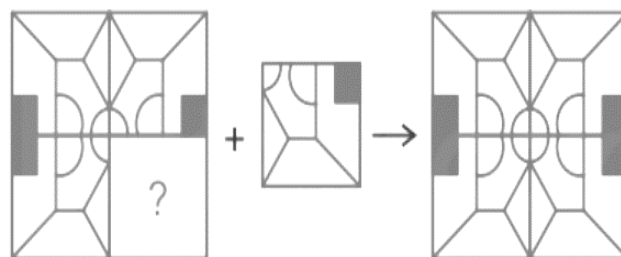


Hence Option D is the correct answer.

Q4 Text Solution:

Explanation:

The figure that will replace the question mark (?) in the following figure is shown below:



Q5 Text Solution:

Explanation:

According to the given information:

Divya travels 15 km south, turns left and travels 40 km to reach at the college gate.

She then turns right and travels 50 km.

Finally, she turns right and travels 40 km.



So, the minimum distance she have to travel to go back to the starting point = Distance between AE = $50 + 15 = 65$ km

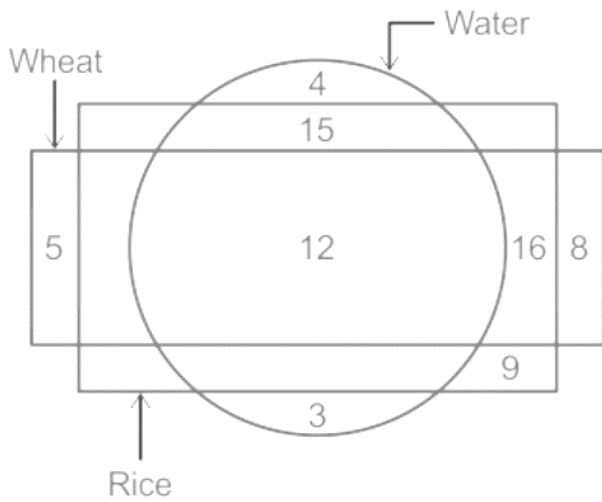
Q6 Text Solution:

Explanation:

According to the given information:

I. Number of Rice which are not water.

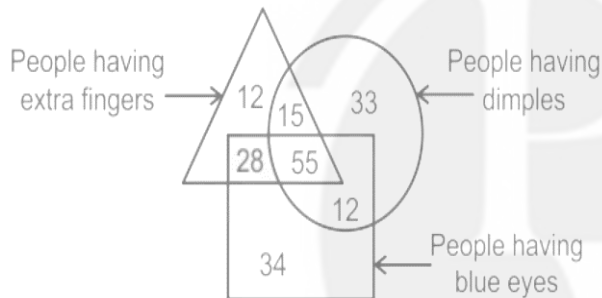




As per the given diagram, the part 16 and 9 represents number of rice which are not water is $9 + 16 = 25$.

Q7 Text Solution:

Explanation:



A is represented by the number 28 and B is represented by 15.

Sum of A and B=43

Q8 Text Solution:

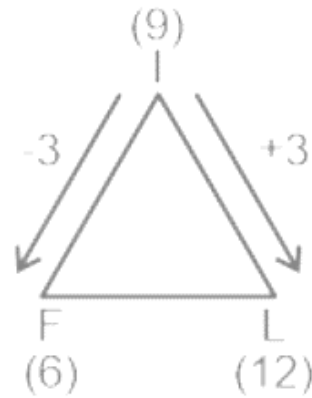
Explanation:

Table show alphabet serial number -

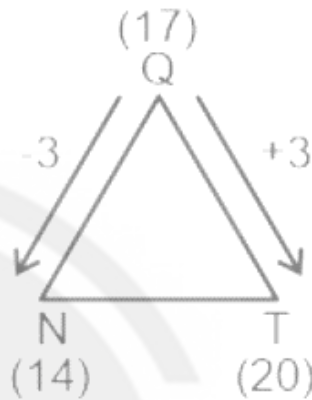
Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

The pattern for the code is as follows,

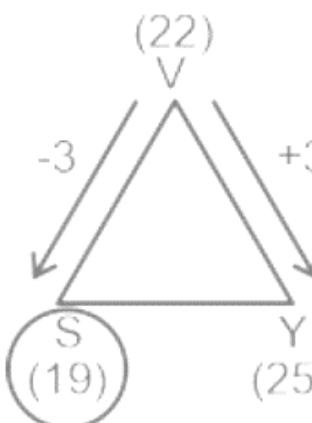
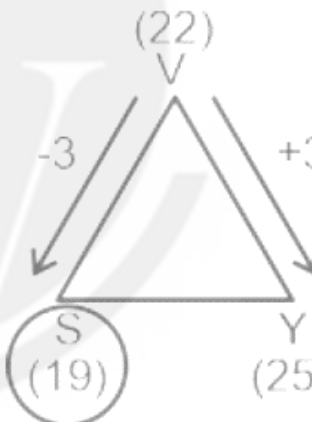
In the triangle, if the upper side alphabet adds three, we get the triangle right side alphabet and if we subtract three, we get the left side alphabet.



And,



Similarly,



Hence, the missing term is S

Q9 Text Solution:

Explanation:



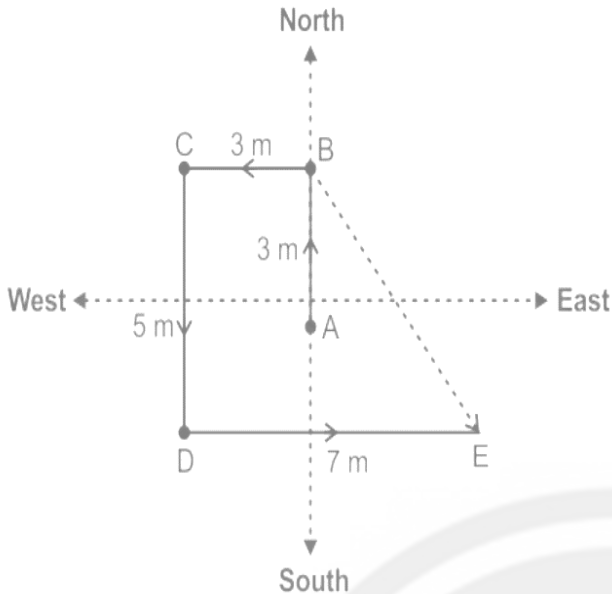
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Explanation:

Drawing the Diagram as per the given information:



Thus, we can say direction of E is South- East with reference to point B.

Q16 Text Solution:

Explanation:

Decoding the information:

Letter	N	M	O	L
Means	+	-	÷	×

Given,

$$6 L 25 M 15 N 45 O 5$$

After replacing the sign from left to right and using the BODMAS rule,

$$= 6 \times 25 - 15 + 45 \div 5$$

$$= 6 \times 25 - 15 + 9$$

$$= 150 - 6$$

$$= 144$$

Q17 Text Solution:

Explanation:

In the given figure, the symbols O, C and S are moving in a clockwise direction and the other symbol +, = and star * are moving in an anticlockwise direction.

=	S	C	+	+	C	O	*	*	O	
C	+	=	S	O	*	+	C	S	=	
*	O	O	*	=	S	S	=	+	C	+

=	S	C	+	+	C	O	*	*	O	=
C	+	=	S	O	*	+	C	S	=	*
*	→	O	O	→	S	S	=	+	C	

=	S	C	+	+	C	O	*	*	O	S
C	+	=	S	O	*	+	C	S	=	O
*	←	O	O	←	S	S	=	+	C	

Here, the answer figure is

S	=
*	O
C	+

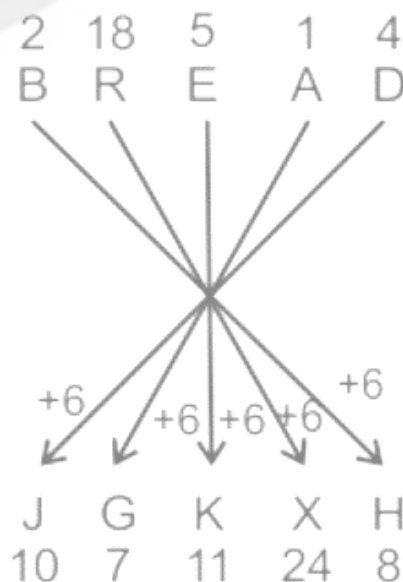
Q18 Text Solution:

Explanation:

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

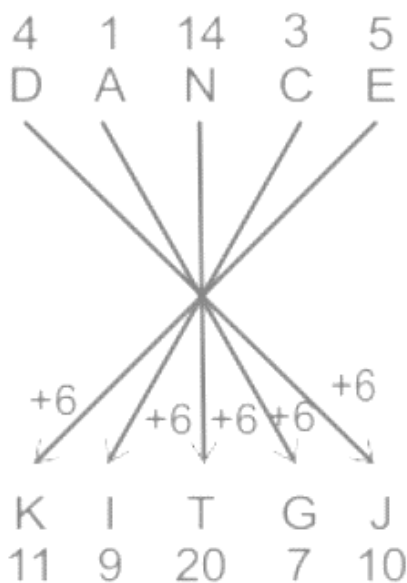
The logic followed here is:

In BREAD –

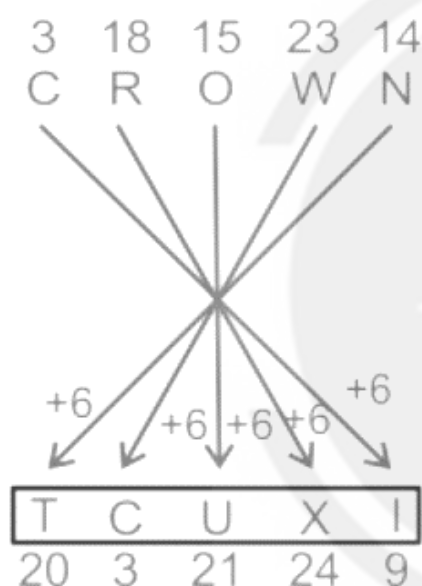


In DANCE –





Similarly,
In CROWN –



In each pair, diagonally letter has a increment of 6 positional value.

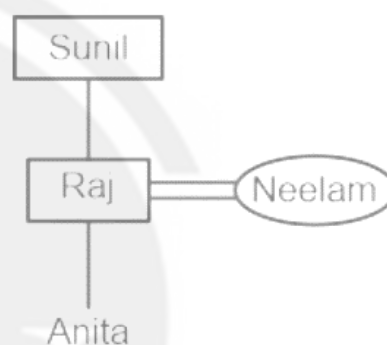
Q19 Text Solution:

Explanation:

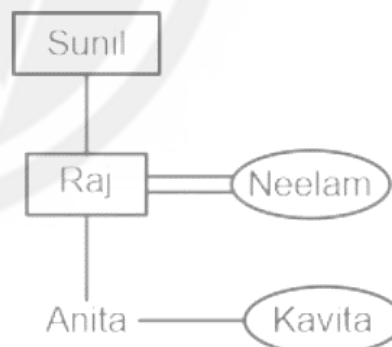
From the given information,

Symbol in Diagram	Meaning
○	Female
□	Male
==	Married Couple
—	Siblings
	Difference of A Generation

Anita's father Raj is the only son of my (Neelam's) father-in-law Sunil, which implies Neelam is the wife of Raj. Thus, the family tree is as follows:



Now if Kavita is the sister of Anita, then the final family tree is as follows:



Hence, Kavita is the granddaughter of Sunil

Q20 Text Solution:

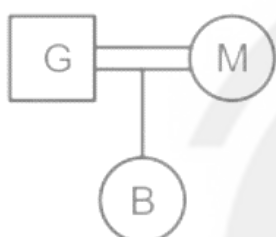
Explanation:



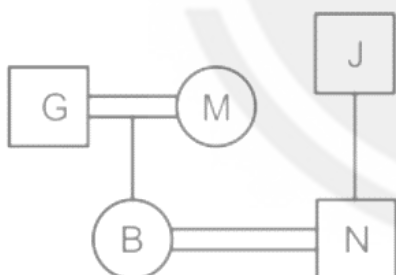
Symbol in Diagram	Meaning
○	Female
□	Male
==	Married couple
—	Siblings
	Difference of a generation

According to the given conditions,

1. B is the daughter of M who is the wife of G

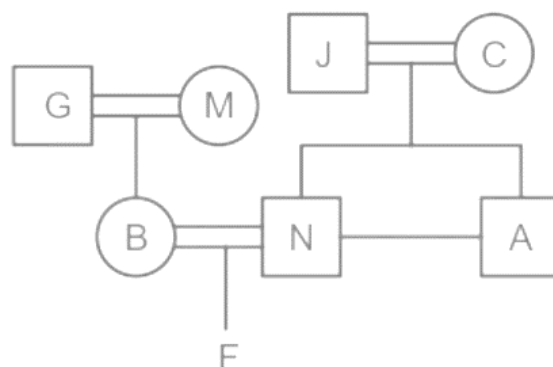


2. N is the only son-in-law of G
3. J is the father of N



4. A is the brother-in-law of B
5. B is the daughter-in-law of C who is the grandparent of F

As the only married child till now in N, F is either the daughter or son of B and N



Thus, according to the final family tree, A is the paternal uncle of F

Q21 Text Solution:

Explanation:

The school is headed by the Principal

Similarly,

The newspaper is headed by an Editor

Q22 Text Solution:

Explanation:

The logic followed here is,

$$\Rightarrow (23 + 15) - 32 = 6$$

$$\Rightarrow (19 + 26) - 29 = 16$$

Similarly,

$$\Rightarrow (27 + 9) - 18 = 18$$

So, the missing term is 18

Q23 Text Solution:

Explanation:

In the question figure(X),

1. One dot is in the common area of the Y-shape, Kite-shape and Square
2. One dot is in the common area of the Y-shape and circle
3. One dot is solely placed in the Kite-shape only

Figure (A) – All the required conditions are fulfilled as shown below:



**Q24 Text Solution:****Explanation:**

The pattern followed in the given series is:

There is a repetition of triangle, square and pentagon in the series.

In each step, a new alphabet is introduced at the corner in clockwise pattern.

Next step will be:

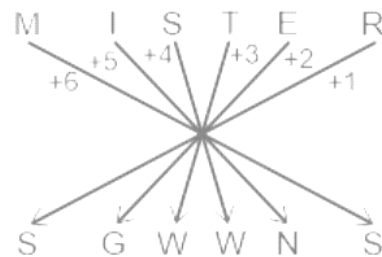
The alphabet will be D and it will be placed at the only corner left i.e., bottom left.

The shapes in the first step will repeat itself.

**Q25 Text Solution:****Explanation:**

The logic followed here is:

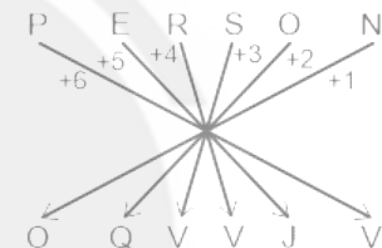
MISTER is coded as SGWWNS



FOREST is coded as UUHVTL



Similarly, PERSON



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| [iOS App](#)

| [PW Website](#)