LOGICAL REASONING

1. **If CAR is coded as 2146, then TRUCK can be coded as**
   a. 146242128
   b. 146212428
   c. 146212423
   d. 146242123
   Ans: d
   Let A, B, C....Y, Z = 1,2, 3, ..., 25, 26.
   C-A-R = 3-1-18 **.............. (1)**
   R-A-C = 18-1-3 **.............. (2)**
   Adding (1) + (2) + 3
   Then, CAR = 2146
   T-R-U-C-K = 20-18-21-3-11 .... (3)
   K-C-U-R-T = 11-3-21-18-20 .... (4)
   Adding (3) + (4) + 3
   Then, TRUCK = 146242123

2. **13478912473948512431562**
   How many odd numbers are there in the sequence which are immediately followed by an odd number?
   A.3.
   B.4.
   C.5.
   D. more than six.
   Ans: d
   Immediately followed by odd number
   1,3- 9,1 –7,3- 3,9- 5,1- 3,1- 1,5.
   Seven times
   So option D is correct

3. **If 783 is written is 378 and 149 as 914 and so on then which of the following two numbers will have high difference between them?**
   a. 473 and 382
   b. 629 and 728
   c. 728 and 847

d. 629 and 568

Ans: a

Option a

473 = 347 ; 382 = 238

Difference = 109

Option b

629= 962 ; 728 = 872

Difference = 90

Option c

728 = 872 ; 847 = 784

Difference = 88

Option d

629=962 ; 568=856

Difference = 106

Hence, highest difference is option a

4. **Riju is ninth place from left and Raji is 11th place from right end in a classroom of children's. If they were shifting their place, Raji position is 17th place from right end. How many children's are there in the row?**

A.24.

B.25.

C.26.

D.27.

Ans: b

17th place Right end   X = 11Raji

<8>11th place	<6>9th place	

Left end   Raji Left end   Riju   Right end

After shifting their place   Original position

Riju is 11th place from the right end.
Children are there in a row = (Left end to Raji) + (Difference) + (Riju to right end).
= 8+6+11 = 25.

5. **An orange cost Rs.60, a grapes cost Rs.40 and guava cost Rs.60, how much a pineapple cost?**
A.60.
B.90.
C.80.
D. 120
Ans: c
Vowels = A,E,I,O,U.
1 Vowels = 20
Orange = 3 Vowels = 60
Grapes = 2 Vowels = 40
Guava = 3 Vowels = 60.
Pineapple = 4 Vowels = 80.

6. **The difference between the 19th and 18th Fibonacci Numbers**
A.1987.
B.1597
c.2584
d.1795
Ans: b

Fibonacci number series

1, 1, 2, 3, 5, 8 13, 21,34, 55,89, 144, 233, 377

Difference = 4181-2584

=1597

7. **The house of Street are numbered from 1 to 49. Praveen's House is numbered such that the sum of numbers of the house prior to Praveen House is equal to the sum of numbers of the houses following Praveen's house. Find Praveen's house number.**

a.27

b.25

c.35

d.29

Ans: c

1, 2, 3, …...., n, …...., 49.

Let n be Praveen's house.

$$s_n = \frac{n(n-1)}{2}$$

$$s_{n-1} = s_{49} - s_n$$

$$\frac{(n-1)(n-1+1)}{2} = \frac{49(50)}{2} - \frac{n(n+1)}{2}$$

$$\frac{(n^2-n)}{2} = \frac{2450}{2} - \frac{n^2+n}{2}$$

$$n^2 - n = 2450 - (n^2 + n)$$

$$n^2 - n + n^2 - n = 2450$$

$$2n^2 = 2450$$

$$n^2 = 1225$$

$$n = \sqrt{1225}$$

$$n = 35$$

8. **In a certain code, '256' means 'red colour chalk', '589' means 'green colour flower' and '245' means 'white colour chalk', which digit in that code means white?**

A.1

B.5

C.4.

D. 6

Ans: c

2 <u>5</u> 6 = red <u>colour</u> chalk

<u>5</u> 8 9 = green <u>colour</u> flower

2 4 <u>5</u> = white <u>colour</u> chalk

Hence 5 = colour

<u>2</u> 5 6 = red colour <u>chalk</u>

<u>2</u> 4 5 = white colour <u>chalk</u>

Hence 2 = chalk

2 <u>4</u> 5 = <u>white</u> colour chalk

White = 4

9. **If interchanges or made in sign and numbers, which of the following would be correct?**

   Interchange In sign: -, X

   Interchanges in numbers: 6 and 8

   a. (8-4) ÷ 6 = 3

   b. (6X12)-8 = 36

   c. (16X6) + 6 = 20

   d. (25-4) ÷ 6 = 40

   Ans: a

   Option a => (8-4) ÷ 6 = 3

   Interchanges => (6 X 4) ÷8 = 24 ÷ 8 = 3

10. **Find the wrong number in the number series 380, 188, 92, 48, 20, 8, 2.**

    a. 188

    b. 92

    c. 48

    d. 20

    Ans: c

380	188	92	48	20	8	2
	$\dfrac{380-4}{2}$	$\dfrac{188-4}{2}$	$\dfrac{92-4}{2}$	$\dfrac{44-4}{2}$	$\dfrac{20-4}{2}$	$\dfrac{8-4}{2}$
188	92	44	20	8	2	

   48 is the wrong answer.

11. Anbu Prabhu, Seeni David and Eisha Sings, one by one. Seeni sings after the person who sings first. The person who sings last Sings after Anbu. Eisha Sings neither first not last. two persons are singing between Prabhu and Anbu. The person who sings last is
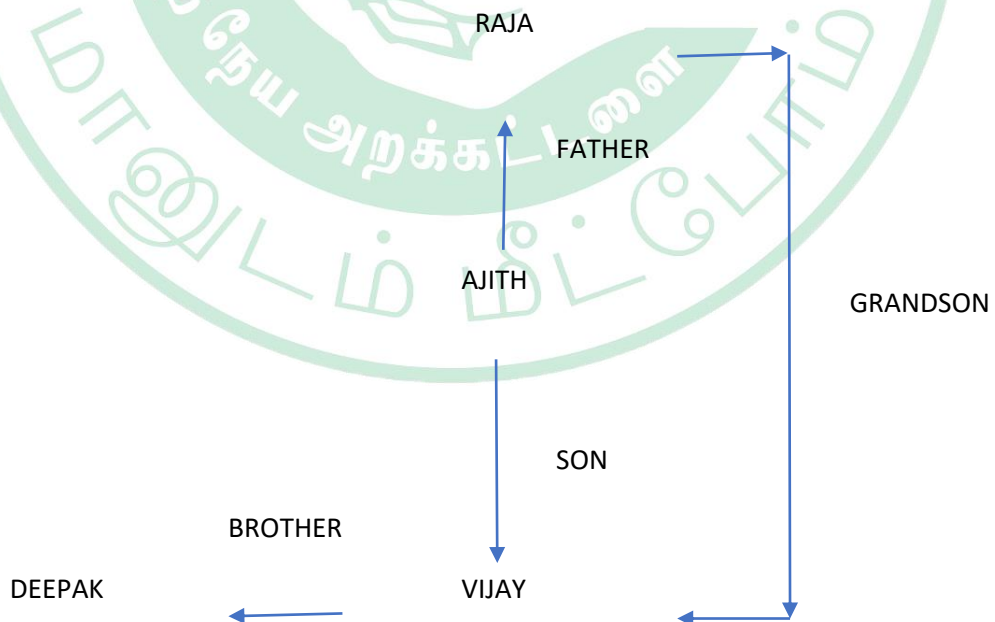
A. Anbu.

B. Prabhu.

C. David

D. Seeni

Ans: c

1	2	3	4	5
Prabhu	Seeni	Esha	Anbu	David

Hence the person who sings last is David.

12. Deepak has a brother Vijay. Deepak is the son of Ajith. Raja is Ajith's father. In terms of related relationship How is Vijay related to Raja?

A. Son

B. Grandson.

C. Brother

D. Grandfather.

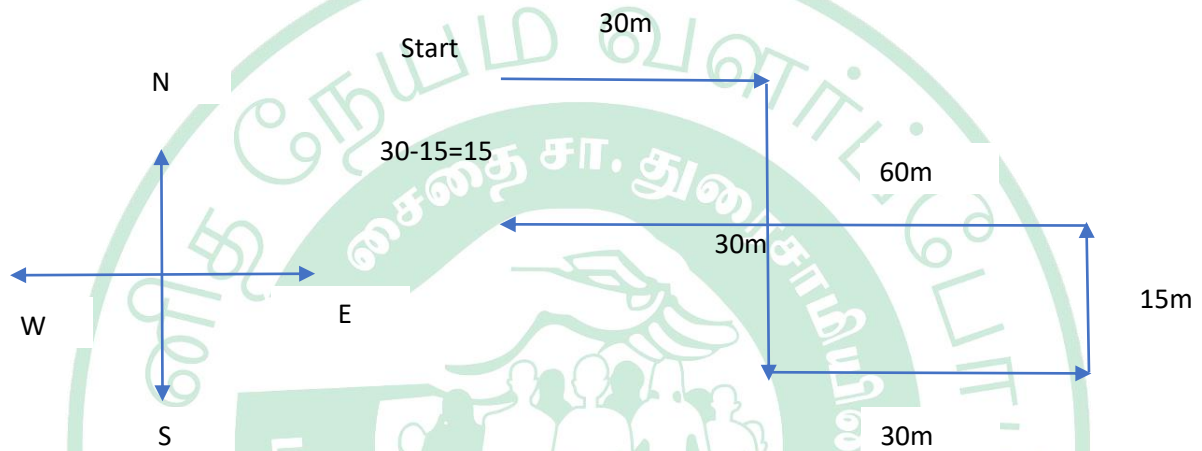**Ans: b**

13. Rajesh walks 30 m east. Then he turns right and walk is 30 m. Then he again turns his left and walks 30 m. Then he again turns left and walks 15 m. Finally, he turns his left and walk 60 m and reaches a place. In which direction and how many metres away is he from his original position?

a. 20m North.

b. 15m North.

c. 20m South.

d. 15m South.

Ans: d

14. 8JP@2$BLV1#6QWG3•CDKA J@B is KCG in the Same way as 2 $ V is to?

a. 3•Q

b. •36

c. •3Q

d. 3•6

Ans: c

8 J P @ 2 $ B L V 1 # 6 Q W G 3 • C D K A.

8 J P @ 2 $ B L V 1 # 6 Q W G 3 • C D K A.

2$V = •3Q

15. **Find the missing term of the sequence 7, 26,63, 124,215,342, _____**

    a. 421

    b. 511

    c. 411

    d. 521

    Ans: b

    $2^3 - 1 = 7$

    $3^3 - 1 = 26$

    $4^3 - 1 = 63$

    $5^3 - 1 = 124$

    $6^3 - 1 = 215$

    $7^3 - 1 = 342$

    $8^3 - 1 = 511$

16. **A cube of side 4 cm is painted blue on all of its surfaces and then divided into various smaller cubes of side 1 cm each. Find the number of smaller cubes with two surfaces painted blue.**

    A. 12

    B. 16

    C. 20

    D. 24

    Ans: d

    Two surfaces painted top and bottom = 8+8 = 16.

    Two surfaces painted centre of cube = 4+4 = 8.

    Total two surfaces painted = 16+8 = 24.

17. **Identify the wrong number in the following sequence**

    5, 6, 14,40, 105, 230, 446

    A. 40

    B. 105

    C. 230

    D. 446.

    Ans: a

    $5 + 1^3 = 6$

$6 + 2^3 = 14$

$14 + 3^3 = 41$

$41 + 4^3 = 105$

$105 + 5^3 = 230$

$230 + 6^3 = 446$

Option a is wrong.

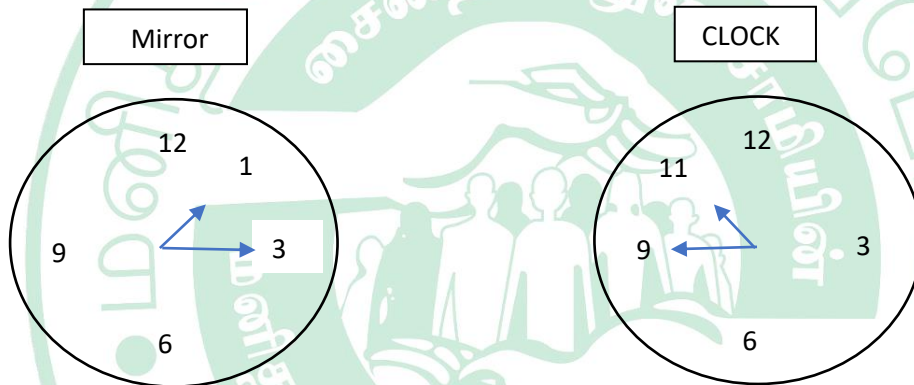18. **When seen through a mirror a watch shows 1:15, the correct time is ?**

    a. 11:15

    b. 11:45

    c. 10:45

    d. 10:15

    Ans: c

19. **According to a certain code HEART = 57, BEAT = 32, then SCIENCE Is?**

    a. 58

    b. 55

    c. 65

    d. 68

    Ans: c

    A, B, C, D, …., Y, Z =1, 2, 3, …, 25, 26 + No. Of letters.

    HEART = (8 +5+ 1+ 18 + 20) + 5 = 57

    BEAT = (2+5+1+20) + 4 = 32

    SCIENCE = (19+3+9+5+14+3+5) + 7 = 65.

20.Find the next term.

$$\frac{1}{2}, \ \frac{1}{3}, \frac{5}{6}, \frac{7}{6}, 2$$

a. $\frac{19}{6}$

b. $\frac{19}{7}$

c. $\frac{9}{8}$

d. $\frac{19}{18}$

Ans: a

First term + 2nd term = 3rd term

$$\frac{1}{2} + \frac{1}{3} = \frac{5}{6}$$
$$\frac{1}{3} + \frac{5}{6} = \frac{7}{6}$$
$$\frac{5}{6} + \frac{7}{6} = \frac{12}{6} = 2$$
$$\frac{7}{6} + \frac{12}{6} = \frac{19}{6}$$

21.If + means ÷, - means X, X means +, ÷ means -

a. 55 – 2 + 10 ÷1 X 5 = 16

b. 10 – 12 + 2 ÷ 30 X 1 = 10

c. 5 X 8 –5 + 5 ÷ 1 = 12

d. 38 ÷ 10 – 5 + 7 X 8 = 25.

Ans: c

Option c = 5 X 8 –5 + 5 ÷ 1 = 12

Symbols changed = 5 + 8 X 5 ÷ 5 – 1 = 12

5+8X1-1 = 12

5+7 = 12

12=12

22.If 8*4 = 156 and 9*6 = 240, then what is the value of 10*7?

a. 306

b. 312

c. 316

d. 322

Ans: a

(Addition of numbers)^2 + addition of numbers

$(8+4)^2 + (8+4) = 156$

$(9+6)^2 + (9+6) = 240$

$(10+7)^2 + (10+7) = 306$

23. **If a man is called girl, girl is called as woman, woman is called as boy, boy called servant and servant is called officer, who will serve in the restaurant?**

a. servant

b. Man
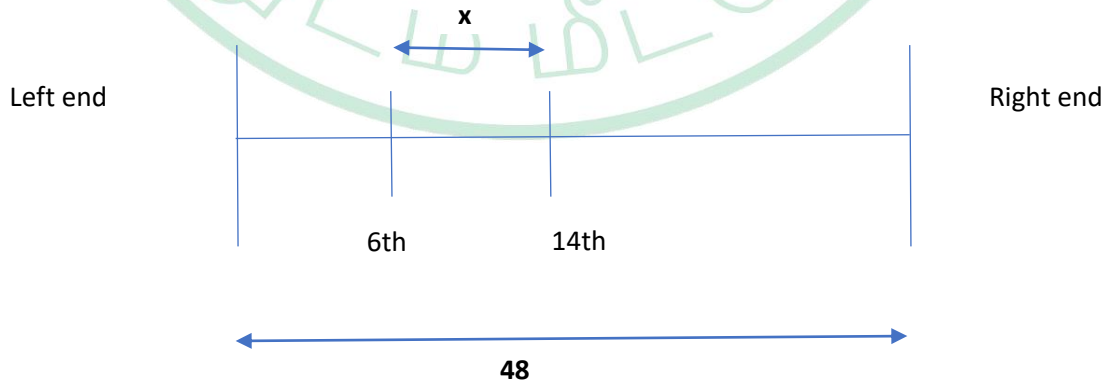
c. Boy

d. Officer

Ans: d

Serve in a restaurant = Servant

Servant is called officer.

24. **In a row of students, the place of Dinesh from right is 14th and from left is sixth. How many students should be added to make the total number of students 48?**

a. 27

b. 28

c. 29

d. 30

Ans: c

$6 + x + 13 = 48$

$X = 48 – 19$

X = 29

25. **Which of the following words cannot be formed the letters of the word "FUNTAMENTAL"?**
    a. TEAM
    b. MEDAL
    c. MEAL
    d. UNDER
    Ans: d
    UNDER = R IS NOT in the word FUNTAMENTAL

26. **Today is Sunday. The day after 42 days is?**
    a. Saturday
    b. Sunday
    c. Friday
    d. Monday
    Ans: d
    Let, Monday = 1, Tuesday = 2, Wednesday = 3, Thursday = 4, Friday = 5, Saturday = 6, Sunday = 7.
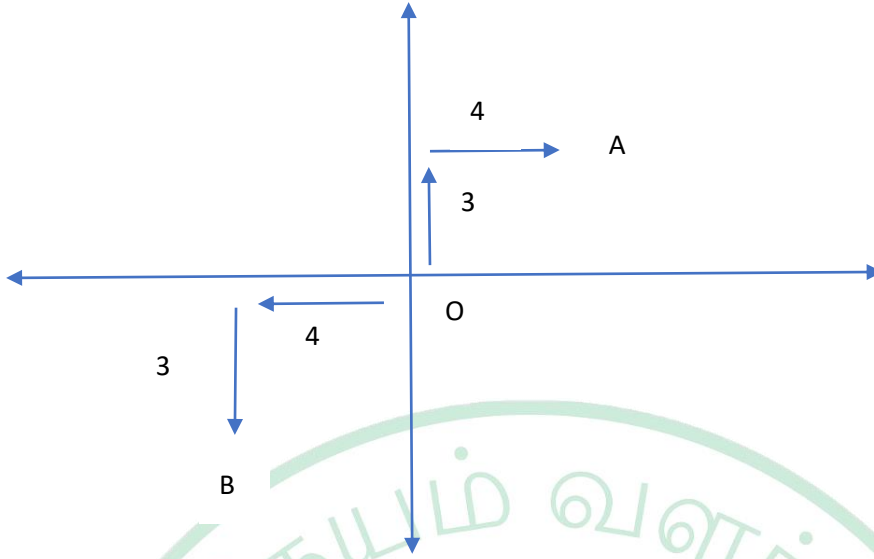   Each day of the week is repeated after 7 days.
    After 42 days = 43rd day
    So, 43rd day is Monday.

27. **X and Y starts working from the same point. X goes north and covers 3 km then turns right and covers 4 km. Y goes west and covers 4 km then turns left and covers 3 km. How far apart are they from each other?**
    a. 9km
    b. 10 km
    c. 16 km
    d. 25 km
    Ans: b

$OA^2 = 4^2 + 3^2$

$OA^2 = 16 + 9$

$OA = 5$

$OB^2 = 4^2 + 3^2$

$OB^2 = 16 + 9$
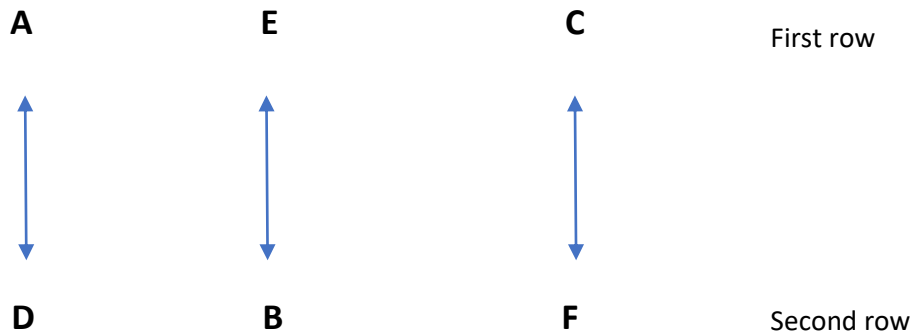
$OB = 5$

$AB = OA + OB$

$AB = 5 + 5$

$AB = 10$ KM.

28. Six persons, A B, C, D, E, F are sitting in two rows 3 in each. D is diagonally opposite to C.B is opposite to E. E sitting between A and C. F is to the right of B. Which of the following are sitting diagonally opposite to each, other than D and C?

a. B, C

b. A, F

c. E, B

d. A, B

Ans: b

| A | E | C | First row |

| D | B | F | Second row |

29.If 5(+)3 = 98 and 6(+)2 = 208, then the value of 7(+)1 is?

a. 342

b. 416

c. 432

d. 468

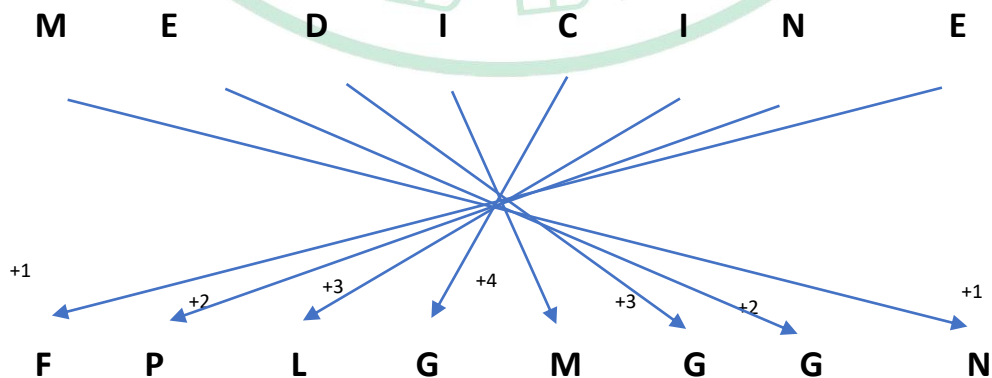**Ans: a**

(+) changed to (-)

$5^3 - 3^3 = 125 - 27 = 98$
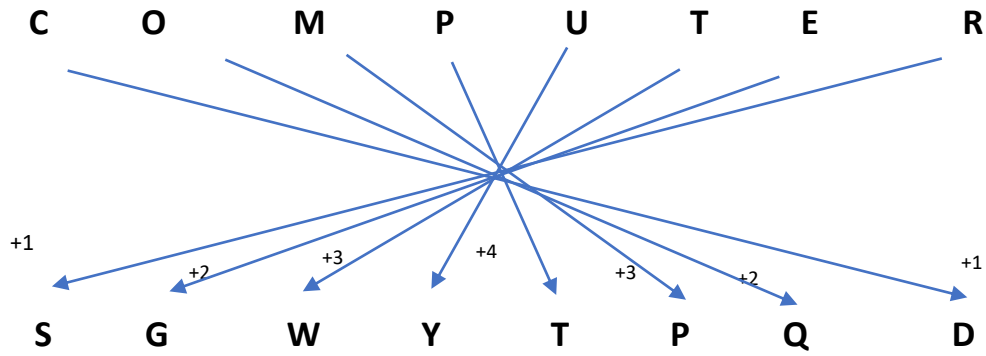
$6^3 - 2^3 = 216 - 8 = 208$

$7^3 - 1^3 = 343 - 1 = 342.$

30.In a certain code MEDICINE is coded as FPLGMGGN, then how is COMPUTER written in the same code?

a. SGWYTPQD

b. SWGYTQPD

c. SGWTYQPD

d. SGYWTPQD

Ans: a

M   E   D   I   C   I   N   E

+1   +2   +3   +4   +3   +2   +1

F   P   L   G   M   G   G   N

C	O	M	P	U	T	E	R

+1   +2   +3   +4   +3   +2   +1

S	G	W	Y	T	P	Q	D

31. Find the next two terms.

$$\frac{1}{2}, \frac{3}{5}, \frac{5}{10}, \frac{7}{17}, ?, ?$$

a. $\frac{9}{26}, \frac{11}{36}$

b. $\frac{9}{26}, \frac{11}{37}$

c. $\frac{9}{28}, \frac{11}{36}$

d. $\frac{9}{28}, \frac{11}{37}$

Ans: b

Numerator = +2

$$\frac{1}{2}, \frac{3}{5}, \frac{5}{10}, \frac{7}{17}, \frac{9}{}, \frac{11}{}$$

Denominator = Denominator of previous term + numerator of same term.

$$\frac{1}{2}, \frac{3}{5}, \frac{5}{10}, \frac{7}{17}, \frac{9}{26}, \frac{11}{37}$$

32. 5 students and their teacher are sitting in a circular table at an equal distance. Read the following instruction and answer the question.
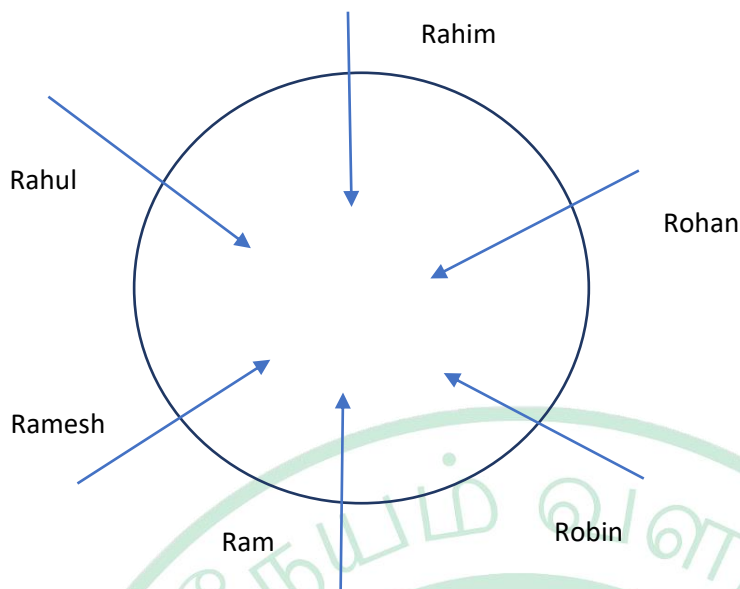
(1) Ram is sitting opposite to Rahim and at two places right of Rahul.

(2) Robin is exactly opposite to Rahul and immediate left to Rohan.

(3) Ramesh, their teacher is also sitting at the table.

Ram sitting to the?

a. Left of Ramesh.

b. Right of Robin.

c. Left of Robin.
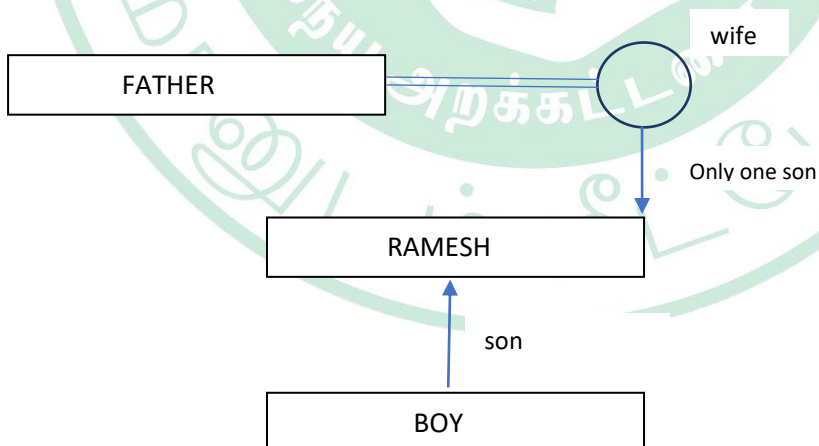
d. Right of Rahim.

Ans: c

Ram is sitting to the left of Robin.

33. **Pointing to a boy Ramesh said, "he's the only son of son of my father's wife". The relationship of Ramesh to the boy is,**
    a. Grandfather
    b. Uncle
    c. Father
    d. Great grandfather.
    Ans: c

Relationship of Ramesh to the boy is father.

34. **Two signals are to be interchanged in the given relation to get the correct answer. The relation is, 5 + 3 X 8 –12 ÷4 = 3**

    a. - and +

    b. X and ÷

    c. ÷ and -

    d. None.

    Ans: b

    Option b – interchange ÷ and -.

    5 + 3 X (8/12) - 4 = 3

    5 + 3 X (2/3) - 4 = 3

    5 + 2 – 4 = 3

    7 – 4 = 3

    3 = 3.

35. **Find the missing letters in the series.**

    a b _ _ b a a _ _ a b _

    a. aaaba

    b. aabaa

    c. aabab

    d. ababa

    Ans: b

    a b a/ a b a/ a b a/ a b a

36. **In a certain code language 'dom pul ta' means 'bring not food'. 'pul tir sop' means 'food is good' and 'tak da sop' means 'good bright boy'. Which of the following means food in that language?**

    a. dom

    b. pul

    c. tir

    d. sop

    Ans: b

    dom pul ta => bring not food

    pul tir sop => good bright boy

    Pul = food

37. **Find the wrong number in the number series.**

    445, 221, 109, 46, 25, 11, 4.

    a. 109

    b. 221

    c. 46

    d. 25

    Ans: c

    (Number – 3) ÷ 2

    445-3 = 442

    442 ÷ 2 = 221

    221-3 = 218

    218 ÷ 2 = 109

    109 – 3 = 106

    106 ÷ 2 = 53

    53 –3 = 50

    50 ÷ 2 = 25

    25 – 3 = 22

    22 ÷ 2 = 11

38. **There are five houses A, B, C, D and E in a row. A is right side of C and left side of E. E is left side of B and B is left side of D. which house is in the middle?**

    a. A

    b. B

    c. E

    d. D

    Ans: c

    　C　A　**E**　B　D

    E house in the middle.

39. **Shalini is facing west. She turns in anticlockwise direction by 45°, then 180° in the clockwise direction which direction is she facing now?**
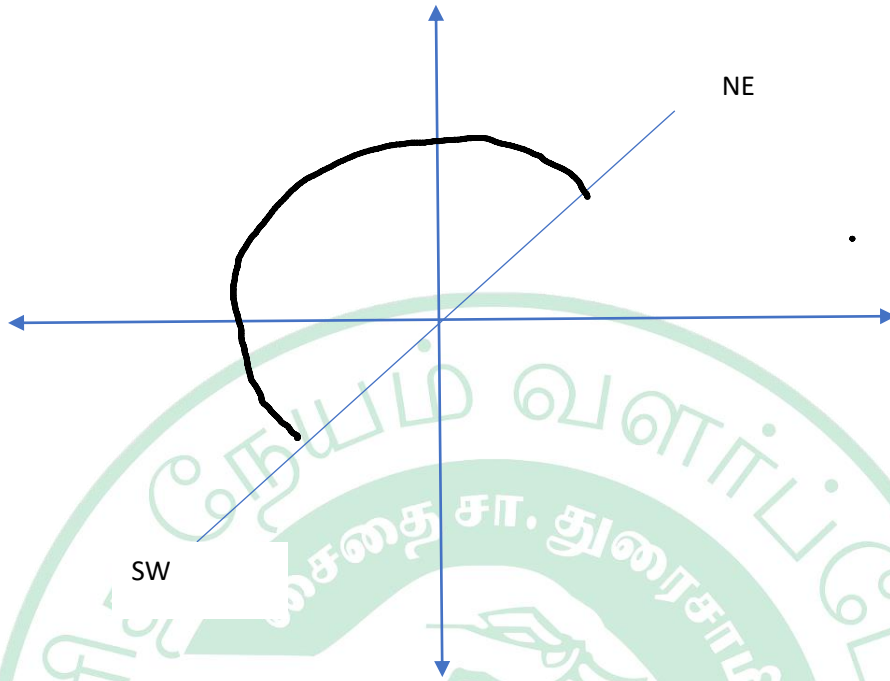
    A. Northwest

    B. Northeast

    C. South-west.

D. Southeast

Ans: b

40. **Find the missing numbers in the series.**

   m _ _ p n o _ _ o p m n

   A. nopm

   B. nomp

   C. nomm

   D. nomn

   Ans: a

   m n o p/ n o p m/ o p m n

41. **In a class among students passed in half-yearly examination, Karthik ranks 14th from the top and 30th from the bottom. In that exam 15 students got field. How many students wrote the examination?**

   A. 57

   B. 58.

   C. 59.

   D. 60.

   Ans: b

   Total passed students = (from the top rank) + (from the bottom rank) -1

   = 14 + 30 –1

   = 43

Total failed students = 15

Total students = total passed students + total failed students

= 43+15

= 58

42. **If a=1, b=2, ….., z= 26, then OWL is equal to the value of**

    a. FISH

    b. PIGEON

    c. SNAKE

    d. BIRD

    Ans: c

    OWL = 15 + 23 + 12 = 50
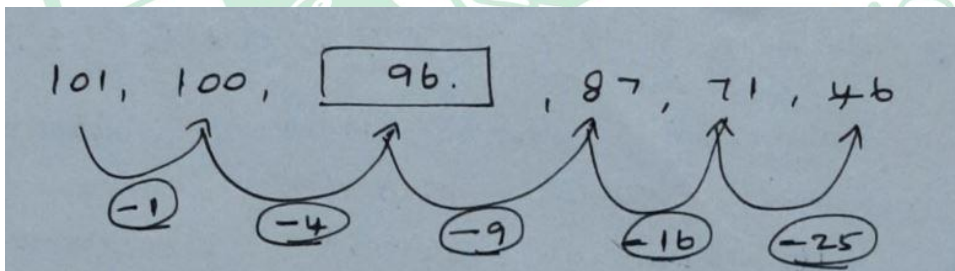
    SNAKE = 19 + 14 + 1 + 11 + 5 = 50

43. **In the following series replace the (?) With the suitable option.**

    101, 100, ?, 87, 71, 46.

    a. 99

    b. 97

    c. 98

    d. 96

    Ans: d

44. **P 4 + S r 9 B # A 2 ? 7 C > Z % 6 d * Q @1**

    If the first half of the series is written in reverse order, then which element will be 16 from the right end?

    a. %

    b. +

    c. r

    d. p

    Ans: c

First eleven numbers are reverse order.

? 2 A #B 9 r S + 4 P 7 C > Z % 6 d * Q @1

16th = r

45. **Choose and substitute the correct set of signs like +, X, =, -, ÷ in place of * sequentially, selecting from the given alternative is to make the question meaningful.**

40 * 30 * 50 * 20

a. -, +, =

b. +, -, =

c. X, ÷, =

d. +, =, -

Ans: b

40 * 30 * 50 * 20

40 + 30 - 50 = 20

70-50 = 20

20 = 20.

46. **Find the wrong number in the series.**

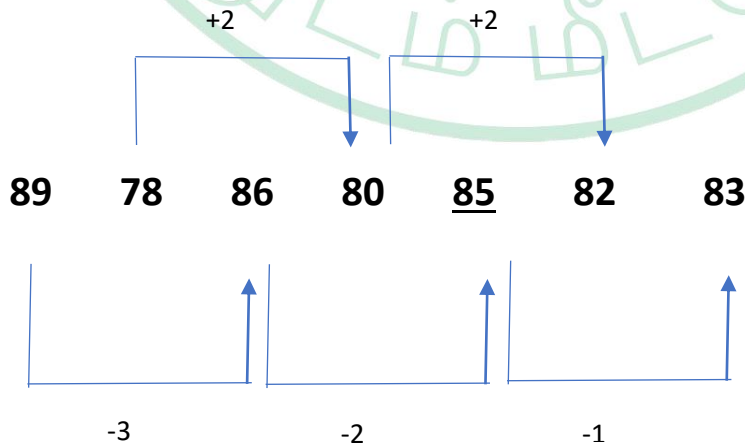**89, 78, 86, 80, 85, 82, 83.**
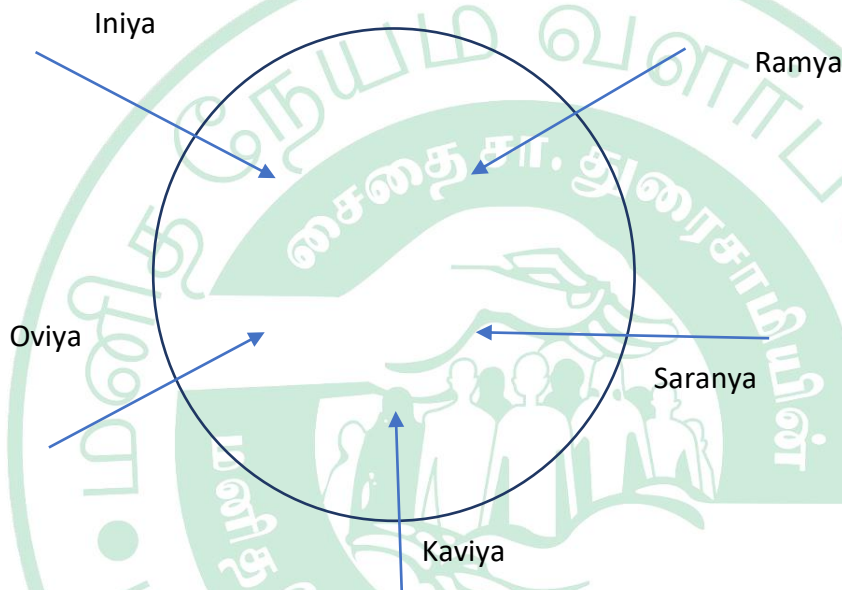
a. 85

b. 82

c. 80

d. 86

Ans: a

Option a is wrong.

47. **Ramya, Oviya, Saranya, Kavya and Iniya sit in a circle. Ramya is between iniya and Saranya. Oviya is immediate left to Kavya. Ramya is 3rd to the right of Oviya. Kavya is left to Saranya. Who is between Oviya and Saranya?**
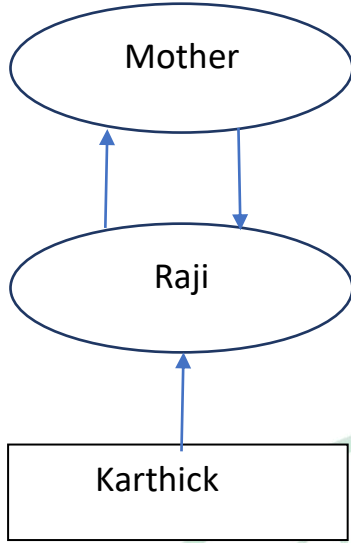   a. Iniya
    b. Ramya
    c. Kaviya
    d. Saranya
    Ans: b

48. **Pointing to Raji, Karthik said "her mother's only daughter is my mother'. How is Karthik related to Raji?**
    a. Brother
    b. son
    c. Nephew
    d. Cousin.
    Ans: b

49. Ravi is 7 ranks ahead of Sundar In a class of 40. If Sundar's rank is 17 from the last, what is Ravi's rank from the first?
A. 16.
B. 17.
C. 18.
D. 24.
Ans: b
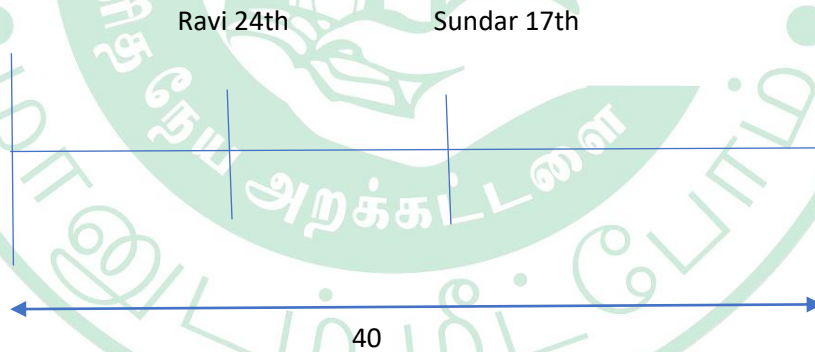
Ravi from last rank = 24

Ravi rank from start = Total students - rank from last + 1

= 40-24+1

= 17

50. **Find the odd man out 385, 462, 572, 396, 427, 671, 264.**

a. 462

b. 427

c. 671

d. 396

Ans: b

In each number except 427, the middle digit is the sum of other 2.

Middle number = 1st number + 3rd number

8 = 5+3

6 =4+2

7 =5+2

9 =3+6

2 = 4+7

7 = 6+1

6 = 2+4

51. **Find the next term**

3,3,4.5,9,22.5,_____

a) 66.5 b) 67 c) 67.5 d) 57.5

Ans: C

Explanation:

3 x 1 = 3

3 x 1.5 = 4.5

4.5 x 2 = 9

9 x 2.5 = 22.5

22.5   x 3 = 67.5

52.12-12-1996, 6-1-1997, 31-1-1997, 25-2-1997, _____ .

The next term of series is

a) 21-3-1997 b) 22-3-1997

c) 23-3-1997 d) 24-3-1997

Ans : B

Explanation :

12-12-1996 + 25 days = 6-1-1997

6-1-1997 + 25 days = 31-1-1997

31-1-1997 + 25 days = 25-2-1997

25-2-1997   5 days = 22-3-1997

53.Find the missing term

7,8,16,43,107,_____, 448

b) 232 b) 236 c) 132 d) 152

Ans : A

Explanation:

$7 + 1^3 = 8$

$8 + 2^3 = 16$

$16 + 3^3 = 43$

$43 + 4^3 = 107$

   107        $5^3 = 107 + 125 = 232$

54. **Find the missing term**

   5 ¾ , 6 4/7, 7 2/3, _____ , 11 ½, 15 1/3

   A. 10 1/3

   B. 9 1/3

   C. 9 1/5

   D. 15 1/5

   Ans: C

   Explanation :

   5 ¾ = 23/4

   6 4/7 = 46/7

   7 2/3 = 23/3

   x

   11 ½ = 23/2

   15 1/3 = 46 /3

   Numerator – 23,46,23,46,23,46

   Denominator – 4, 7, 3,_ , 2, 3

   Denominator alternate terms 4-1=3-1= 2

   7-2 =5 -2 = 3

   So 46/5 = 9 1/5

55. **Find the next term in the series**

   35,79,1113,1517,_____

   a) 1923 b) 1920 c) 1937 d) 1921

   Ans: D

Explanation :

(3,5) (7,9) (11,13) (15, 17), (19,21) => series of odd numbers

56. Find the next term

3,10,29,88,263,_____

a) 792 b) 790 c) 693 d) 493

Ans: B

Explanation:

3 X 3 +1 = 10

10 x 3 -1 = 29

29 x 3 + 1 = 88

88 x 3 – 1 = 263

263 x 3 +1 = 790

57. Find the next term

8,16,19,95,102,1122, _____

a) 1137 b) 1135 c) 7073 d) 1037

Ans: B

Explanation:

8 x 2 = 16

16 + 3 = 19

19 x 5 = 95

95 + 7 = 102

102 x 11 = 1122

1122 + 13 = 1135 (2,3,5,7,11,13 are consecutive prime numbers)

58. Find the next term

6,14,23,87,112, _____

a) 228 b) 328 c) 418 d) 216

Ans: B

Explanation :

$6 + 2^3 = 14$

$14 + 3^2 = 23$

$23 + 4^3 = 87$

$87 + 5^2 = 112$

$112 + 6^3 = 112 + 216 = 328$

59. Find the next term in the series

7,14,42,84,252,_____

a) 504 b) 500 c) 756 d) 750

Ans : A

Explanation :

$7 \times 2 = 14$

$14 \times 3 = 42$

$42 \times 2 = 84$

$84 \times 3 = 252$

$252 \times 2 = 504$

60. Find the value of X

25, 29, 20, 36, 11, x

a) 47 b) 37 c) 30 d) 74

Ans: A

Explanation :

$25 + 2^2 = 29$

$29 - 3^2 = 20$

$20 + 4^2 = 36$

$36 - 5^2 = 11$

$11 + 6^2 = 47$

61. **If the English alphabet is written in backward order, then which letter**

Will be 5th to the left of letter M?

a. G b) H c) S d) R

Ans: D

Explanation :

From backward left implies right from actual series.

M + 5 = R

62. **If the letters of the word 'DOLPHIN' are arranged as they appear in the English**

alphabetical order, which of the following letters will be the 5th From left?

a. O   b) D   c) I   d) None of these

Ans: D

Explanation :

DOLPHIN in alphabetical order

DHILNOP

N is 5 th from left .

63. **How many M's occur in the following series such that it is preceded by W and followed by V?**

XUVMRSTMWNVMWOPMWUVMWACWMVHPNVWMWTUN

a) 3   b) 2   c) 1   d) 5

Ans: C

Explanation :

Only one time M occurs before V and after W

64. **Find the next term in the series.**

KPD, LOE, MNF, NMG, ____

a) OLH   b) MLH   c) MNH   d) NLH

Ans : A

Explanation:

K +1 = L, L+1 = M, N+1= O

O-1 = P => M-1 = L

D +1 = E => G +1 = H

"OLH"

65. **Find the next term in the series**

P, R, V, D, T, _

a) R   b) A   c) Z   d) Y

Ans: C

EXPLANATION:

P +2 = R

R + 4 = V

V + 8 = D

D + 16 = T

T + 32 = T + 6 = Z

66. Find the odd one out

9 , 16, 25, 125 , 169, 196, 225

a. 36   b) 196   c) 169   d) 125

Ans: D

Explanation :

Except 125 all other numbers are perfect square numbers.

67.Find the Odd man out:

a. ABC   b) BCD   c) CDE   d) DEF

Ans: B

Explanation :

Except in BCD all other options have a vowel in it.

68.Find the one which does not belong to the group

211, 725, 101, 643, 990, 615

a. 101

b. 643

c. 615

d. 725

Ans: B

Explanation:

Sum of last two digits = First Digit

2+5 = 7

69. Three of the following four numbers are alike in a certain way. Odd one is different. Pick the number that is different from the rest.

   a. 9630

   b. 131074

   c. 151295

   d. 741

   Ans: C

   Explanation:

   9-3 = 6 -3 = 3 – 3 = 0

   15 – 3 =12 – 3 = 9 -3≠ 5

70. In the following questions select the option that is related to the third term in the same way as the second term is related to the first term

   8. 425 : 13 : : 257 : ?

   a. 17

   b. 19

   c. 21

   d. 15

   Ans: A

   Explanation:

   4 x 2 + 5 = 13

   2   x 5 +7 = 17

71. Complete the code.   CD : GA : : PQ : ?

A) SM   B) SN   C) US   D) TN

Solution :

	Likewise
C --- G	P --- T
D --- A	Q --- N

72. Which of the following would best complete the relation given below?

ZYX : PQR : : XYZ : ?

A) PRQ   B) QRP   C) RQP   D) YZX

Solutions :

```
    Z   Y   X                 X   Y   Z
    |   |   |                 |   |   |
    P   Q   R                 R   Q   P
```

73. Find the missing value.

19 : 361 : : _ : _

a. 13, 169   B) 15, 235   C) 9, 27   D) 12, 154

Solution :

$19^2 = 361$

$13^2 = 169$

74. Pugazh is in fourteenth from the right end in a row of 40boys. What is his position from the left end ?

a. 27   B) 28   C) 29   D) 26

Solution :

Left = Total – Right + 1

= 40 – 14 + 1 = 27

75. In a row of students Sasi is in 13th position from the left end. Raja is in 12th position from the right end and 18th from left end. How many students of Sasi's right ?

a. 28   B) 26   C) 29   D) 16

Solution:

Total = 18 + 12 – 1 = 29

Sasi's right = 29 – 13 = 16

76. In a class of 80 students, Arivu is 13th from right and Anbu is 18th from left. How many students are in between Arivu and Anbu?

    a. 48   B) 47   C) 49   D) 50

Solution:

Students in between = 80 – (18 + 13) = 49

77. A is 13th from top, B is 18th from bottom, when A and B change their position then A becomes 21st from top. What is the new position of B from bottom?

    a. 25   B) 26   C) 24   D) 27

Solution: 21-13 = 8
              18 + 8 = 26

78. In a row of students Ram is 17th from top. Ravi is 32nd from bottom. Interchanging their position Ram becomes 37th from top. What is the total no. of students?

    a. 66   B) 65   C) 67   D) 68

Solution:

Total no. of students = 37 + 32 – 1= 68

79. In a class of 40 students, Guna is 21st from right and Prabha is 23rd from left. How many students are in between them in the row?

    a. 1   B) 2   C) 3   D) 4
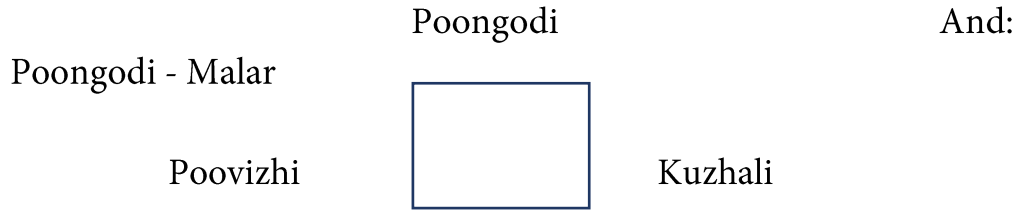
Solution:

23 + 21 - 40 - 2 = 2

80. Malar, Poovizhi, Kuzhali and Poongodi sitting in a square table. Malar is at right to Poovizhi, Kuzhali is at left to Poongodi. Who is sitting in front of each other?

    a. Malar – Poovizhi
    b. Poovizhi – Poongodi

   c. Poongodi – Malar

   d. Poongodi – Poovizhi

Poongodi   And:

Poongodi - Malar

Poovizhi   Kuzhali

        Malar

81. A, P, R, S, X and Z are sitting in a row S and Z are in the centre, A and P are at the ends. R is sitting on the left of A, then who is sitting at the right of P?

   a. S   B) Z   C) P   D) X

Solution: From given data

Right   Left

      A   R   S   Z   X   P

Ans: X

82. Ravi is taller than Ram. Ram is shorter than Raja. Nisha is taller than Hari but shorter than Ravi. Who is the tallest among them ?

   a. Raja   B) Ram   C) Ravi   D) Hari

Solution: From given data

         Ravi > Raja > Ram > Nisha > Hari

83. Which of the following response is correct ?

    25 _ 2 _ 6 = 4 _ 11 _ 0

    a. x, -, x, +   B) +,-, x, +   C) x, +, x, - D) x, +, +, x

Solution:

        25 x 2 – 6 = 4 x 11 + 0

84.If P stands for ' - ' , Q stands for ' x ' , R stands for ' ÷ ' , S stands for ' + ' , then what is the value of the given equation. 14Q3P12S4R2

a. 17   B) 32   C) 28   D) 6

Solution:

$$14 \times 3 - 12 + 4 \div 2 = 42 - 12 + 2 = 32$$

85.If 8 + 8 = 72, 5 + 5 = 30 and 7 + 7 = 56. Then what is 6 + 6 ?

a. 42   B) 12   C) 36   D) 48

Solution :

$$8 + 8 = 72 \qquad\qquad 5 + 5 = 30$$
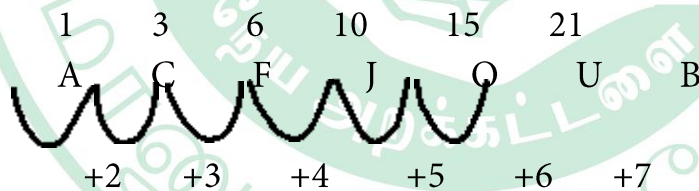
$$8 \times 9 = 72 \qquad\qquad 5 \times 6 = 30$$

Hence $6 \times 7 = 42$

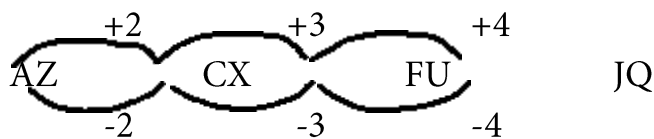**86.A, C, F, J, O, ?, B. Find the missing alphabet.**

a. I   B) H   C) U   D) P

Solution :

1	3	6	10	15	21	
A	C	F	J	O	U	B

+2   +3   +4   +5   +6   +7

87.AZ, CX, FU, ?

a. JQ   B) KR   C) IR   D) IV

Solution:

+2   +3   +4

AZ   CX   FU   JQ

-2   -3   -4

88.a – b – abb – ab – a – bba

a. bbaab   B) babba   C) baaba   D) aabba

Solution:

abba / abba / abba / abba

89.3, 7, 23, 95, ?

a. 479   B) 625   C) 225   D) 169

Solution:

3   7   23   95   479

X2+1   x3+2   x4+3   x5+4

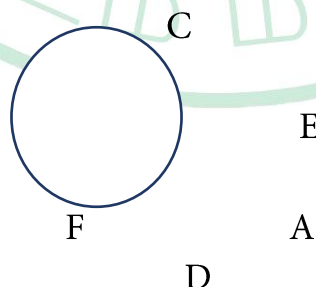**90.If AT = 20, BAT = 40, then CAT will be ?**

a. 20   B) 80   C) 60   D) 160

Solution :

AT = 20 ; BAT = 2 x 20 = 40 ;
CAT = 3 x 20 = 60

91.6 persons A, B, C, D, E, F standing in a circular boundary facing towards center. B is in between F and C, A is between E and D, F is to the left of D. Who is standing between A and F?

A)C   B) B   C) D   D) A

Solution:

C

E   Ans: option c

F   A

D

92.4 : 13 : : 64 : ?. Find the missing number.

a. 168   B) 198   C) 208   D) 228

Solution:

$$4 / 13 = 64 / X$$
$$X = 208$$

93. **S is taller than R but not as tall as Q. R is taller than P. Who among P, Q, R, S is tallest ?**

       a. P   B) Q   C) R   D) S

      Solution: From given data
           $Q > S > R > P$
        Q is the tallest person

94. **Find the missing number.**
       ? : 45 : : 35 : 63

       a. 53   B) 25   C) 35   D) 55

      Solution:
        $35 / 63 = x / 45$
         $5/9 = x / 45$
          $x = 25$

95. **A is twice as old as B, two years ago. If the difference in their ages is 2 years. Find A's age ?**

       a. 4   B) 2   C) 6   D) 12

      Solution :
        A   B
        2x   x

        $2x - x = 2$ years
          $x = 2$
     A's age now $= 2x + 2$
         $= 2 \times 2 + 2 = 6$

96. What is X in the sequence

   16,144,36,100,64, x, 100, 36,144,16

   A. 49

   B. 64

   C. 125

   D. 24

   Ans: B

   Explanation :

   $4^2, 12^2, 6^2, 10^2, 8^2, 8^2, 10^2, 6^2, 12^2, 4^2$

   $X = 8^2 = 64$

97. A cube has all its faces painted with different colours, cut into 125 pieces of equal sizes. Now find the number of smaller cubes with atleast two faces painted.

   A. 36

   B. 44

   C. 28

   D. None of the above

   Ans: B

   Explanation :

   Cubes with Atleast 2 faces painted = Cubes with 2 faces painted + cubes with three faces painted.

   Cubes with 2 faces painted = (n – 2) x 12

   Where n = $\sqrt[3]{(125)}$ = 5

   Cubes with 2 faces painted = (5-2)x 12 = 3 x 12 = 36

   Cubes with three faces painted = 8

   Required Answer= 36 + 8 = 44

98. m_nm_n_an_a_ma_

   A. aamnan

   B. ammanm

   C. aammnn

   D. amammn

Ans: C

Explanation :

It is given as man/man/man/man/man..

So missed numbers are aammnn

99. **B is the husband of P. Q is the only grandson of E, who is wife of D and mother-in-law of P. How is B related to D?**

   A) nephew

   B) cousin

   C) son-in-law

   D) son

   Ans : D

   Explanation:

   D is father in law of P.

   So B is son of D

100. **What can be the ratio of men and women in a class of 60 members?**

   (A)1:2   (B) 2:5   (C) 5:3   (D) 5:4

   Ans: A

   Explanation :

   From options :

   A=> 1 + 2 = 3

   60 is divisible by 3 so 1: 2 is answer.