
MATHEMATICAL REASONING

1 Which one of the following represents the place value chart for **Two lakh two hundred twenty two**?

[A] Lakh period - 2, Thousand period – 00, Ones period 222

[B] Lakh period - 2, Thousand period – 22, Ones period 222

[C] Lakh period - 2, Thousand period – 02, Ones period 222

[D] Lakh period - 2, Thousand period – 02, Ones period 22

2 The roman numeral for 99

[A] IC

[B] XCIX

[C] Both A & B

[D] None of these

3 The date of 100th day of any year that is a leap year is

[A] April 10

[B] April 9

[C] April 7

[D] April 11

4 Which one of the number sentence is true?

[A] $15 \times 3 = (10 \times 3) \div (5 \times 3)$

[B] $15 \times 3 = (10 \times 3) \times (5 \times 3)$

[C] $15 \times 3 = (10 \times 3) - (5 \times 3)$

[D] $15 \times 3 = (10 \times 3) + (5 \times 3)$

5 105, 112, 119, 126....., are

[A] Multiples of 5

[B] Multiples of 3

[C] Multiples of 2

[D] multiples of 7

6 The annual fee of Riya is ₹ 5372 and that of Aruna is ₹ 4352. What is their total fees altogether?

[A] ₹ 9734

[B] ₹ 9724

[C] ₹ 9624

[D] ₹ 9825

7 Riya's family consumes 1000 kg wheat in a year where as Aruna's family consumes 959 kg of wheat in a year. How much more kg of wheat does Riya's family consume?

[A] 39 kg

[B] 40 kg

[C] 41 kg

[D] 45 kg

8 A cricket stadium has 456 rows with 200 seats in each row. How many seats are there in the stadium?

[A] 656

[B] 91000

[C] 81200

[D] 91200

9 To find the number that comes after 219, in the series given below, we should

99, 159, 219, _____

[A] Add 60 to 219

[B] Subtract 60 from 219

[C] Add 69 to 219

[D] Add 50 to 219

10 Arun arranged four numbers in descending order in four boxes as given below. But he forgot to write number in one of the boxes. Identify the number in the blank box from the options given below.

8723

6521

3278

[A] 6532

[B] 7461

[C] 3728

[D] 3215

11 The difference between two numbers is 45398. If the greater of the two numbers is 84520, then sum of the two numbers is

[A] 39122

[B] 123642

[C] 129918

[D] 391200

12 Carefully observe the square given below. When the square is completed by putting number in each small square, the sum of numbers in each row, column and diagonally is 9. What is the sum of numbers in the shaded squares?

[A] 7

[B] 8

[C] 10

[D] 15

	2	3
2		

13 Seven hundredth is equal to

[A] 0.07

[B] 0.007

[C] 0.700

[D] 0.7100

14 One decagram is equal to

[A] 10 gram

[B] 100 gram

[C] 0.1 gram

[D] 0.01 gram

15 A farmer picked 823 tomatoes from his field and divided them equally into 36 bunches. How many tomatoes are in each bunch? Is there any tomato left out from the packing?

[A] 22 tomatoes in each bunch and 31 left out

[B] 23 tomatoes in each bunch and 32 left out

[C] 21 tomatoes in each bunch and 32 left out

[D] 31 tomatoes in each bunch and 22 left out

16 Which of the following numbers has the least number of factors?

[A] 66

[B] 106

[C] 78

[D] 110

17 Read the following statements carefully and choose the correct option

(i) 63, 77, and 81 are all multiples of 9

(ii) 49, 63, and 88 are all multiples of 7

(iii) 2, 5 and 8 are factors of 40

(iv) 3, 6 and 13 are factors of 234

[A] Statements (ii) & (iv) are true and (i) & (iii) are false

[B] Statements (ii) & (iv) are false and (i) & (iii) are true

[C] Statements (i) & (ii) are true and (iii) & (iv) are false

[D] Statements (iii) & (iv) are true and (i) & (ii) are false

18 Aruna has 12 orange juice cans and 45 mango juice cans. She wants to distribute them among children equally so that no juice can is left. What will be the greatest number of children among whom Aruna can distribute the juice cans?

[A] 4

[B] 5

[C] 3

[D] 9

19 The teacher gave 12 books a group of children and asked them to arrange them in different groups under some conditions like

(i) Each group should have the same number of books

(ii) No books should be left over

(iii) Each grouping should be different from the other

This activity will help the children to understand the concept of

[A] Addition

[B] Subtraction

[C] Multiples and factors

[D] Measurements

20 Four-sevenths of the 70 crayons Aruna and Riya using were broken. Hominy crayons were broken?

[A] 10

[B] 40

[C] 48

[D] 66

21 The perimeter of a triangle is 45 cm. If its two sides are 12 cm and 18 cm, then the measure of third side is

[A] 15 cm

[B] 16 cm

[C] 13 cm

[D] 12 cm

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- 22 Points A, B, C and D all of which lie on a straight line, are marked in the figure below. The distance between points A and C is 10 m, between B and D is 15 m. and Between A and D is 22 m. What is the distance between points B and C?



- [A] 1m [B] 2 m
[C] 3 m [D] 4 m

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- 23 How many one-eighths will make 1 whole?

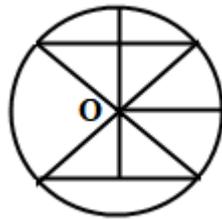
- [A] 4 [B] 6
[C] 8 [D] 16

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- 24 Sameer works 8 hours a day. He earns ₹ 75 per hour. If he works for two weeks, how much does he earn?

- [A] ₹ 7200 [B] ₹ 8400
[C] ₹ 9450 [D] ₹ 4200

-
- 25 How many radii you can count in following circle with centre O?

- [A] 2
[B] 8
[C] 4
[D] 6



26 $\frac{5}{10} + \frac{3}{100} + \frac{8}{1000} =$

- [A] 5380 [B] 0.0538
[C] 0.538 [D] 5.038

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- 27 Using the following digits, write down the smallest and largest number to two decimal places without putting 0 in tens or tenths place

0, 2, 3, 4

- [A] Largest: 43.02; Smallest: 02.34 [B] Largest: 43.02; Smallest: 20.34
[C] Largest: 43.20; Smallest: 02.34 [D] Largest: 04.23; Smallest: 02.34

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- 28 Train leaving platform 1 at 14:25 hours will arrive next station at 16:07 hours. How long will the train take?

- [A] 1 hour 42 minutes [B] 2 hours 35 minutes
[C] 2 hours 12 minutes [D] 1 hour 22 minute

29 Aruna bought 50 litre container of oil. She used 44 litre 300 ml. How much oil is left in the container?

[A] 6 litre 300 ml

[B] 6 litre 700 ml

[C] 5 litre 300 ml

[D] 5 litre 700 ml

Q No: 30 & 31: Read the following passage and answer the questions 31 & 31

In ancient times, there was a king named Vikramaditya who was very kind and helpful for poor people of his kingdom. He decided to remove poverty from his kingdom. He gave an order to his ministers that find poor people in his kingdom. They found 1000 poor people in the kingdom. So the king appointed Ramsingh, Vikrant and Jaysingh from his ministers to come up with ideas of removing poverty. Vikrant suggested that king should distribute ₹ 25 as one time allowance and ₹ 5 per month for 11 months. Jaysingh suggested that king should distribute rice and wheat worth ₹ 50 and also give ₹ 20 every 6 months for 2 years. Ramsingh suggested that king should distribute ₹ 75 to each person in the kingdom as a one-time allowance

30 What will be the total expenses of king Vikramaditya if he decides to go with advice of Jaysingh?

[A] ₹ 70000

[B] ₹ 130000

[C] ₹ 100000

[D] ₹ 140000

31 How much amount per person will be distributed by king if he goes with advice of Vikrant?

[A] ₹ 25

[B] ₹ 55

[C] ₹ 80

[D] ₹ 100

32 There are MMCDXX people in a city. Out of them, DLV are children. How many adults are there in the city?

[A] MDCCCLXV

[B] MDCCLXV

[C] MDCCCXV

[D] MDCCCLV

33 Arun walks around a park of sides 68 m, 72 m, 116m and 94 m. He walks 5 rounds around the park every day. How much distance does he cover in a day?

[A] 1 km 750 m

[B] 1 km 740 m

[C] 0.700 km

[D] 3 km 500 m

34 Anju has 8 red balloons, 4 blue balloons and 3 green balloons. What fraction of balloons are green balloons?

[A] $\frac{8}{15}$

[B] $\frac{4}{15}$

[C] $\frac{3}{15}$

[D] $\frac{5}{15}$

35 How many months in a year have 31 days?

[A] 3

[B] 4

[C] 6

[D] 8

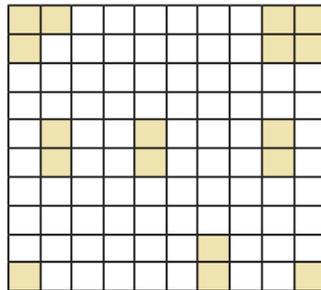
36 In the figure given below, the shaded portion represents

[A] 0.0017

[B] 0.017

[C] 0.17

[D] 1.7



37 Grandpa had ₹ 144000 in his bank account. He gave half of it to his wife. From the remaining, he gave one quarter to his son. He gave half of the remaining amount to his grandson. How much money did grandson get?

[A] ₹ 27000

[B] ₹ 54000

[C] ₹ 72000

[D] ₹ 18000

38 Rajani bought 6 items at the mall. No item cost more than ₹ 5 or less than ₹ 2. Which of the following could be the total cost of the 6 items Rajani bought?

[A] ₹ 31

[B] ₹ 7

[C] ₹ 10

[D] ₹ 22

39 Mary wants to buy a toy for ₹ 55. She has ₹ 20 saved in the kiddy bank. If she saves ₹ 5 every week, how many weeks will it take Mary to save enough money to buy the toy?

[A] 4

[B] 5

[C] 7

[D] 35

40 Which of the following describes the rule for this pattern?

15, 18, 17, 20, 19, 22, 21

[A] Add 3, add 1

[B] Add 3, subtract 1

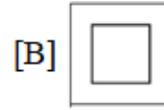
[C] Add 1, subtract 3

[D] Subtract 3, add 1

LOGICAL REASONING

41 Replace the question mark

■	△	●
△	●	□
●	□	?



42 Mamta's rank is 21st from the top and 15th from the bottom in the class. How many students are in class?

[A] 29

[B] 27

[C] 35

[D] 36

43 Choose the alternative which is closely resembles the water image of the given combination/figure.

ADVANCE

[A] ADVANCE

[B] VDAVNA

[C] AVNAD

[D] NONE

44 Select the related word from the give alternatives to replace Question mark (?)

AUTHOR : PEN :: DOCTOR : ?

[A] HOSPITAL

[B] STETHOSCOPE

[C] WARD

[D] DISPENSARY

45 If the letters in **MUFEEEDHA** are coded as **37544269** and **SARATH** are coded as **198906**, how can **DHARUSH** are coded?

[A] 2698716

[B] 2697816

[C] 2698761

[D] 2698971

46 Replace question mark?

AB	ZY	BC	YX	CD	XW	DE	?
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[A] WV

[B] YW

[C] VW

[D] UV

47 Find the number of triangles in the given figure?



[A] 5

[B] 8

[C] 9

[D] 10

48 How many 4's are there preceded by 7 but not followed by 3?

5 9 3 2 1 7 4 2 6 9 7 4 6 1 3 2 8 7 4 1 3 8 3 2 5 6 7 4 3 9 5 8 2 0 1 8 7 4 6 3

[A] Three

[B] Four

[C] Five

[D] Six

49 From the given alternative of words, select the word which cannot be formed using the letters of the word given in bold:

Word: **DIRECTIONS**

[A] CONE

[B] DRONE

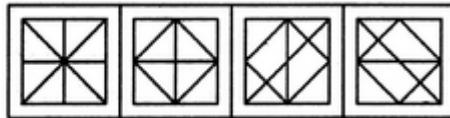
[C] STOP

[D] IRON

50 Find out the alternative figure which contains figure (X) as its part.



(X)



(1)

(2)

(3)

(4)

[A] 1

[B] 2

[C] 3

[D] 4

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SPACE FOR ROUGH WORK