

1) Which of the following fraction is the smallest?

$$\frac{7}{6}, \frac{7}{9}, \frac{4}{5}, \frac{5}{7}$$

1) $\frac{7}{6}$ 2) $\frac{7}{9}$

3) $\frac{4}{5}$ 4) $\frac{5}{7}$

2) Which of the following fraction is the smallest?

$$\frac{9}{13}, \frac{17}{26}, \frac{28}{29}, \frac{33}{52}$$

1) $\frac{33}{52}$ 2) $\frac{17}{26}$

3) $\frac{9}{13}$ 4) $\frac{28}{29}$

3) The smallest possible three place decimal number is:

- 1) 0.012 2) 0.123
3) 0.111 4) None of these

4) Which is the following fraction is the smallest?

$$\frac{8}{15}, \frac{7}{13}, \frac{11}{13}, \frac{14}{33}$$

1) $\frac{8}{15}$ 2) $\frac{7}{13}$

3) $\frac{11}{13}$ 4) $\frac{14}{33}$

5) Which of the following is the smallest fraction?

$$\frac{8}{25}, \frac{7}{23}, \frac{11}{23}, \frac{14}{53}$$

1) $\frac{8}{25}$ 2) $\frac{7}{23}$

3) $\frac{11}{23}$ 4) $\frac{14}{53}$

6) The smallest number of five digits exactly divisible by 476 is

- 1) 47600 2) 10000
3) 10476 4) 10472

7) The greatest fraction among

$$\frac{2}{3}, \frac{5}{6}, \frac{11}{15} \text{ and } \frac{7}{8} \text{ is}$$

1) $\frac{7}{8}$ 2) $\frac{11}{15}$

3) $\frac{5}{6}$ 4) $\frac{2}{3}$

8) The least number among

$$\frac{4}{9}, \sqrt{\frac{9}{49}}, 0.45 \text{ and } (0.8)^2 \text{ is}$$

- 1) $\frac{4}{9}$ 2) $\sqrt{\frac{9}{49}}$
3) 0.45 4) $(0.8)^2$

9) Which of the following number is the greatest of all?

$$0.9, 0.\bar{9}, 0.0\bar{9}, 0.\overline{09}$$

- 1) 0.9 2) $0.\bar{9}$
3) $0.0\bar{9}$, 4) $0.\overline{09}$

10) The largest among the numbers

$$(0.1)^2, \sqrt{0.0121}, 0.12 \text{ and } \sqrt{0.0004} \text{ is}$$

- 1) $(0.1)^2$ 2) $\sqrt{0.0121}$
3) 0.12 4) $\sqrt{0.0004}$

11) When 335 is added to 5A7, the result is 8B2. 8B2 is divisible by 3. What is the largest possible value of A?

- 1) 8 2) 2
3) 1 4) 4

12) If a number is as much greater than 31 as it is less than 75, then the number is

- 1) 106 2) 44
3) 74 4) 53

13) Sum of three fractions is $2\frac{11}{24}$, on dividing the largest fraction by the smallest fraction. $\frac{7}{6}$ is obtained which is $\frac{1}{3}$ greater than the middle fraction. The smallest fraction is

- 1) $\frac{5}{8}$ 2) $\frac{3}{4}$
3) $\frac{5}{6}$ 4) $\frac{3}{7}$

14) A number when divided by 899 gives a remainder 63. If the same number is divided by 29, the remainder will be :

- 1) 10 2) 5
3) 4 4) 2

❖ A) A six digit number is formed by repeating a three digit number: for example, 256, 256 or 678, 678 etc. Any number of this form is always exactly divisible by :

- 1) 7 only 2) 11 only
3) 13 only 4) 1001

- 15) The smallest number to be added to 1000, so that 45 divides the sum exactly, is :
- 1) 35 2) 80
3) 20 4) 10
- 16) The divisor is 25 times the quotient and 5 times the remainder. If the quotient is 16, the dividend is :
- 1) 6400 2) 6480
3) 400 4) 480
- 17) When a number is divided by 56, the remainder obtained is 29. What will be the remainder when the number is divided by 8?
- 1) 4 2) 5
3) 3 4) 7
- 18) A number being divided by 52 gives remainder 45. If the number is divided by 13, the remainder will be
- 1) 5 2) 6
3) 12 4) 7
- 19) A number when divided successively by 4 and 5 leaves remainder 1 and 4 respectively. When it is successively divided by 5 and 4 the respective remainders will be
- 1) 4, 1 2) 3, 2
3) 2, 3 4) 1, 2
- ❖ B) In a division problem, the divisor is 4 times the quotient and 3 times the remainder. If remainder is 4, the dividend is
- 1) 36 2) 40
3) 12 4) 30
- ❖ C) How many natural numbers divisible by 7 are there between 3 and 200?
- 1) 27 2) 28
3) 29 4) 36
- ❖ D) A number when divided by 3 leaves a remainder 1. When the quotient is divided by 2, it leaves a remainder 1. What will be the remainder when the number is divided by 6?
- 1) 3 2) 4
3) 5 4) 2
- ❖ E) 64329 is divided by a certain number. While dividing, the numbers, 175, 114 and 213 appear as three successive remainders. The divisor is
- 1) 184 2) 224
- 3) 234 4) 296
- 20) The product of two numbers is 9375 and the quotient. When the larger one is divided by the smaller, is 15. The sum of the numbers is :
- 1) 395 2) 380
3) 400 4) 425
- 21) $(7^{19} + 2)$ is divided by 6, the remainder is:
- 1) 5 2) 3
3) 2 4) 1
- 22) A number when divided by 6 leaves remainder 3. When the square of the same number is divided by 6, the remainder is:
- 1) 0 2) 1
3) 2 4) 3
- 23) Which of the following number is NOT divisible by 18?
- 1) 54036 2) 50436
3) 34056 4) 65043
- 24) If two numbers are each divided by the same divisor, the remainders are respectively 3 and 4. If the sum of the two numbers be divided by the same divisor, the remainder is 2. The divisor is
- 1) 9 2) 7
3) 5 4) 3
- 25) Two numbers, when divided by 17, leave remainders 13 and 11 respectively. If the sum of those two numbers is divided by 17, the remainder will be
- 1) 13 2) 11
3) 7 4) 4
- 26) The remainder when 3^{21} is divided by 5 is
- 1) 1 2) 2
3) 3 4) 4
- 27) If 17^{200} is divided by 18, the remainder is
- 1) 17 2) 16
3) 1 4) 2
- 28) When 2^{31} is divided by 5 the remainder is
- 1) 4 2) 3
3) 2 4) 1
- 29) When a number is divided by 387, the remainder obtained is 48. If the same number is divided by 43, then the remainder obtained will be-

- 1) 0
3) 5
- 2) 3
4) 35
- 3) 6
4) 7
- 30) In a division sum, the divisor is 10 times the quotient and 5 times the remainder. If the remainder is 46, then the dividend is
1) 4236
2) 4306
3) 4336
4) 5336
- 31) When a number is divided by 24, the remainder is 16. The remainder when the same number is divided by 12 is
1) 3
2) 4
3) 6
4) 8
- 32) $(4^{61} + 4^{62} + 4^{63})$ is divisible by
1) 3
2) 11
3) 13
4) 17
- 33) A number when divided by 91 gives a remainder 17. When the same number is divided by 13, the remainder will be:
1) 0
2) 4
3) 6
4) 3
- 34) Divide 37 into two parts so that 5 times one part and 11 times the other are together 227.
1) 15, 22
2) 20, 17
3) 25, 12
4) 30, 7
- 35) How many numbers between 400 and 800 are divisible by 4, 5, and 6?
1) 7
2) 8
3) 9
4) 10
- 36) The number which is to be added to 0.01 to get 1.1, is
1) 1.11
2) 1.09
3) 1
4) 0.10
- 37) $999\frac{998}{999} \times 999$ is equal to
1) 998999
2) 999899
3) 989999
4) 999989
- 38) How many 3 digit numbers, in all, are divisible by 6?
1) 140
2) 150
3) 160
4) 170
- 39) If n is an integer, then $(n^3 - n)$ is always divisible by :
1) 4
2) 5
- 40) If the sum of the digits of any integer lying between 100 and 1000 is subtracted from the number, the result always is
1) divisible by 6
2) divisible by 2
3) divisible by 9
4) divisible by 5
- 41) Both the end digits of a 99 digit number N are 2. N is divisible by 11, then all the middle digits are:
1) 1
2) 2
3) 3
4) 4
- 42) A 4-digit number is formed by repeating a 2-digit number such as 2525, 3232, etc. Any number of this form is always exactly divisible by :
1) 7
2) 11
3) 13
4) Smallest 3-digit prime number
- 43) The least number which must be added to the greatest number of 4 digits in order that the sum may be exactly divisible by 307 is
1) 132
2) 32
3) 43
4) 75
- 44) If $a = 4011$ and $b = 3989$ then value of $ab = ?$
1) 15999879
2) 15899879
3) 15989979
4) 15998879
- 45) If n is even, $(6^n - 1)$ is divisible by
1) 37
2) 35
3) 30
4) 6
- 46) I have x marbles. My elder brother has 3 more than mine, while my younger brother has 3 less than mine. If the total number of marbles is 15, the number of marbles that I have is
1) 3
2) 5
3) 8
4) 7
- 47) Weight of a bucket when filled fully with water is 17 kg. If the weight of the bucket when half filled with water is 13.5 kg, what is the weight of empty bucket?
1) 12 kg
2) 8 kg
3) 10 kg
4) 7 kg

48) The maximum value of F in the following equation

$$5E9 + 2F8 + 3G7 = 1114 \text{ is}$$

Where E, F, G each stands for any digit

- 1) 8 2) 9
3) 7 4) 5
- 49) A number when divided by 729 gives a remainder of 56. What will we get as remainder if the same number is divided by 27?
- 1) 4 2) 2
3) 0 4) 1
- 50) If 25 is added to a number it becomes 3 less than thrice of the number. Then number is
- 1) 15 2) 14
3) 19 4) 20
- 51) If the sum of a number and its reciprocal be 2, then the number is
- 1) 0 2) 1
3) -1 4) 2
- 52) When a number is divided by 56, the remainder will be 29. If the same number is divided by 8, then the remainder will be
- 1) 6 2) 7
3) 5 4) 3
- 53) A positive number when decreased by 4, is equal to 21 times the reciprocal of this number. The number is:
- 1) 3 2) 7
3) 5 4) 9
- 54) When n is divided by 4, the remainder is 3. The remainder when $2n$ is divided by 4 is:
- 1) 1 2) 2
3) 3 4) 6
- 55) A man has some hens and some cows. If the total number of heads of hens and cows together is 50 and the number of feet of hens and cows together is 142, then the number of cows is
- 1) 21 2) 25
3) 27 4) 29
- 56) The least number to be added to 13851 to get a number which is divisible by 87 is :
- 1) 18 2) 43
3) 54 4) 69
- 57) Which of the following numbers is completely divisible by 99?
- 1) 57717 2) 57627
3) 55162 4) 56982
- 58) The sum of all prime numbers between 58 and 68 is
- 1) 179 2) 178
3) 187 4) 183
- 59) The product of digits of a 2 digit number is 24. If we add 45 to the number, the new number obtained is a number formed by interchanging the digits. What is the original number?
- 1) 54 2) 83
3) 38 4) 45
- 60) The product of two numbers is 48. If one number equals, "The number of wings of a bird plus 2 times the number of fingers on your hand divided by the number of wheels of a Tricycle". Then the other number is
- 1) 9 2) 10
3) 12 4) 18
- 61) One-fourth of a tank holds 135 liters of water. What part of the tank is full if it contains 180 liters of water?
- 1) $\frac{2}{5}$ 2) $\frac{2}{3}$
3) $\frac{1}{3}$ 4) $\frac{1}{6}$
- 62) If 3 times a number exceeds its $\frac{3}{5}$ by 60, then what is the number?
- 1) 25 2) 35
3) 45 4) 60
- 63) IF $\frac{4}{5}$ of an estate be worth 16800 Rs, then the value of $\frac{3}{7}$ of it is ---
- 1) 90000 Rs 2) 9000 Rs
3) 72000 Rs 4) 21000 Rs
- 64) A man spends $\frac{1}{3}$ of his income on food, $\frac{2}{5}$ of his income on house rent and $\frac{1}{5}$ of his income on clothes. If he still has 400Rs. Left with him, his income is
- 1) 4000 Rs 2) 5000 Rs
3) 6000 Rs 4) 7000 Rs

65) When $0.\overline{47}$ is converted as a fraction, the result is

- 1) $\frac{47}{90}$ 2) $\frac{46}{90}$
3) $\frac{46}{99}$ 4) $\frac{47}{99}$

66) A candidate in an examination was asked to find $\frac{5}{14}$ of a certain number. By mistake he found $\frac{5}{4}$ of it. Thus, his answer was 25 more than the correct answer. The number was:

- 1) 28 2) 56
3) 84 4) 140

67) In an examination, a student was asked to find $\frac{3}{14}$ of a certain number, By mistake, he found $\frac{3}{4}$ of it. His answer was 150 more than the correct answer. The given number is:

- 1) 500 2) 280
3) 240 4) 180

68) $\frac{1}{10}$ of a rod is coloured red, $\frac{1}{20}$ orange, $\frac{1}{30}$ yellow, $\frac{1}{40}$ green, $\frac{1}{50}$ blue, $\frac{1}{60}$ black and the rest is violet. If the length of the violet portion of the rod is 12.08 meters, then the length of the rod is

- 1) 16 m 2) 18 m
3) 20 m 4) 30 m

69) A tree increases annually by $\frac{1}{8}$ th of its height. By how much will it increase after 2 years, if it stands today 64 cm high?

- 1) 72 cm 2) 74 cm
3) 75 cm 4) 81 cm

70) How many $\frac{1}{6}$ of together make $41\frac{2}{3}$?

- 1) 125 2) 150
3) 250 4) 350

71) The sum of the numerator and denominator of a positive fraction is 11. If 2 is added to both numerator and denominator, the fraction is increased by $\frac{1}{24}$. The difference of numerator and denominator of the fraction is

- 1) 5 2) 3
3) 1 4) 9

72) The denominator of a fraction is 3 more than its numerator. If the numerator is increased by 7 and the denominator is decreased by 2, we obtain 2. The sum of numerator and denominator of the fraction is

- 1) 5 2) 13
3) 17 4) 19

73) If 1 is added to both the numerator and the denominator of a fraction, it becomes $\frac{1}{4}$. If 2 is added to both the numerator and the denominator of that fraction. It becomes $\frac{1}{3}$. The sum of numerator and denominator of the fraction is :

- 1) 8 2) 13
3) 22 4) 27

74) A number whose one-fifth part increased by 4 is equal to its one-fourth part diminished by 10, is:

- 1) 260 2) 280
3) 240 4) 270

75) Divide 50 into two parts so that the sum of their reciprocals is $\frac{1}{12}$.

- 1) 35, 15 2) 20, 30
3) 24, 36 4) 28, 32

76) $0.\overline{123}$ is equal to :

- 1) $\frac{14}{333}$ 2) $\frac{41}{333}$
3) $\frac{123}{1000}$ 4) $\frac{441}{333}$

77) Arrange $\frac{4}{5}, \frac{7}{8}, \frac{6}{7}, \frac{5}{6}$ in the ascending order

- 1) $\frac{4}{5}, \frac{7}{8}, \frac{6}{7}, \frac{5}{6}$ 2) $\frac{5}{6}, \frac{6}{7}, \frac{7}{8}, \frac{4}{5}$
3) $\frac{4}{5}, \frac{5}{6}, \frac{6}{7}, \frac{7}{8}$ 4) $\frac{7}{8}, \frac{6}{7}, \frac{5}{6}, \frac{4}{5}$

78) The digit in unit's place of the product

$$81 \times 82 \times 83 \times \dots \times 89 \text{ is}$$

- 1) 0 2) 2
3) 6 4) 8

79) The digit in unit's place of the product $(2153)^{167}$ is:

- 1) 1 2) 3
3) 7 4) 9

- 80) The digit in the unit's place of the product $(2464)^{1793} \times (615)^{317} \times (131)^{491}$ is
1) 0
2) 2
3) 3
4) 5
- 81) Unit digit in $(264)^{102} + (264)^{103}$ is :
1) 0
2) 4
3) 6
4) 8
- 82) The last digit of 3^{40} is
1) 1
2) 3
3) 7
4) 9
- 83) One's digit of the number $(22)^{23}$ is
1) 4
2) 6
3) 8
4) 2
- 84) Find the unit digit in the product $(4387)^{245} \times (621)^{72}$
1) 1
2) 2
3) 5
4) 7
- 85) The sum of three consecutive odd natural numbers is 147. Then, the middle number is:
1) 47
2) 48
3) 49
4) 51
- 86) The sum of all natural numbers from 75 to 97 is:
1) 1598
2) 1798
3) 1958
4) 1978
- 87) The sum of all natural numbers between 100 and 200, which are multiples of 3 is :
1) 5000
2) 4950
3) 4980
4) 4900
- 88) The sum of three consecutive odd natural numbers is 87. The smallest of these numbers is:
1) 29
2) 31
3) 23
4) 27
- 89) What is the sum of two consecutive even numbers, the difference of whose square is 84?
1) 38
2) 34
3) 42
4) 46
- 90) The sum of all the natural numbers from 51 to 100 is
1) 5050
2) 4275
3) 4025
4) 3775
- 91) The sum of all the 2- digit numbers is :
1) 4995
2) 4950
3) 4945
4) 4905
- 92) The sum of all the 3-digit numbers is
1) 98901
2) 494550
3) 8991
4) 899
- 93) Out of six consecutive natural numbers. If the sum of first three is 27, what is the sum of the other three?
1) 36
2) 35
3) 25
4) 24
- 94) If the sum of five consecutive integers is S, then the largest of those integers in terms of S is
1) $\frac{S-10}{5}$
2) $\frac{S+4}{4}$
3) $\frac{S+5}{4}$
4) $\frac{S+10}{5}$
- 95) The sum of all those prime numbers which are not greater than 17 is
1) 59
2) 58
3) 41
4) 42
- 96) The sum of the squares of 3 consecutive positive numbers is 365. The sum of the numbers is
1) 30
2) 33
3) 36
4) 45
- 97) Find three consecutive numbers such that twice the first, three times the second and four times the third together make 191.
1) 19, 20, 21
2) 21, 22, 23
3) 20, 21, 22
4) 22, 23, 24
- 98) Find the sum of all positive multiples of 3 less than 50
1) 400
2) 404
3) 408
4) 412
- 99) What is the arithmetic mean of first 20 odd natural numbers?
1) 19
2) 17
3) 22
4) 20

- 100) Two positive whole numbers are such that the sum of the first number and twice the second number is 8 and their difference is 2. The numbers are:
- 1) 7, 5 2) 6, 4
3) 4, 2 4) 3, 5
- 101) If we write 45 as sum of four numbers so that when 2 is added to first number, 2 subtracted from second number, third multiplied by 2 and fourth divided by 2, we get the same result, then the four numbers are:
- 1) 1, 8, 15, 21 2) 8, 12, 5, 20
2) 8, 12, 10, 15 4) 2, 12, 5, 26
- 102) The value of $(0.\overline{63} + 0.\overline{37})$ is
- 1) 1 2) $\frac{100}{99}$
3) $\frac{99}{100}$ 4) $\frac{100}{33}$
- 103) $(0.\overline{11} + 0.\overline{22}) \times 3$ is equal to
- 1) 3 2) $1.\overline{9}$
3) 1 4) $0.\overline{3}$
- 104) $1.\overline{2} \times 0.\overline{03} =$
- 1) $0.0\overline{4}$ 2) $0.0\overline{36}$
3) $1.\overline{13}$ 4) $0.0\overline{37}$
- 105) Which one of the following numbers is not a square of any natural number?
- 1) 17956 2) 18225
3) 63592 4) 53361
- 106) The difference of $5.\overline{76}$ and $2.\overline{3}$ is
- 1) $2.\overline{54}$ 2) $3.\overline{73}$
3) $3.\overline{46}$ 4) $3.\overline{43}$
- 107) Numbers 2, 4, 6, 8, 10.....196, 198, 200 are multiplied together. The numbers of zeros at the end of the product on the right will be equal to –
- 1) 21 2) 22
3) 24 4) 25
- 108) The value of $(0.\overline{63} + 0.\overline{37})$ is
- 1) 1 2) $\frac{100}{99}$
3) $\frac{99}{100}$ 4) $\frac{100}{33}$
- 109) Sum of two numbers is 40 and their product is 375. What will be the sum of their reciprocals?
- 1) $\frac{8}{75}$ 2) $\frac{1}{40}$
3) $\frac{75}{8}$ 4) $\frac{75}{4}$
- 110) 800 chocolates were distributed among the student of a class. Each student got twice as many chocolates as the number of students in the class. The number of students in the class was:
- 1) 25 2) 30
3) 35 4) 20
- 111) How many digits in all are required to write numbers from 1 to 50?
- 1) 100 2) 92
3) 91 4) 50
- 112) The numbers 1, 3, 5, 7...., 99 and 128 are multiplied together. The number of zeros at the end of the product must be:
- 1) 19 2) 22
3) 7 4) Nil
- 113) The simplified value of $(1 - \frac{1}{3})(1 - \frac{1}{4})(1 - \frac{1}{5}) \dots (1 - \frac{1}{99})(1 - \frac{1}{100})$
- 1) $\frac{2}{99}$ 2) $\frac{1}{25}$
3) $\frac{1}{50}$ 4) $\frac{1}{100}$
- 114) 380 mangoes are distributed among some boys and girls who are 85 in numbers. Each boy gets four mangoes and each girl gets five. The number of boys is
- 1) 15 2) 38
3) 40 4) 45
- 115) In a two digit number if it is known that its units digit exceeds its tens digit by 2 and that the product of the given number and the sum of its digits is equal to 144, then the number is
- 1) 46 2) 42
3) 26 4) 24
- 116) A number consists of two digits such that the digit in the ten's place is less by 2 than the digit in the unit's place. Three times the

132) A man engaged a servant on the condition that he would pay him 90rs and a turban after service of one year. He served only for nine months and received the turban and an amount of 65rs. The price of turban is

- 1) 25Rs 2) 18.75Rs
3) 10 Rs 4) 2.50 Rs

133) If a certain number of two digits is divided by the sum of its digits, the quotient is 6 and the remainder is 3. If the digits are reversed and the resulting number is divided by the sum of the digits, the quotient is 4 and the remainder is 9. The sum of the digits of the number is

- 1) 6 2) 9
3) 12 4) 4

134) What decimal of a week is an hour?

- 1) 0.0059 2) 0.0062
3) 0.062 4) 0.059

135) Natu and Buchku each have certain number of oranges. Natu says to Buchku, "If you give me 10 of your oranges, I will have twice the number of oranges left with you". Buchku replies, "If you give me 10 of your oranges, I will have the same number of oranges as left with you". What is the number of oranges with Natu and Buchku, respectively?

- 1) 50, 20 2) 70, 50
3) 20, 50 4) 50, 70

Yashshree Competition Zone