



INSTITUTE OF MATHEMATICS EDUCATION

MATHS APTITUDE TEST – 2022 (Primary Level)

Std. : V and VI
Time : 2 Hours

Question Paper

Date : 10.09.2022
Total Marks : 100

Instructions : 1) Use separate answer sheet to mark answers. 2) First read question carefully, get the answer and darken the circle of respective correct alternative on answer sheet. 3) **No change is allowed, so think twice and then darken the appropriate circle.** 4) Note that half circle darkened or more than one circle darkened, cross or tick on the circle, will not be given marks. 5) If questions are not attempted, marks will not be given. 6) **You can use separate paper for rough work.**

- Q.1 :** How many notes of ₹ 200/- denomination make the amount two lacs fifty thousand?
A) 1250 B) 12,500
C) 25000 D) 2,00,000
- Q.2 :** In the division $22502250 \div 15$, how many zeros are there in the quotient?
A) 1 B) 2 C) 3 D) 4
- Q.3 :** What is the sum of 17th and 19th odd number after 60?
A) 190 B) 192 C) 188 D) 191
- Q.4 :** Which of the following is not divisible by 18?
A) 9522 B) 11520 C) 6552 D) 9183
- Q.5 :** Find the difference between GCD and LCM of 441 and 588.
A) 147 B) 1470 C) 1617 D) 567
- Q.6 :** If $\frac{5}{7} + \frac{4}{7} + \frac{3}{7} + \frac{2}{7} = x$, then find x.
A) $\frac{1}{2}$ B) 2 C) 1 D) 21
- Q.7 :** Which of the following is decimal form of $\frac{13}{22}$?
A) 0.590 B) 0.590 C) 0.059 D) 0.59
- Q.8 :** 20.26 decigram = how many gms.?
A) 0.2026 B) 0.02026
C) 0.002026 D) 2.026
- Q.9 :** Write the number 1212 in the Roman Numerals.
A) MCXII B) MCCXII
C) MCCLII D) MCCII
- Q.10 :** If minute hand of a clock indicates 9 and hour hand is between 3 and 4, then what is the time?
A) 9 :15 B) 3 : 45
C) 2 : 45 D) 2 : 15
- Q.11** If $6x - 11 = 2x + 13$, then $x =$?
A) 3 B) $\frac{1}{4}$ C) $\frac{1}{2}$ D) 6
- Q.12** If 6th July of certain year falls on Wednesday, then which days will come five times in that month?
A) Friday, Saturday, Sunday
B) Friday, Saturday
C) Saturday, Sunday, Monday
D) Sunday, Monday
- Q.13 :** Simplify : $(1001 \div 11 - 11) \div (350 \div 14 - 5)$
A) 80 B) 20 C) 4 D) 0
- Q.14 :** Cost of apples is ₹ 105 per kg. What is the cost of 350g of apples in ₹ ?
A) 36.75 B) 36.50 C) 75 D) 100.5
- Q.15 :** If area of a rectangle is 52.8 sq. m and breadth is 6.4 m, then find its perimeter.
A) 25.7 m B) 29.3 m C) 50 m D) 14.5 m
- Q.16 :** If CP of an article is ₹ 720 and there is profit of 8%, then what is its selling price ?
A) ₹ 57.6 B) ₹ 662.4
C) ₹ 777.6 D) Any other
- Q.17 :** 10% of 10.5 + 20% of 20.5 = ?
A)15.5 B) 3.05 C) 5.15 D) 30.5
- Q.18 :** What should be the digit among options in the place of * in the number 431*14 so that it is divisible by 6?
A) 4 B) 3 C) 8 D) 1
- Q.19 :** How many prime factors does number 330 have?
A) 4 B) 5 C) 3 D) 6
- Q.20 :** Which of the following is a pair of twin primes?
A) (121, 123) B) (131, 137)
C) (111, 113) D) (101, 103)
- Q.21 :** $\frac{A}{18} + \frac{A}{18} + \frac{A}{18} = \frac{18}{54}$ Find the value of 'A'.
A) 8 B) 4 C) 2 D) 1
- Q.22 :** $16.45 + 3.007 + 0.2108 =$?
A) 19.6678 B) 18.1728
C) 19.2568 D) Any other
- Q.23 :** 3 kg. 200 g. + 600 g. + 550 decagram = ... kg ... g.
A) 2 kg. 500 g. B) 3 kg. 450 g.
C) 3 kg. 650 g. D) 9 kg. 300 g.
- Q.24 :** Convert 5000 sec. into hrs, min, sec.
A) 1 hr. 10 min. 52 sec.
B) 5 hrs. 20 sec.
C) 1 hr. 23 min. 20 sec.
D) 5 hrs. 50 min. 2 sec.
- Q.25 :** In the number 3257, if 0 is inserted between 2 and 5 and also between 5 and 7, then place value of 2 will change by.
A) 2000 B) 19200 C) 19800 D) 18080

Q.26 : How many times 52 is subtracted from 520054 so that remainder is 2?

- A) 10001 B) 10003 C) 1001 D) 101

Q.27 : If it is Friday on 7th Oct, then what will be the day on Christmas in the same year?

- A) Saturday B) Sunday
C) Tuesday D) Monday

Q.28 : A shopkeeper gets profit equal to one-third of cost price of an article. Find the selling price of that article.

- A) equal to C.P. B) $\frac{1}{2}$ times C.P.
C) 3 times C.P. D) $\frac{4}{3}$ times C.P.

Q.29 : Put correct sign (<, >, =) in the box \square .

$$201 \div 3 - 3 \times 9 \square 106 \times 2 - 61 \times 3$$

- A) > B) = C) < D) Cannot say

Q.30 : CCIX \div XI + IX = ?

- A) XXVIII B) CCIX C) XIX D) XVIII

Q.31 : 3 hrs. 20 min. + $1\frac{1}{4}$ hrs. = ?

- A) 3 hrs. 45 min. B) 4 hrs. 35 min.
C) 4 hrs. 15 min. D) 4 hrs. 75 min.

Q.32 : Perimeter of an isosceles triangle is 33 cm. If length of equal sides is 12 cm, find the length of base side of triangle.

- A) 9 cm B) 18 cm C) 6 cm D) 12 cm

Q.33 : If 30% of x = 20% y, then three times of x will be equal to how many times of y?

- A) 3 B) 4 C) 2 D) 5

Q.34 : Simplify $55 \times 9 - 9 \times (17 \times 3 - 3)$

- A) 0 B) 55 C) 77 D) 63

Q.35 : If $36 \times 9 = 324$ and $36 \times 12 = 432$, then what is G.C.D. of 324 and 432?

- A) 36 B) 108 C) 144 D) 48

Q.36 : Get the addition of the following.

$$1\frac{1}{3} + 1\frac{1}{6} + 3\frac{1}{6} + \frac{1}{3}$$

- A) $1\frac{1}{6}$ B) 3 C) $\frac{5}{6}$ D) 6

Q.37 : Which of the following will be value of expanded form of fraction?

$$1 \times 1000 + 0 \times 100 + 0 \times 10 + 0 \times 1 + \frac{0}{10} + \frac{0}{100} + \frac{0}{1000} + \frac{8}{10000} = ?$$

- A) 100.0008 B) 1000.008
C) 1000.0080 D) 1000.0008

Q.38 : What should be subtracted from 1766 to get the number divisible by 55?

- A) 13 B) 11 C) 6 D) 10

Q.39 : If $y = 2x - 1$ and x is odd number, then which of the following is an even number?

- A) $x + y - 1$ B) $x + y + 1$
C) $x^2 + y^2 - 1$ D) $x + y + 2$

Q.40 : When an article is sold at ₹ 119, then the shopkeeper earns profit of ₹ 14. Find the percentage loss when it is sold at a loss of ₹ 14.

- A) 14% B) $13\frac{2}{3}\%$ C) $15\frac{3}{7}\%$ D) $13\frac{1}{3}\%$

Q.41 : If the cost of 19 balls is ₹ 104.50, then the cost of 49 balls is

- A) ₹ 2695 B) ₹ 269.50
C) ₹ 731.50 D) ₹ 123.5

Q.42 : The L.C.M. and G.C.D. of the two numbers are 900 and 30 respectively. If one of the number is 180, then find the other number.

- A) 30 B) 150 C) 120 D) 300

Q.43 : 11.7 decim \div 1.3 = how many decagm?

- A) 0.09 B) 0.19 C) 1.17 D) 1.09

Q.44 : If 20% of 60 = (2x) % of 25, then find x.

- A) $12\frac{1}{4}$ B) 20 C) 25 D) 24

Q.45 : Find area of a figure formed by joining two squares of side 6 cm each. (in sq. m)

- A) 12 B) 24 C) 36 D) 72

Q.46 : A 25 digit number is written as 126126 ...1, and when it is divided by 6, it gives remainder 1. Find how many zeros are there in quotient?

- A) 6 B) 7 C) 8 D) 24

Q.47 : Evaluate : $\frac{1}{5} + \frac{1}{10} + \frac{1}{15} + \frac{1}{20} + \frac{1}{4} + \frac{1}{8} + \frac{1}{12} + \frac{1}{16}$

- A) $\frac{1}{16}$ B) $\frac{15}{16}$ C) $\frac{4}{5}$ D) $\frac{1}{20}$

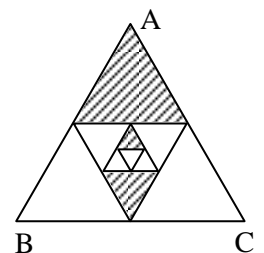
Q.48 : By selling an article for ₹ 600 more, Karthik would have made 5% profit on his sale instead of 11% loss. What was the cost price of the article?

- A) ₹ 3750 B) ₹ 4000 C) ₹ 2250 D) ₹ 6000

Q.49 : How many unordered pairs of positive integers exist such that HCF of numbers is 35 and their sum is 1085?

- A) 12 B) 8 C) 15 D) 17

Q.50 : An equilateral triangle ABC has an area 1 sq. cm. Take mid points of the sides of the triangle and join them repeatedly as shown in figure. Find area of shaded region in sq. cm.



- A) $\frac{1}{8}$ B) $\frac{1}{64}$ C) $\frac{20}{64}$ D) $\frac{21}{64}$

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