INSTITUTE OF MATHEMATICS EDUCATION

MATHS APTITUDE MOCK TEST – 2021(Primary Level)

Std. : V and VI **Question Paper** Date : 04.09.2021

Time : 2 Hours Total Marks : 100

Q.1 : By how much will place value of 2 increase if 0 is inserted at extreme right of the number 13204 ?
(A) 2000 (B) 2200
(C) 1800 (D) Any other

Q.2 : Which of the following are not co-prime?
(A) 83,581 (B) 101,127
(C) x, x+1 (D) 155, 156

Q.3 : Which of the following is divisible by 72 ?
(A) 13140 (B) 13104
(C) 13410 (D) 11340

Q.4 : Find GCD of 92 and115.
(A) 92 (B) 115 (C) 1 (D) 23

Q.5 : Find the sum of largest and smallest fractions from the following $\frac{7}{5}, \frac{7}{15}, \frac{7}{10}, \frac{7}{13}, \frac{7}{11}$

(A) $1\frac{13}{15}$ (B) $\frac{14}{15}$

(C) $\frac{14}{30}$ (D) Any other

Q.6 : If 1742 + 2741 = m, then find the value of 1742 + 2 (2741) =
(A) m (B) m + 2
(C) m + 2741 (D) m + 1742

Q.7 : 3.006 ÷ 0.06 = ?
(A) 5.06 (B) 50.1
(C) 5.01 (D) Any other

Q.8 : 56.7 decagram = ……..decigram
(A) 0.567 (B) 5.67
(C) 567 (D) 5670

Q.9 : Write 2043 in Roman Numerals
(A) MMXLIII (B) MMLXIII
(C) XMMLIII (D) Any other

Q.10 : 2.5 hrs + 3 hrs 15 min + $5\frac{3}{4}$ hrs = …….hrs
(A) 11.3 hrs (B) 11.50 hrs
(C) 11.25 hrs (D) 11.75 hrs

Q.11 : Put correct sign (< ,>, =) in the box
144 ÷ 12 + 8 ……□... 16 × 9 – 18 × 7
(A) > (B) <
(C) = (D) cannot say

Q.12 : If the cost of 11 bats is Rs. 6061, then the cost of 37 bats is
(A) Rs. 20,837 (B) Rs. 20,378
(C) Rs. 20,738 (D) Rs. 20,387

Q.13 : If 20th June was on Sunday, then what will be the day on Children's day?
(A) Sunday (B) Tuesday
(C) Friday (D) Saturday

Q.14 : Simplify : 20 – (5× 2 – 12 ÷ 4) + 6 × 3 ÷ 9
(A) 12 (B) 15
(C) 5 (D) Any other

Q.15 : If length of a rectangle is 25 cm and breadth is 7 less than it's length, then find its perimeter.
(A) 86 cm (B) 43 cm
(C) 18 cm (D) Any other

Q.16 : 28% of 28 = …….
(A) 784 (B) 78.4
(C) 7.84 (D) Any other

Q.17 : An article is sold for Rs.960 at 20% profit. Then the profit is
(A) Rs. 160 (B) Rs. 800
(C) Rs. 192 (D) Any other

Q.18 : Which of the following is 150 millions ?
(A) 15,00,00,00 (B) 150000000
(C) 15000000000 (D) None of these

Q.19 : Find LCM of 553 and 79.
(A) 79 (B) 1
(C) 553 (D) 553 × 79

Q.20 : Find the sum of two digit prime numbers whose both individual digits are prime.
(A) 186 (B) 286
(C) 309 (D) Any other

Q.21 : How many 3 digits numbers have 3 factors ?
(A) 8 (B) 6 (C) 7 (D) 5

Q.22 : Convert $\frac{7}{11}$ into decimal fractions.
(A) $0.\overline{36}$ (B) 0.63
(C) $0.\overline{63}$ (D) $0.\overline{363}$

Q.23 : 20 cm + 40 deci m+ 60 deca m = …..m
(A) 604.2 (B) 60.42
(C) 6.042 (D) 6042

Q.24 : If $4m = 72$ and $3n - 5 = 10$, then $m - n =$
(A) 18 (B) 5 (C) 23 (D) 13

Q.25 : Find the sum of 15^{th} odd number after 26 and 17^{th} even number before 129.
(A) 218 (B) 151
(C) 161 (D) Any other

Q.26 : If 325A69B is divisible by 66, then find A + B.
(A) 15 (B) 7
(C) 11 (D) Cannot say

Q.27 : If x and y are co-prime numbers, then find the sum of their GCD and LCM.
(A) $xy - 1$ (B) xy
(C) 1 (D) $xy + 1$

Q.28 : If $\frac{N}{19} - \frac{N}{38} + \frac{N}{57} = \frac{35}{798}$, then find N.
(A) 6 (B) 5 (C) 1 (D) Any other

Q.29 : Simplify $\{(XLV \div V) + CXXI \div XI\} \div IV = ?$
(A) V (B) VI
(C) X (D) IV

Q.30 : A train departs at 17:50 hrs from Mumbai Central and reaches Calcutta on the 3^{rd} day at 5:45 a.m. Find the duration of the journey.
(A) $35\frac{1}{2}$ hrs (B) $35\frac{11}{12}$ hrs
(C) 35.5 hrs (D) $35\frac{10}{12}$ hrs

Q.31 : 50% of $\frac{4}{5}^{th}$ of a number is 140, then find the number.
(A) 350 (B) 300
(C) 420 (D) Any other

Q.32 : The S.P. of an article is Rs. X. If it is sold at y% loss, then find its C.P.
(A) Rs. $\frac{100x}{100 + y}$ (B) Rs. $\frac{100y}{100 - x}$
(C) Rs. $\frac{100x}{100 - y}$ (D) Cannot Say

Q.33 : Side of a regular octagon is 6 cm. Find the side of hexagon, whose perimeter is same as that of an octagon.
(A) 10 cm (B) 8 cm
(C) 6 cm (D) 12 cm

Q.34 : If $2\{[2(72 \div 9 \times 5) + 5] \div 17\} = 5x$, then find x.
(A) 10 (B) 5 (C) 2 (D) 20

Q.35 : If 'a' and '3b' are odd numbers, then which of the following is divisible by 2? (a, b ∈ N)
(A) a + b + 1 (B) ab
(C) a + b (D) ab - 2

Q.36 : If 'a' dozen mangoes cost 'y', then what is the cost of 'x' mangoes?
(A) Rs. $\frac{ax}{12y}$ (B) Rs. $\frac{xy}{12a}$
(C) Rs. $\frac{ay}{12x}$ (D) Any other

Q.37 : Pinky celebrated her 5^{th} birthday on 15^{th} August 2021. What was the day on her 3^{rd} birthday?
(A) Friday (B) Monday
(C) Thursday (D) Sunday

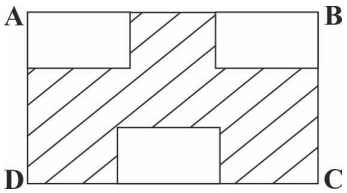
Q.38 : Simplify $\frac{(4.02 - 1.009) \times (630.6)}{(30.11) \times (5.006 + 1.3)}$
(A) 10 (B) 0.1 (C) 0.01 (D) 100

Q.39 : 7 hectorlitre + 700 mililitre + 70 litre = ……kilolitre
(A) 77.07 (B) 0.7707
(C) 7.707 (D) 770.7

Q.40 : Simplify $2 + \frac{1}{2 + \frac{1}{2 + \frac{1}{2}}} = ?$
(A) $2\frac{7}{12}$ (B) $2\frac{12}{7}$
(C) $2\frac{5}{12}$ (D) $4\frac{2}{5}$

Q.41 : 20% x + 40% y = ?
(A) $\frac{x + y}{5}$ (B) $\frac{x + 2y}{5}$
(C) $\frac{x + y}{10}$ (D) $\frac{x + 2y}{100}$

Q.42 : 3 equal rectangular pieces are cut from a rectangular board ABCD as shown in the figure whose length is 48 cm and breath 36 cm. If length and breadth of smaller rectangular pieces are $\frac{1}{3}^{rd}$ of the respective length and breadth of rectangle ABCD, then find the area of remaining portion (shaded)



(A) 1152 sq.cm (B) 576 sq.cm
(C) 192 sq.cm (D) Any other

Q.43 : An article is sold for Rs. 450 at 10% loss. By how much its selling price should be increased so that there will be 10% profit ?
(A) Rs. 500 (B) Rs. 100
(C) Rs. 50 (D) cannot say

Q.44 : The sum of any three consecutive numbers is always divisible by ……..
(A) 6 (B) 2 (C) 5 (D) 3

Q.45 : The first 10001 odd numbers are added and their sum is divided by 2. Then the remainder will be…..
(A) 1 (B) 0 (C) 2 (D) cannot say

Q.46 : a, b, c, d, e are consecutive natural numbers such that 36 times their sum is equal to their product. The largest amongst them is …..
(A) 6 (B) 2 (C) 5 (D) 7

Q.47 : Find the sum of all two digit numbers formed using digits 0, 1, 2, 3 ?
(A) 250 (B) 256 (C) 258 (D) 192

Q.48 : If GCD and LCM of two numbers are 12 and 1008 respectively, then find the greater number out of them if both the numbers lie between 50and 200.
(A) 252 (B) 144
(C) 84 (D) Any other

Q.49 : If prime numbers are written in the following manner 2, 2, 3, 3, 3, 5, 5, 5, 5, 5….that is 2 is written 2 times, 3 is written 3 times, 5 is written 5 times and so on, then what is the sum of first 15 digits?
(A) 73 (B) 153
(C) 30 (D) Any other

Q.50 : A boy runs a total distance of 5 km around a square ground when he makes 10 rounds. If fencing is to be done around the ground, what will the cost of two layer fencing at the rate of Rs. 10 per m. ?
(A) Rs. 5000 (B) Rs. 10,000
(C) Rs. 15,000 (D) Any other

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