



INSTITUTE OF MATHEMATICS EDUCATION
MATHS APTITUDE MOCK TEST – 2020 (Primary Level)

Std. : V and VI
Time : 2 Hours

Question Paper

Date : 12.09.2019
Total Marks : 100

- Q.1 :** Which of the following is “Thirty millions and forty two” ?
(A) 30,00,00,042 (B) 30,000,000.042
(C) 30,000,042 (D) 30,000,42
- Q.2 :** If $(7 \times 61) + 5 = 432$, then $7 \times (61 + 2) + 5 = ?$
(A) 434 (B) 439
(C) 446 (D) Any other
- Q.3 :** Find the sum of the prime numbers up to 100 having one of the digits 7.
(A) 416 (B) 426
(C) 419 (D) 495
- Q.4 :** What is the smallest digit in the place of * in the number 819*45 if the number is divisible by 45 ?
(A) 9 (B) 0 (C) 2 (D) 4
- Q.5 :** Find L.C.M of 30,40,50
(A) 60 (B) 300
(C) 600 (D) 500
- Q.6 :** Simplify : $\frac{1}{2} + \frac{1}{3} + \frac{1}{4} = ?$
(A) $\frac{12}{13}$ (B) $1\frac{1}{12}$ (C) $12\frac{1}{13}$ (D) $13\frac{1}{12}$
- Q.7 :** $0.025 + 0.0025 + 0.25 = ?$
(A) 0.2775 (B) 0.02775
(C) 2.775 (D) Any other
- Q.8 :** $4.2 \text{ gm} + 0.3 \text{ deca gm} = \underline{\hspace{1cm}} \text{ kg?}$
(A) 0.0072 (B) 0.072
(C) 4.5 (D) Any other
- Q.9 :** $\text{XXII} \times \text{XXX} = ?$
(A) CDLX (B) DCLX
(C) DCCLX (D) MDLX
- Q.10 :** Which of the following time shows 5 minutes to 12 at night in 24 hour clock?
(A) 23: 55 (B) 23 : 05
(C) 11 : 55 (D) Any other
- Q.11 :** Put correct sign (<,>=) in the box
 $\{ (72 + 5) \div 7 \} \times 5 \square \{ (85 - 5) \div 8 \} \times 5$
(A) < (B) >
(C) = (D) cannot say
- Q.12 :** If 8th May 2020 was on Saturday, then when will you celebrate Children’s day?
(A) Sunday (B) Monday
(C) Friday (D) Thursday
- Q.13 :** If $5x + 2 = 17$, then find $3x - 5$
(A) 5 (B) 4
(C) 12 (D) any other
- Q.14 :** If a regular octagon having each side equal to 10 cm is rebent to form a regular pentagon, then find the length of each side of the pentagon.
(A) 10cm (B) 16cm
(C) 15cm (D) 12cm
- Q.15 :** If a washing machine was sold for Rs.9500 with profit of Rs 1500, then find profit percentage.
(A) 22% (B) 18.75%
(C) 24.5% (D) Any other
- Q.16 :** 25 out of 125 = -----%
(A) 22% (B) 25%
(C) 20 % (D) Anyother
- Q.17 :** A car runs 35 km in 2 litres of petrol . How much petrol will be required to cover a distance of 245 km. ?
(A) 14 lit (B) 15 lit
(C) 20 lit (D) Anyother
- Q.18 :** If $x^2 - 2$ is an odd number, then which of the following is even ?
(A) x^2 (B) $x^2 + 2$ (C) $x^2 + 4$ (D) $x - 1$
- Q.19 :** The difference between G.C.D and L.C.M. of 19 and 133 is equal to
(A) 6 times the G.C.D
(B) 6 times the L.C.M
(C) 5 times the G.C.D
(D) 5 times the L.C.M.
- Q.20 :** Which of the following is the greatest ?
 $\frac{26}{91}, \frac{45}{105}, \frac{31}{217}, \frac{85}{119}$
(A) $\frac{26}{91}$ (B) $\frac{45}{105}$
(C) $\frac{31}{217}$ (D) $\frac{85}{119}$
- Q.21 :** How many places and which side the decimal point should be shifted if 0.0071 is divided by 1000.
(A) 3 places to right
(B) 2 places to left
(C) 3 places to left
(D) cannot say

Q.22 : Simplify : $[29 - \{ (13 \times 5) - (10 \times 5) \}] \div 7$

- (A) 2 (B) 4
(C) 6 (D) Any other

Q.23 : If C.P. is half of S.P., then profit or loss % is

- (A) 100% profit (B) 100% loss
(C) 50% profit (D) 50% loss

Q.24 : If 12.5 % of $x = 10$ % of 800, then find x .

- (A) 80 (B) 160 (C) 640 (D) 128

Q.25 : If the squares are drawn on each side of an equilateral triangle whose perimeter is 30 cm, then find the perimeter of new figure.

- (A) 100cm (B) 90 cm
(C) 10cm (D) 50cm

Q.26 : How many numbers can be formed which are in the form 'ababa' and divisible by 22?

- (A) 4 (B) 3
(C) 5 (D) infinite

Q.27 : How many lakhs make 1 billion ?

- (A) 1thousand (B) 10 thousand
(C) 100 thousand (D) Any other

Q.28 : When an article was sold for Rs 20, there was a loss of 20%. Find it's cost price.

- (A) Rs. 25 (B) Rs. 20
(C) Rs. 30 (D) Any other

Q.29 : 20% of 90 is less than 30% of 70 by

- (A) 3 (B) 4
(C) 6 (D) Any other

Q.30 : Sum of ages of 'A', 'B' and 'C' after 10 years will be 'm' years. Find the sum of their ages today.

- (A) m years (B) (m - 10) years
(C) (m - 30)years (D) Any other

Q.31 : Convert (10hrs, 10min, 10sec) into seconds.

- (A) 36666sec (B) 36610sec
(C) 36000sec (D) Any other

Q.32 : If $17x = 34$ and $\frac{72}{y} = 9$, then find $\frac{y}{x}$.

- (A) 2 (B) 4 (C) 8 (D) Any other

Q.33 : In an isocseles triangle, equal sides are less by 2 cm than its base. If it's perimeter is 74cm, then find the length of it's equal sides.

- (A) 24cm. (B) 26cm
(C) 28cm (D) Any other

Q.34 : The perimeter of an equilateral triangle is 25.5 cm. If each side is reduced by 2 mm, then what will be the perimeter of the triangle ?

- (A) 19.5cm (B) 23.5cm
(C) 24.9cm (D) Any other

Q.35 : If 'a' is the L.C.M. of two numbers and 'b' is the product of uncommon factors, then find their G.C.D.

- (A) $a - b$ (B) ab
(C) $a + b$ (D) $\frac{a}{b}$

Q.36 : Let x and y be two consecutive numbers. Find the difference between their L.C.M. and G.C.D.

- (A) $x + y$ (B) $xy - 1$
(C) $xy + 1$ (D) $\frac{x}{y} + 1$

Q.37 : Area of square field is 400 sq. m. If single wire fencing is to be done, then what is the cost of fencing at Rs. 25 per meter.

- (A) Rs.2000 (B) Rs.200
(C) Rs.500 (D) Any other

Q.38 : $\left(\frac{1}{7} + \frac{1}{14} + \frac{1}{28}\right) - \left(\frac{1}{13} + \frac{1}{26} + \frac{1}{104}\right) = ?$

- (A) $\frac{1}{4}$ (B) $\frac{1}{6}$
(C) $\frac{1}{8}$ (D) Any other

Q.39 : For a movie, fare for 3 adults is Rs. 'x' and for 2 children is Rs. 'y'. Then find the total fare for 2 adults and one child.

- (A) $\frac{2x + 3y}{6}$ (B) $\frac{4x + y}{6}$
(C) $\frac{4x + 3y}{6}$ (D) Any other

Q.40 : Cost of 4 dozen mangoes is Rs.x. Find the cost of 2 mangoes.

- (A) $\frac{x}{24}$ (B) $\frac{x}{12}$
(C) $\frac{x}{6}$ (D) $\frac{x}{3}$

Q.41 : If C.P. of an article is Rs. 'x' and if it is sold at 10% profit, then find it's selling price.

- (A) $\frac{10x}{11}$ (B) $\frac{9x}{10}$
(C) $\frac{11x}{10}$ (D) $\frac{9x}{11}$

Q.42 : Manisha bought 250 gm of grapes for Rs.20. She also bought 750 gm of guava for Rs. 60 and 1.5 kg apples for Rs.120. Then which is the cheapest fruit ?

- (A) Grapes
(B) Guava
(C) Apples
(D) All three have same rate

Q.43 : If 20% of $x = 40%$ of y , then which of the following is true ?

- (A) $2x = y$ (B) $x = 2y$
(C) $x = y$ (D) cannot say

Q.44 : 6.3 litres of milk is required for 45 children. Then by same proportion how many litres of milk is required to for 55 children ?

- (A) 140 lit (B) 7700 lit
(C) 7.7 lit (D) Any other

Q.45 : Which of the following expression is equal to 100 ?

- (A) $19 - 5 \times 5$ (B) $(19 + 5) + 5$
(C) $19 \times 5 + 5$ (D) $19 + 5 \times 5$

Q.46 : If 50 consecutive numbers are added and the sum is divided by 2, then what will be the remainder ?

- (A) 1 (B) 0
(C) 2 (D) can't determine

Q.47 : There are 22 poles fitted at equal distance on a straight road. If distance between 1st and last pole is 105 m, then find the distance between any two consecutive poles.

- (A) $\frac{105}{22}$ m (B) 5m
(C) $\frac{105}{23}$ m (D) Any other

Q.48 : Let $\frac{26}{25} + \frac{37}{50} - \frac{19}{75} = \frac{x}{300}$. Find x.

- (A) 26 (B) 50
(C) 458 (D) Any other

Q.49 : $\frac{1}{4} \left[1 - \frac{1}{4} \left\{ 1 - \frac{1}{4} \left(1 - \frac{1}{4} \right) \right\} \right] \div \left(4 \frac{1}{4} \right) = ?$

- (A) $\frac{51}{64}$ (B) $\frac{17}{64}$
(C) $\frac{3}{64}$ (D) $\frac{3}{16}$

Q.50 : A bus started from Mumbai at quarter to 9 in the morning and reached Pune at 40 min. past 1 in the afternoon on the same day. In between it took halts of 10 min each at Karjat and Lonavala and of 5 min. at Swargate. Then find the actual travelling time.

- (A) 4.3 hrs (B) 4.5 hrs
(C) 4.75 hrs (D) 4.15 hrs

