



**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 :**  $XXII \times XXX = ?$   
(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 8<sup>th</sup> 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

