



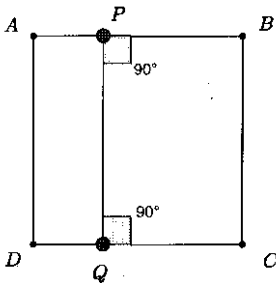
NMTC Screening Test 2017
Primary Level

PART - A

1. Which one of the following numbers is NOT the sum of two prime numbers?

- A. 24 B. 30 C. 67 D. 21

2. $ABCD$ is a square and $PB = 2AP$. The perimeter of the rectangle $APQD$ is 80 cm. The perimeter of $ABCD$ in cms is



- A. 100 B. 120 C. 140 D. 160

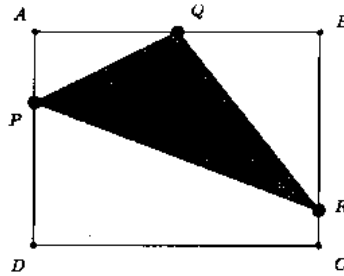
3. Saket added up all the even numbers from 1 to 101. Then, from the total he obtained, he subtracted all odd numbers between 0 and 100. The answer he would have obtained is

- A. 0 B. 20 C. 30 D. 50

4. The value of $\frac{\frac{1}{2} + \frac{1}{4} + \frac{1}{8}}{2 + 4 + 8}$

- A. 16 B. 4 C. $\frac{1}{4}$ D. $\frac{1}{16}$

5. $ABCD$ is a rectangle. $AB = 8$ cm and $BC = 6$ cm. Q is the midpoint of AB . P , R are on AD and BC respectively such that $AP = 2$ cm, $CR = 1$ cm. Area of the shaded triangle in square cms is



- A. 12 B. 13 C. 14 D. 16

6. The *Rishimoolam* of a number is defined as follows. Consider the number 234. By multiplying its digits 2,3 and 4, we obtain $2 \times 3 \times 4 = 24$. Again, multiplying the digits of 24, we get $2 \times 4 = 8$. We say 8 is the Rishimoolam of the number 234. If 0 is the Rishimoolam, we say the number has no Rishimoolam. Which one of the following has no Rishimoolam?

- A. 736 B. 647 C. 831 D. 6197

Two circles touch two parallel lines as shown in Figure 3. The radius of each circle is 1 cm. The distance between the centres of the circles is 5 cm. The area of the shaded region in square cms is



- A. 5π B. 10π C. $10 - \pi$ D. $10 + 7\pi$

8. Samrud wrote two consecutive integers, one of which ends in a 5. He multiplied both. He squared the answer. The last two digits of his answer is

- A. 50 B. 40 C. 10 D. 00

9. Vishwa wrote a number on each, side of 3 cards. In each card, the numbers written on the sides are different. One side of each card is a prime number and the other sides had 44, 59 and 38 respectively. Given that the sum of the numbers on each card is the same, the difference between the largest and the second largest of the prime numbers on the cards is

- A. 6 B. 7 C. 9 D. 4

10. The number of three digit numbers abc such that $a \times b \times c = 15$ is

- A. 2 B. 6 C. 8 D. 9

PART - B

11. Five chairs cost as much as 12 desks, 7 desks cost as much as 2 tables and 3 tables cost as much as 2 sofas. If the cost of 5 sofas is Rs 5250, then the cost of a chair (in Rs) is _____

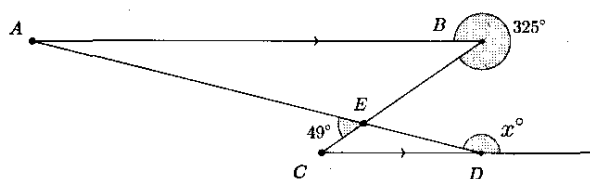
12. The average age of a class of 20 children is 12.6 years. 5 new children joined with an average age of 12.2 years. The new average of the class (to one decimal place) _____

13. 13 is a two digit prime and when we reverse its digits, the number 31 obtained is also a prime number. The number of two digit numbers having this property is -

14- In a garden there are two plants. One plant is 44 cm tall and the other is 80 cm tall. The first plant grows 3 cm in every 2 months and the second 5 cm in every 6 months. The number of months after which the two plants will have equal height is _____

15. In 5 days a man walked a total of 85 KM. Every day he walked 4 KM less than the previous day. The number of KM he walked on the last day is -

16. In the adjoining Figure 4, AB is parallel to CD . The value of x is -



17. In Mahadevans cycle shop for children, there are unicycles, having only one wheel, bicycles having two wheels and tricycles, having three wheels. Samrud counts the seats and wheels and finds that there are totally 7 seats and 13 wheels. The number of bicycles is more than tricycles. The number of unicycles in the shop is _____

18. There is a tree with several branches. Many parrots came to rest on the tree. When 6 parrots sat on each branch of the tree, all the branches were occupied but three parrots were left over. When 9 parrots sat on each branch, all parrots were seated but two branches were empty. If b is the number of branches and p is the number of parrots, the value of $b + p$ is _____

19. The incomes of A and B are in the ratio 3:2. Their expenditures are in the ratio 5:3. If each saves Rs 10,000, then A 's income is (in Rs) -

20. The radius of a circle is increased so that its circumference is increased by 5%. The area of the circle will increase by _____%

Answer Key

1	C
2	B
3	D
4	D
5	C
6	D
7	C
8	D
9	A
10	B
11	480
12	12.5
13	9
14	54
15	9
16	166°
17	2
18	52
19	60000
20	10.25