



**RAMAGYA SCHOOL, NOIDA**  
**MATHS/OLYMPIAD WORKSHEET/(2017-18)**  
**CLASS – VI**

**(Concept based)**

1. The Hindu – Arabic numeral form for XCCMXCIX is \_\_\_\_\_.
- (A) 1099                      (B) 9099                      (C) 1089                      (D) 999
2. Find the value of  $-26 - 20 + 33 - (-33) + 24 + 21 - (-25) - 26 - 14$ .
3. The sum of the prime factors of 63 is \_\_\_\_\_
- (A) 8                      (B) 10                      (C) 4                      (D) 14
4. How many prime numbers are there between 1 and 50?
- (A) 14                      (B) 15                      (C) 16                      (D) 17

**(Application based)**

5. Which of the following numbers is divisible by 9?
- (A) 95103476                      (B) 92106345                      (C) 9076185                      (D) 10349576
6. Swati, Meera and Harshita divided 11.775 kg of wheat flour equally among themselves. Swati used all her wheat flour equally to bake 5 chocolate cakes. How much wheat flour did each cake need?
- (A) 3.92 kg                      (B) 0.665 kg                      (C) 0.875 kg                      (D) 0.785 kg
7. A potter made 4080 diyas in the month of September. If he made the same number of diyas each day, how many diyas did he make in a week?
- (A) 962                      (B) 952                      (C) 942                      (D) 932
8. Write greatest 5-digit number having three different digits.
- (A) 99876                      (B) 99976                      (C) 99986                      (D) 99987
9. Estimate the sum of (21397 + 42505) to nearest thousand.
- (A) 64000                      (B) 65450                      (C) 70000                      (D) 92000

**HOTS**

10. If '+' means  $\times$ , '-' means  $\div$ , ' $\times$ ' means  $-$ , and ' $\div$ ' means  $+$ , then  $16 \div 64 - 8 \times 4 + 2 = ?$
- (A) 12                      (B) 18                      (C) 16                      (D) 24
11. 72a34 is a number in which one of the digits is "a". If the number is exactly divisible by 9, what is the numerical value of "a"?

- (A) 3                      (B) 6                      (C) 7                      (D) 8

12. There are 36 square tables. They can be arranged in multiple ways. If the tables are to be arranged in a rectangular shape, how many such arrangements are possible?

- (A) 4                      (B) 5                      (C) 6                      (D) 7

13. Arman was asked to multiply a number by 25. Instead he multiplied the number by 52 and got the answer 324 more than the correct answer. The number to be multiplied was \_\_\_\_\_.

- (A) 12                      (B) 15                      (C) 25                      (D) 32

**(Value based)**

14. 8 cakes have to be divided equally among 9 children. Tanmay tried many ways of cutting the cake into equal pieces. What is the smallest number of pieces he has to make of each cake so that he can easily give equal amount of cake to each child without wasting any part of the cake?

- (A) 6                      (B) 7                      (C) 8                      (D) 9

**Logical Reasoning**

15. Arrange the following words in the sequence in which they occur in the dictionary.

1. Select      2. Seldom      3. Send      4. Selfish      5. Seller

- (A) 1, 2, 4, 5, 3      (B) 2, 1, 5, 4, 3      (C) 2, 1, 4, 5, 3      (D) 2, 5, 4, 1, 3

16. Some letters are given which are numbered 1, 2, 3, 4 and 5. Find the combination of numbers from the options so that the letters arranged accordingly form a meaningful word.

**ERPIC**  
**1 2 3 4 5**

- (A) 3, 2, 1, 4, 5      (B) 3, 2, 4, 5, 1      (C) 3, 2, 4, 1, 5      (D) 3, 2, 1, 5, 4

17. Find out from the options which is the mirror-image of the given word, if the mirror is placed vertically right.

**CONTENTS**

- (A) STNETNOC      (B) STNETNOC      (C) CONTENTS      (D) STNETNOC

18. Pia walks a distance of 4 metres towards south. Then she turns to the left and walks 3 metres. After this she turns to the right and walks 4 metres. Now which direction is she facing ?

- (A) South                      (B) North                      (C) South-West                      (D) North-East

19. Identify the missing number at the end of the series.

**3, 6, 11, 18, ?**

- (A) 25                      (B) 27                      (C) 29                      (D) 31

20. If  $(k - 8)$  is the highest common factor of 56 and 77, then the value of  $k$  is \_\_\_\_\_.

- (A) 15                      (B) 7                      (C) 11                      (D) 16

