

# MATHEMATICS

### Std - VI

**Time: 2 Hrs**

<b>Name of the School:</b>  _____	<b>Name of the Student:</b>  _____
<b>Place:</b>  _____	<b>Roll No.:</b>  _____

**10 x 1 = 10**

- 1) If a number is divisible by 2 and 3, then the number is divisible by \_\_\_\_\_  
a) 5                                  b) 6                                  c) 2
- 2) HCF of the co-prime numbers is \_\_\_\_\_  
a) 0                                  b) 1                                  c) 2
- 3) Which of the following is divisible by 3? \_\_\_\_\_  
a) 1620                              b) 889                              c) 1219
- 4) If a number is divisible by 10, then the last digit is \_\_\_\_\_  
a) 5                                  b) 0.5                              c) 0
- 5) Which of the following number is not divisible by 6. \_\_\_\_\_  
a) 24                                  b) 32                                  c) 36
- 6) The common multiple of 4, 5 and 10 is \_\_\_\_\_  
a) 25                                  b) 50                                  c) 20
- 7) If  $m$  and  $n$  are two prime numbers, then which of the following statements is correct?  
a)  $m + n$  is always a composite number.  
b)  $m - n$  is always a prime number.  
c)  $m \times n$  is always a composite number.
- 8) A and B are two numbers such that B is a multiple of A. Which of the following is the value of LCM (A,B)? \_\_\_\_\_  
a) A                                  b)  $A + B$                               c) B
- 9) A \_\_\_\_\_ is a visual way of representing hierarchy in a tree like structure.  
a) Pictograph                      b) Tree diagram                      c) Pie chart
- 10) Which of the following numbers is divisible by both 3 and 4?  
a) 1245                              b) 6895                              c) 2376

**II. Match the following:****5 x 1 = 5**

- |                                    |   |                             |
|------------------------------------|---|-----------------------------|
| 11) 1                              | - | Only 2 factors              |
| 12) $\text{HCF} \times \text{LCM}$ | - | Neither Prime nor composite |
| 13) Prime number                   | - | Prime Number                |
| 14) 11                             | - | Product of the numbers      |
| 15) LCM of co-prime                | - | $N_1 \times N_2$            |

**III. Answer the following: (any 10)****10 x 2 = 20**

- 16) Check whether the following number is divisible by 9. Give reasons for your answer: 8852175
- 17) Check whether the following number is divisible by 4. Give reasons for your answer: 5956
- 18) Find the LCM of 24, 12, 40.
- 19) Find the factors of the following number using factor tree method: 156
- 20) Draw a tree diagram for the expression:  
Two times a number added to 4 times another number.
- 21) A florist has 144 roses and 312 lilies. He makes separate bunches of roses and lilies having equal number of flowers in each bunch. What is the greatest number of flowers the florist can have in each bunch?
- 22) Replace '\_\_\_\_\_' with the smallest number to make the statement true.  
a) 27 \_\_\_\_\_ 4 divisible by 3                      b) 1723 \_\_\_\_\_ 4 divisible by 11
- 23) The product of two numbers is 2430 and their LCM is 270. Find the HCF of these numbers.
- 24) Write down the common multiplies of 3, 4 and 6.
- 25) Draw a tree diagram for the following:  $(a \times b) + (c - d)$
- 26) Draw the tree diagram for  $[x + (y - z)] \times 7x$ .

**IV. Do the following: (any 3)****3 x 5 = 15**

- 27) Write in 3 primes such that  $N$ ,  $N + 2$ ,  $N + 4$  are all primes.
- 28) Draw the tree diagram for the expression below:  
 $[\{(4 - 1) + 3\} - (2 - 1)] \times [(3 + 2) + (8 - 5)]$
- 29) Find the largest number that can divide 135, 183 and 375 leaving the same remainder 15 in each case.
- 30) Find the HCF of the following number:  
480, 405 and 150