MATHS
SAMPLE QUESTION PAPER (SEMESTER 1)

Class: VI                        Maximum Marks: 50
Time duration: 2hrs             No of pages: 3

List of Topics covered in this sample paper:
Number system
   The integers
   Percentage
   Profit and loss
   Fundamental concepts
   Ratio
   Fundamental concepts
   Geometry Angles
   Fundamental operations
   Properties of angles and lines
   Construction of angles
   Power and roots

General Instructions:
All questions are compulsory.
Show the worksheet for the answers
Draw the diagrams neatly wherever required

1. How many 3 digit numbers are there between 99 and 999
2. The temperature of a body first rises by 20°C and then falls by 25°C. Find the final temperature of the body, if its initial temperature is -30°C and 62°C
3. Evaluate:
   a) 7*12+85÷6
   b) 56÷4*(-15)-45÷9
   c) 26*(-6)+156÷8
4. Express as percent
   a) 0.25   b) 0.56   c) 0.062   d) 0.01
5. The population of a small locality was 4000 in 1990 and became 5520 in 1992. By what percent did the population increase?
6. A trader at Chennai buys a TV for Rs 8000 from Mumbai and sells it in Chennai at Rs 8750. If his overhead expenses amount to Rs 910, find his profit or loss in this transaction and express it in percent.

7. A man buys 500 articles at Rs 4 and sells all of them at Rs 6 each find
   a) the cost price of one article
   b) the profit made by the man on selling one article
   c) his total profit on selling all the 500 articles

8. Give example for binomial, monomial, multinomial terms

9. State whether the expression are monomial, binomial or trinomial
   a) 2x + 5y
   b) 5 + 4x + 6z
   c) 8x^2 - 6x - 17
   d) 6x^2 - 6z + 5x - 17

10. Express the ratio in simplest form
   a) 62:120
   b) 200:150
   c) 4 min: 60 sec
   d) 2.5:6.5

11. Define the terms
   a) plane
   b) parallel lines
   c) collinearity of points
   d) intersecting lines

12. Draw a four-sided closed figure, in which:
   a) all the sides are equal and each angle is 60°
   b) opposite sides are equal and each of the angle are 90°

13. In the given figure ABC is a straight line
   a) If X = 65°, find Y
   b) If Y = 2\frac{1}{3} right angles, find X

14. In the given figure, two parallel lines are cut by a transversal. Find, giving reasons, the values of angles x, y and z.
15. Draw a line segment $AB = 5\text{cm}$ without using set squares, draw angle $OAB = 60^\circ$ and $OBA = 90^\circ$. Measure angle $AOB$ and write this measurement.

16. Find the cube root of $2^6*3^3$  
   b) $5^3*2^8$

17. Find the square root of 
   a) $36*64*81$  
   b) $100*225$  
   c) $72*18$  
   d) $8*25*200$