#### SRI KANCHI MAHASWAMI VIDYA MANDIR QUESTION BANK MATHEMATICS

#### STD: VI

#### **1.KNOWING OUR NUMBERS**

### **ONE MARK QUESTIONS**

1.Write the place value of 2 in 36,27,583 2.Write the place value of 5 in 1,576,329\_\_\_\_\_ 3.Write the face value of 4 in 24,38,076 4.Numbers up to \_\_\_\_\_\_ digits is written and read in the same way In both Indian and International system of numeration 5.\_\_\_\_\_ of a number is the number obtained by adding 1 to the number 6. \_\_\_\_\_ of a number is the number obtained by subtracting 1 from the number 7. Write the greatest 7 digit number 8. Write the predecessor of 1,00,00,000 9. Write the successor of 9,99,999\_\_\_\_\_ 10. 1 million = \_\_\_\_\_ lakh 11. 1 billion = \_\_\_\_\_ crore 12. Roman symbol for 100 is 13. Roman symbol for 500 is\_\_\_\_\_ 14. Write the Roman numeral for 123 15. Write the Hindu-Arabic numeral for XCVIII 16. The symbol C can be repeated up to a maximum of \_\_\_\_\_ times 17. \_\_\_\_\_ Roman symbol can never be repeated 18. \_\_\_\_\_ Roman symbol is never subtracted 19. Round Off 9876 to the nearest 100 \_\_\_\_\_ 20. Round Off 7356 to the nearest 1000

# THREE MARK QUESTIONS

- 1.Write the following numbers in words using both Indian and International system a.50490705 b.4049975
- 2. Write the following in the standard numeral form:
  a. 5,00,000 + 40,000 + 7000 + 800 + 60 + 4
  b. 40,00,000 + 2,00,000 + 50 + 1
- 3. Write the following numbers in expanded form: a.6,32,80,054 b. 94,56,006
- 4. Make the smallest and greatest 5-digit numbers with 3,5,7,9 using digit 5 twice and find their difference
- 5. Find the difference between the place value and face value of 9 in 459326
- 6. Interchange the digits at thousand and tens places in the number 743256 and find their Sum
- 7. Fill with >,< or = in the given pairs of numbers

a. 4,56,98,786 \_\_\_\_\_97,89,999 b. 5,86,454 \_\_\_\_\_ 5,86,576 c. 9,03,412 \_\_\_\_\_9,13,689

- 8. Write the following numbers in ascending order:
- a. 36946341,36946431,36946631,3694634,3694639 b.876215,875436,876317,875485,876219
- 9. Write the following numbers in descending order:

a. 345217,345672,345324,354674,369876 b. 908543,901456,913478,916380,9176243

10. Pawn had 60 chocolates. He gave away 10 chocolates to Rahul. Rahul already had 55 chocolates. So who had more chocolates finally and how much?

11. Find the difference between 9887623 and 1201338 and write in words (Using International System)

12. Add 3718925,8932319 and write the sum in words (using Indian system)

13. Mukesh lives in a hostel which charges Rs 55 for Dinner and 45 for Lunch. Find the money he has to pay for seven days.

14. Find the difference between 9887623 and 1201338 and write in words(International system)

 $15.Multiply: 10853 \times 403$ 

16.Divide and find the quotient and remainder 8391506 by 792

17. Find the difference between the largest number of seven digits and the smallest number of eight digits.

18.A mobile number consists of ten digits. The first four digits of the number are 9987. The last three digits are 355. The remaining digits are distinct and make the mobile number, the greatest possible number. What are these digits?

19.Estimate: 13889 + 23109 by rounding off to nearest hundreds

20.Estimate:  $276 \times 231$  by rounding off to the nearest tens.

21.State why the following are not valid Roman numeral: a. LC b. XXXX c. DM

#### FIVE MARK QUESTIONS

1.Population of Shivaji park was 2,35,471 in the year 2002. In the year 2012 it was found to be increased by 72,958. What was the total population of the city in 2012?

2.Kirti bookstore sold books worth RS.2,85,891 in the first week of June and books worth Rs.4,00,768 in the second week of the month. How much was the sale for the two weeks together? In which week was the sale greater and by how much?

3.In an election, the successful candidate registered 5,77,500 votes and his nearest rival secured 3,48,700 votes. By what margin did the successful candidate win the election?

4.Virat is a famous cricket player. He has so far scored 6780 runs in test matches. He wishes to complete 10,000 runs. How much runs he need to score to complete his wish?

5. The town newspaper is published every day. One copy has 12 pages. Everyday 12,000 copies are printed. How many total pages are printed every day?

6.A vendor supplies 38 liters of milk to a hotel in the morning and 72 liters of milk in the evening. If the milk costs Rs 48 per liter, how much money is due to the vendor per week?

7.To stitch a shirt, 2m 15cm cloth is needed. Out of 40m cloth, how many shirts can be stitched and how much cloth will remain?

8.Medicine is packed in boxes each weighing 4kg 500g. How much such boxes can be loaded. In a van which cannot carry beyond 800 kg?

# 2.WHOLE NUMBERS

# **ONE MARK QUESTIONS**

1.The smallest natural number is\_\_\_\_\_

2. The smallest whole number is\_\_\_\_\_

3. The product of two Odd Numbers is \_\_\_\_\_

4. Product of an even number and an odd number is\_\_\_\_\_

5. The natural number which doesn't have predecessor is\_\_\_\_\_

6.Sum of two odd numbers is always\_\_\_

7. \_\_\_\_\_ is the identity for multiplication.

8. Whole numbers are closed under \_\_\_\_\_\_ and \_\_\_\_\_\_ operation. 9. Division by \_\_\_\_\_\_ is not defined 10. \_\_\_\_\_\_ is the identity for addition. 11\_\_\_\_\_  $\times$  13 = 13  $\times$  18. 12. Find the successor 999 \_\_\_\_\_\_ 13.Find the predecessor of 4000 \_\_\_\_\_\_ 14.19 $\times$ 12+19 =19 $\times$ (12+\_\_\_\_\_) 15.Name the property of (6+8)+9=6+(8+9) \_\_\_\_\_ 16.Name the property of 75 $\times$ 12=12 $\times$ 75 \_\_\_\_\_ 17.Find using property 225 $\times$ 8+225 $\times$ 2=\_\_\_\_\_ 18.The product of non-zero whole number and its successor is always \_\_\_\_\_ 19.How many whole numbers are there between 32 and 53 \_\_\_\_\_ 20.2546789 $\times$ 0=

## THREE MARK QUESTIONS

Find the successor and predecessor of each of the following whole numbers:

 (i) 999
 (ii) 21999
 (iii) 500012

 How many whole numbers are there between 12 and 86?

3. Solve these using suitable arrangements: a. 137 + 908 + 463

b.637+200+363

4.If a,b and c are whole numbers verify (a+b)+c=a+(b+c), taking a=10, b=7 and c=5

5.Find using distributive property: 624×25

6. If 36 flats cost Rs 68251500 What is the cost of each flat

7. Find using suitable arrangements  $125 \times 207 \times 8$ 

8.Find using suitable properties: 279×189 -279×89

9.Find using distributive property: 313 ×1003

10.Draw the number line and find the following

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a. 7+5 b.12-6
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11.Name the property:

a.19+63 = 63 + 19

b.20 + 0 = 20

 $c.(68 \times 4) \times 20 = 68 \times (4 \times 20)$ 

### FIVE MARK QUESTIONS

1. Find the value of the following using suitable properties:

3845×5×782+769×25×218

2.A truck can carry 582 boxes of biscuits weighing 13kg each, whereas a tempo can carry 418 boxes each of the same weight. Find the total weight that can be carried by both the vehicles ?

3.A box contains 25 strips having 12 capsules of 500mg medicine in each capsule. Find the total weight in grams of medicine in 30 such boxes.

4.A cab-driver filled his car petrol tank with 43 litres of petrol on Monday. The next day, he filled the tank with 57 litres of petrol. If the petrol costs Rs 67 per litre, how much money did he spend in all on petrol?5. A merchant had 280000 with him. He placed an order for purchasing 28 smart phones at Rs.8400 each. How many more smart phones he could have purchase with the amount he had?

6. The cost of 12 dozen banana is 720. Abhisek has Rs.1500 with him. He wants to distribute one banana to each person on the street. How many bananas can he buy? Mention the value you depict from this act of Abhisek?

7. Mukesh lives form a hostel which charges Rs 55 for Dinner and 45 for Lunch. Find the money he has to pay for seven days.

8. On Nov 21, 27 adults visited an amusement park. On Nov 22, 23 adults visited the amusement park. The entrance fee for the adults is Rs 100. How much amount is collected from the adults in these two days? 9.Using short cuts determine the following

a.12763+99999 b.87233 – 9999

- 10.Using short cuts determine the following
  - a. 2723×9999 b.130000÷625

# **3.BASIC GEOMETRICAL IDEAS**

## **ONE MARK QUESTIONS**

- 1.A\_\_\_\_\_ determines a location.
- 2. How many lines pass through one given point?
- 3. How many lines pass through two given points?
- 4. A line has \_\_\_\_\_ length.
- 5.Number of points a line can have are \_\_\_\_\_
- 6. A portion of a line which has two end points\_\_\_\_\_
- 7. A line segment has definite\_\_\_\_\_
- 8. A flat surface which extends indefinitely in all directions is called \_\_\_\_\_\_
- 9. Two lines meeting at a point are called \_\_\_\_\_\_
- 10. Three or more lines which pass through same point are called\_\_\_\_\_
- 11. The lines which do not intersect and have equal distance between them are called\_\_\_\_\_
- 12. Number of line segments which can be drawn by joining two points\_\_\_\_\_
- 13. Three or more points which lie on a same line are called\_
- 14. An angle is made up of two \_\_\_\_\_\_ starting from common end point
- 15.\_\_\_\_\_ is a simple closed curve made up of line segments.
- 16.A\_\_\_\_\_\_is the path of a point moving at the same distance from a fixed point.
- 17. The fixed point of a circle is called its\_\_\_\_\_
- 19. A \_\_\_\_\_\_ of a circle is a line segment joining any two points on the circle
- 20.A\_\_\_\_\_\_is a chord passing through the centre of the circle.

21.Diameter =  $2 \times$ \_\_\_\_

- 22.A part of a circle is called an\_\_\_\_\_
- 23. The area enclosed by an arc its corresponding chord is called\_
- 24. The area enclosed by an arc and the two radii joining the centre to the end points of the arc is called\_\_\_\_\_
- 25.The diameter of a circle divides it into two\_\_\_\_\_
- 26.The line segments are the \_\_\_\_\_ of the polygon.
- 27. Any two sides with a common end point are \_\_\_\_\_\_sides
- 28.The meeting point of a pair of sides is called a \_\_\_\_\_
- 29. The join of any two non-adjacent vertices is a \_\_\_\_\_
- 30.A\_\_\_\_\_ is a four sides polygon.

### THREE MARK QUESTIONS

1..How many line segments and points are there name them

A B C D E

2. Identify the closed curve ,simple curve and simple closed curve



3. How many angles does the given figure have?



4.Name the points in the interior, exterior and on the circle



## 4.UNDERSTANDING ELEMENTARY SHAPES

## **ONE MARK QUESTIONS**

1.Two line segments having the same length are said to be\_\_\_\_\_ 2. If the length of a line segment AB = 3 cm then 2AB will be 3. The number of diagonal in a triangle are 4. If two lines are perpendicular to each other then angle between them at the point of contact is\_\_\_\_\_ 5.We use a \_\_\_\_\_\_ to measure an angle. 6.An angle is measured in 7.1/4 revolution represents a \_\_\_\_\_ angle. 8.1/2 revolution represents a \_\_\_\_\_angle. 9.One complete revolution represents a \_\_\_\_\_angle 10. The measure of a right angle is\_\_\_\_\_ 11. The measure of a straight angle is \_\_\_\_\_ 12.An angle is \_\_\_\_\_ if its measures is between  $0^{\circ}$  and  $90^{\circ}$ 13.An angle is \_\_\_\_\_ if its measures is between  $90^{\circ}$  and  $180^{\circ}$ 14.An angle is if its measures is between  $180^{\circ}$  and  $360^{\circ}$ 15.A triangle in which all sides are unequal in length is called a triangle. 16.A triangle in which exactly two sides are equal in length is called an triangle. 17.A triangle in which all sides are equal in length is called an \_\_\_\_\_\_ triangle. 18.A polygon having three sides is called a 19.A polygon having four sides is called a 20.A parallelogram in which an interior angle is 90° is called a 21.A quadrilateral in which all sides are equal is called a \_\_\_\_\_ 22.A rhombus in which an interior angle is of 90° is called a 23. A quadrilateral in which exactly one pair of sides is parallel is called a\_\_\_\_\_ 24.In a rectangle diagonals are always equal in\_\_\_\_\_ 25. A horizontal line and a vertical line always intersect at \_\_\_\_\_ angles 26. Cube, cuboid are \_\_\_\_\_dimensional shapes 27.A cuboid has \_\_\_\_faces, \_\_\_\_vertices and \_\_\_\_\_edges 28.A has a flat face, a curved surface, a circular edge and one vertex. 29.A has a curved surface, no edge and no vertex. 30. is a solid shape whose base is a polygon and lateral faces are triangles with common vertex.

## THREE MARK QUESTIONS

1.If a bicycle wheel has 20 spokes, then the angle between a pair of two consecutive spokes in degree 2.If A,B,C are three points on a line such that AB=10cm, BC=3cm and AC=7cm which one of them lies between the other two? 3. Classify each one of the following angles:



4. Classify the following triangles according to their angles



5. Classify the following triangles according to their sides



6. Classify the types of quadrilateral



## **5.INTEGERS**

## **ONE MARK QUESTIONS**

- 1. The preceding number of 1 on number line is\_\_\_\_\_
- 2. The integer succeeding 9 is:\_\_\_\_\_
- 3. What will be the opposite of 3 Km south?\_\_\_\_\_
- 4. 7 added to -1 gives\_\_\_\_\_
- 5. 1 subtracted from 1 gives\_\_\_\_\_
- 6. 3 taken away from 0 gives\_\_\_\_\_
- 7. Absolute value of 11 is\_\_\_\_\_
- 8. The number of integers between -2 and 2 is\_\_\_\_\_
- 9. Sum of two negative integers is always\_\_\_\_\_
- 10. In addition and subtraction of the integers the sign of answer depends upon
- 11. Sum of two positive integers is always\_\_\_\_\_
- 12. Sum of a negative and a positive integer is \_\_\_\_\_
- 13. Sum of -14 and 9 is\_\_\_\_\_

14. The opposite of -7 is\_\_\_\_

- 15. Which number is to the left of -10 on the number line ?
- 16. 5 added to -5 gives\_\_\_\_
- 17. 2 steps to the right of -1 on number line gives\_\_\_\_\_
- 18. 7 steps to the left of 4 on number line gives\_\_\_\_\_
- 19. The number 3 less than -2 is\_

20. The number of integers between -2 and 2 is\_\_\_\_\_

#### THREE MARK QUESTIONS

1. Write the opposite of each of the following: a.Decrease in size b.Rise in water level c.20° C rise in temperature 2.Write the distinct integers whose sum is 7. 3. Which of the following statements is false: (a) 0 lies to the left of -1 (b)2 lies to the right of 1 (c)1 lies to the right of 0 (d) - 2 lies to the left of - 14. Which of the following statement is true: (a)2 subtracted from -3 gives 1 (b) -1 subtracted from -5 gives 6 (c)3 subtracted from -8 gives -11 (d)1 subtracted from -7 gives -65. Which of the following statements is false (a)-4>-5 (b) -4<5 (c) 4<-5 (d) 4>-5 6. Which of the following will give answer with negative sign (a) - 48 + 79 (b) - 40 + 40 (c) - 48 + 30 (d) 48 + (-39)7. Arrange the following in ascending order: a.3,0,-1,-4, -3,-6 b.-2,1,0,-3,4,-5 8.Arrange the following in descending order: a.7,-8,6,0,-1,4,-3 b. -9,8,7,-5,0,-1,2 9.Mark the following on the number line: a. -4 b.0 c.6 d.-7 10.Write the absolute value of the following: a.-15 b.9 c.-11 d.0 e. -10 f.-9 11. With the help of number line, give two possible integers for y if: a. y>8 b.y<-5 c. y>-2 12. Which number in each of the following pairs is to the left of the other on the number line: a.0, -6 b.-1,4 c.-5,-213.Write the additive inverse of the following: a.15 b.-25 c.-38 14.An aircraft was flying at a height of 4000feet. The pilot decreased the height by 500feet. Then he increased the height by 700 feet. At what height is the plane flying now? 15.Point A is 1500m below sea level and point B is 700m above sea level. Find the vertical distance between A and B.

## FIVE MARK QUESTIONS

1.Using a number line and answer the following:

a.Which number will we reach if we move 4 numbers to the right of -2? b.Which number will we reach if we move 5 units to the left of 1? c.If we are at -1 on the number line, in which direction should we move to reach -7? d.If we are at -6 on the number line, in which direction should we move to reach 0? 2.Find the value of the following: a.1000 + (-380) +(-270) b. (-273) + (-395) + 441 +126 3.Subtract: a. -201 from 315 b. 175 from -441 c. -351 from -190 4.If a\* b = a+b-5, find 8 \* (-4) and (-4) \* 8 . Is 8 \* (-4) = (-4) \* 8? 5. Find the sum: a. 137 and -354 b. -312,39 and 192 c. -50,-200, and 300 6.Fill in the blanks: a. (-8) + \_\_\_\_ = 0 b. 13 + \_\_\_\_ = -6 c. 12 + (-12)=\_\_\_\_ d.(-4) + \_\_\_\_ = (-12) e. \_\_\_\_ + (-15) = -10 7.Fill in the blanks with >,< or = sign a. (-3) + (-6) \_\_\_\_ (-3) - (-6) b. (-21) - (-10) \_\_\_\_ (-31) + (-11) c. 45- (-11) \_\_\_\_57 + (-4) d. (-25) - (-42) \_\_\_\_ (-42) - (-25)

#### **6.FRACTIONS**

#### **ONE MARK QUESTIONS**

1. is a number representing a part of a whole 2.A fraction with numerator 1 is called\_ 3.If the numerator is less than the denominator then the fraction is called fraction 4.If the numerator is more than the denominator then the fraction is called fraction 5. Fraction with same denominators are called fractions 6.Fractions with different denominators are called fractions 7.A fraction is said to be in \_\_\_\_\_\_ form if HCF of the numerator and the denominator is 1 8.13<sup>5</sup>/<sub>17</sub> is a \_\_\_\_\_fraction 9.  $\frac{12}{7}$  is an \_\_\_\_\_\_ fraction 10.  $\frac{7}{19}$  is a \_\_\_\_\_\_ fraction 11.  $\frac{5}{8}$  and  $\frac{3}{8}$  are \_\_\_\_\_\_ fraction 12.  $\frac{5}{8} = \frac{20}{p}$ , then the value of p \_\_\_\_\_ 13. Give true and false about the statements  $\frac{22}{121} = \frac{2}{11}$ 14.When  $\frac{1}{\Delta}$  is written with denominator as 12, its numerator is \_\_\_\_\_ 15.On subtracting  $\frac{5}{9}$  from  $\frac{19}{9}$  the result is \_\_\_\_\_ 16.Fill with >,< or = sign :  $\frac{16}{25}$   $\frac{13}{25}$ 17. Write the natural numbers from 2 to 14. What fraction of them are prime numbers 18.Expressed as improper fraction  $5\frac{4}{7}$ 

 $19.\frac{25}{19} + \frac{6}{19} =$ \_\_\_\_\_

20.If a proper fraction is represented on a number line between which two numbers will always lie?

#### THREE MARK QUESTIONS

1. Arrange in ascending order  $\frac{1}{3}$ ,  $\frac{6}{9}$ ,  $\frac{5}{3}$ ,  $\frac{11}{3}$ , 1 2. Arrange in descending order  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ , 1 3. Show the following on Number line a)  $\frac{1}{3}b)\frac{2}{7}$ ,  $c)\frac{7}{5}$ , d)  $\frac{13}{5}$ 4. Express the following as mixed fraction: a. $\frac{19}{6}b.\frac{68}{7}$ 5. Express the following as improper fraction: a. $2\frac{5}{6}$ , b. $9\frac{6}{7}$ 6. Find the missing value: a. $\frac{45}{60} = \frac{15}{5}$ , b. $\frac{18}{24} - \frac{1}{4}$ , c. $\frac{-15}{5} - \frac{15}{20}$ 7. Find the following a) Equivalent fraction of  $\frac{2}{3}$  with denominator 36 b) Equivalent fraction of  $\frac{1}{5}$  with Numerator 5 8. Fill with >,< or = sign: a. $\frac{1}{2}$ ,  $\frac{1}{5}$ , b. $\frac{7}{9}$ ,  $\frac{3}{9}c.\frac{5}{7}$ ,  $\frac{15}{21}$ 9. Add: a.  $\frac{13}{15} + \frac{12}{15}b.\frac{9}{21} + \frac{8}{21}c.\frac{4}{13} + \frac{6}{13}$ 10. Subtract: a.  $\frac{12}{15}, \frac{7}{15}b.\frac{23}{25}, \frac{15}{25}, \frac{17}{24}, \frac{9}{24}$ 

#### **FIVE MARK QUESTIONS**

1.Reduce the following fractions to the simplest form: a. $\frac{84}{98}$ b. $\frac{108}{256}$ c. $\frac{120}{800}$ 

2.Add the following: a.  $\frac{13}{24} + \frac{5}{16} = \frac{1}{2} + \frac{1}{3} + \frac{2}{4}$ 3.Subtract: a.  $\frac{7}{8} - \frac{2}{3} = \frac{11}{13} - \frac{2}{4}$ 

- 4. Sonu ate 1/3 part of an apple and the remaining apple was eaten by her brother Monu. How much part of the apple did Monu eat? Who had the larger share? By how much?
- 5. X finished colouring a picture in 7/12 hour. Y finished colouring the same picture in <sup>3</sup>/<sub>4</sub> hour. Who worked longer? By what fraction was it longer?

- 6.Sarita bought 2/5 metre of ribbon and Lalita 3/4 metre of ribbon. What is the total length of the ribbon they bought?
- 7.Nandhini's house is 9/10 km from her school. She walked some distance and then took a bus for 1/2km to reach the school. How far did she walk?

### 7.DECIMALS

## **ONE MARK QUESTIONS**

1. There are \_\_\_\_\_ parts in decimal number. 2.Write in fraction form 1.23 3.Write in decimal form 78/1000 4. Which is greater? 0.12 or 0.21 5 Write the place value of 2 in the following decimal. 64.258\_\_\_\_\_ 6.Express as metres using decimals. 25 cm 7. 20+9+5/100 can be written in decimal as 8. The expanded form of 19.64 is\_\_\_\_\_ 9. 5.008 can be written in words as 10. Which of the following is greater? a) 1.09 b) 0.19 c) 1.90 d) 1.009 11. Which of the following is smaller? a) 0.7 b) 0.07 c) 0.007 d) 0.0007 12. Which of the following is true a) 0.3 > 0.4 b) 0.07<0.02 c) 3>0.8 d) 0.5 =0.05 13. Two tens and nine tenths write in decimal form 14. 725 Paisa in rupees can be written as 15. Find the value of 9.756 – 6.28 16. 32.549 > 32.458 because a)Tenth part is more b) Hundredth is more c)Thousandth is more d) Whole part of both number are equal 17. What is the place value of 9 in the given decimal 19.4\_\_\_\_\_ 18.4.19 m in cm can be written as \_\_\_\_\_ 19. 22g in Kg can be written as \_\_\_\_\_ 20.0.456 × 10 = \_\_\_\_\_

## THREE MARK QUESTIONS

1.Order these decimals from least to greatest:

a. 119.60 , 120.01, 119.06 , 119.61

- b. 1561.32, 1561.032, 1562.31
- c. 101.812, 101.218, 101.128

2. Write 5 decimals between below given pair in order from greatest to least

(a) 1.100 , 1.121 (b) 1.241 , 1.421

3. Write the following decimals in the place value table.

(a) 69.4 (b) 1.3 (c) 1121.6

4. Five athlete are entered into a competition. Four of the athlete have had their turns. Their scores are 9.8 s, 9.75 s, 9.79 s, and 9.81 s to run 200m distance. What score must the last athlete get in order to win the competition?

- 5. Write each of the following decimals in words (a) 01.03 (b) 1.24 (c) 101.56 (d) 11.07
- 6. Show the following numbers on the number line. (a) 0.2 (b) 1.1 (c) 1.5 (d) 2.1
- 7. Find the sum in each of the following: (a) 21.076 + 22.551 + 22.004 (b) 21.95 + 10.005 + 1.7
- 8. Find the value of: (a) 19.756 6.18 (b) 114.6 91.847
- 9. Write as fractions in lowest terms.

(a) 0.10 (b) 0.25 (c) 0.40

10. Express as metres using decimals. (a) 25 cm (b) 21 m 45 cm

11. Raju bought a book for Rs. 35.65. He gave Rs. 50 to the shopkeeper. How much money did he get back from the shopkeeper?

12. Subtract :Rs. 18.25 from Rs. 20.75

13. Jatin had 20 m 5 cm long cloth. He cuts 4 m 50 cm length of cloth from this for making a curtain. How much cloth is left with him?

14. Ram walked 1 km 35 m in the morning and 2 km 7 m in the evening. How much distance did he walk in all?

15.Write in expanded form: a. 12.098 b.187.452

16.Express as decimal : a. 11/20 b. 5/8

#### FIVE MARK QUESTIONS

1. Arnav bought vegetables weighing 11 kg. Out of this, 3 kg 500 g is Cabbage, 2 kg 75 g is tomatoes and the rest is onion. What is the weight of the onion in kg?

2. Anamika travels 10 km 50 m every day. Out of this, she travels 5 km 200 m by train and the rest by auto. How much distance does she travel by auto?

3. Rana purchased Rs49.46 in groceries at a store. The cashier gave her 1.46 in change from a Rs 100 bill. Rana gave the cashier an angry look. What did the cashier do wrong?

4. Sachin has 4250.82 in her checking account in Citibank How much does he have in her account after he makes a deposit of 1200.75 and a withdrawal of 1850.90?

5.Radha cycled 2098m in morning and 1296 m in evening. Find the total distance she cycled in km. Has she cycled more than 4.005km.?

6. Alok purchased 6kg 280g apples and 5kg 225g grapes. Find the total weight of the fruits purchased by Alok in kg. How much more is the weight than 10 kg?

## 8.ALGEBRA

# **ONE MARK QUESTIONS**

1. The branch of mathematics in which we study the use of letters is called

2. Variables are used to represent an \_\_\_\_\_ quantity

3.Constanthas value

4.'Y exceeds by 5' can be expressed as

5. Write a verbal expression for the algebraic expression 4x+8.

6. The number of days in 'W' weeks

\_is an algebraic expression which involves an equal to(=)sign. 7.\_\_

8. The value of the variable in an equation which satisfies the equation is called to the equation

9.An expression consisting of one term is called\_\_\_\_

10.An expression consisting of two terms is called\_\_\_\_\_

11. Give an expression for 'Three times p'\_

12. The verbal statement for the expression 'm -15'

13. The numerical coefficient in -4abc is \_\_\_\_\_

14. The side of rhombus is denoted by r, express the perimeter of the rhombus in terms of r

15.Write in the form of an equation 'One-third of a number k increased by 5 is 14'

16.Write in the form of an equation '2 more than 7 times y equals 16'

17.If 5a+10=25, then the value of y is\_\_\_\_\_

18. X metres = \_\_\_\_\_centimetres

19.Find the solution of the equation 2b-1=7

20. The perimeter of the triangle with sides a, a and b is\_\_\_\_\_

## THREE MARKS

1. Give expressions for the following cases.

(a) 71 added to m (b) 99 subtracted from m

(c) n multiplied by 8 (d) p divided by 10

2. Which out of the following are expressions with both variable and numbers only?

(a) p-9p-9 (b)  $(11\times20)-8x(11\times20)-8x$  (c)  $5(21-7)+7\times2+p5(21-7)+7\times2+p$ 

**3.**Get the algebraic expressions in the following cases using variables, constants and arithmetic operations.

(i) Subtraction of z from y. (ii) One-half of the sum of numbers a and b.

(iii) The number y multiplied by itself.

**4.** Define variable and constant with example.

5. Write true or false

a. 2x - 4 > 11 is an equation

b. x = 5 is the solution of the equation 3x + 2 = 17.

c. x minutes are equal to 60 x seconds.

6. Which of the following equations does not have solution in integers?

a. x + 1 = 1b. 2x + 1 = 4c. 1 - x = 5

7. Which of the following equation has x = 3 as a solution?

a. x - 2 = 5 b) x + 2 = 5 c) 2x + 1 = 0

8. The length of a rectangular hall is 4m less than 3 times the breadth of the hall. What is the length if the breadth is 'b' m?

9. Meena, Beena and Leena are climbing the steps to the hill top. Meena is at step 's'. Beena is 8 steps ahead and Leena 7 steps behind. Where are Beena and Leena? The total number of steps to the hill top is 10 less than 4 times what Meena has reached. Express the total number of steps using's'.

10. Categorize into like and unlike terms

a. 3a<sup>2</sup>bc, 3abc, 6a<sup>2</sup>b, 5a<sup>2</sup>bc, 8a<sup>2</sup>bc, 8abcb. a<sup>3</sup>, ac, 5a<sup>3</sup>, 6ac, a<sup>6</sup>

11. Write the terms of the expression given here

a. -3mn + 4np - 5pmb. 3y-5t + 2zc. 2ab + 3c - 2p + 2q

12. State whether the following are monomial, binomial and trinomial

a. 4abc - 4abb. 16x + 2y + 6xyc. 4xyz

## FIVE MARK QUESTIONS

1.Complete the table and by inspection of the table, find the solution to the equation x -11 = 6

Х	11	12	13	14	15	16	17	18	19	20	
x – 11	-	-	-	-	-	-	-	-	-	-	-

2. Complete the table and by inspection of the table, find the solution to the equation 2z = 44

z	14	15	16	17	18	19	20	21	22	
2z	-	-	-	-	-	-	-	-	-	-

3.Complete the table and find the solution of the equation z/5 = 6 using the table.

z	5	10	15	20	25	30	35	40	45	
z/5	1	2	3	-	-	-	-	-	-	-

4.Solve the following equations: a. 7y + 10 = 38 b. 2z - 3 = 17 c. 3p + 23 = 385.Solve the following equations: a.  $\frac{3}{2}a + 5 = 11$  b.  $\frac{2}{3}b + 7 = 9$ 

6.TakeSarita's present age to be 'y' years

- a. What will be her age 5 years from now?
- b. What was her age 3 years back?

c. Sarita's grandfather is 6 times her age. What is the age of her grandfather?

d.Grandmother is 2 years younger than grandfather. What is grandmother's age?

7.A class with 'p' students has planned a picnic. Rs.50 per students is collected, out of which Rs.1800 is paid in advance for transport. How much money is left with them to spend on other items?

#### **9.MENSURATION**

#### **ONE MARK QUESTIONS**

1. The distance covered along the boundary of a rectangle is called its\_\_\_\_\_

2. The perimeter of a square is\_\_\_\_\_

3. The amount of surface enclosed by a closed figure is called its\_\_\_\_\_\_

4. Area of which figure is length x breadth\_\_\_\_

5. What will be the distance covered by Shalini by taking three rounds around a square park of side 2 cm \_\_\_\_\_

6. What is the perimeter of a regular pentagon whose each side measuring 5 cm

7. The shape of your class blackboard is\_\_\_\_\_

8. The perimeter of a triangle whose sides are 5 cm, 2 cm and 3 cm.\_\_\_\_\_

9. The perimeter of regular hexagon of side 4 cm will be\_\_\_\_\_

10. The formula for finding area of square is\_\_\_\_\_

11. The perimeter of regular octagon is 16 cm, the length of each side will be\_\_\_\_\_

12. Which formula will be used to find the area of wall of your class-room\_\_\_\_\_

13. If perimeter of triangle is 15 cm and any two sides are of length 4 cm and 3 cm then length of third side will be\_\_\_\_\_

14. 1 m 25 cm is -----cm.

15. If the area of one tile is 102. What will be the area of 5 tiles?

16. If the cost of painting one black-board is Rs.50, what will be the cost of painting 10 black-boards\_\_\_\_\_

17. The perimeter of an equilateral triangle is\_\_\_\_\_

18. The width in area of rectangle is\_\_\_\_\_

19. The cost of fencing a square park of side 100 m at the rate of Rs.10 per m will be\_

20. The perimeter of an isosceles triangle with equal side of length 4 cm and third side of length 6 cm will be\_\_\_\_\_

# THREE MARK QUESTIONS

1. Find the perimeter of the following :

(a) A triangle of sides 12 cm, 5 cm and 13 cm.

(b) An equilateral triangle of side 8 cm

2. Find the perimeter of the following :

a) An square of side 10 cm b) An rectangle of side 11 cm, 10 cm

3. Find the perimeter of the following :

(a) An isosceles triangle with equal sides 4 cm each and third side 3 cm.

(b) Regular hexagon of side 8 cm

4.Two sides of a triangle are 12 cm and 14 cm. The perimeter of the triangle is 36 cm. What is its third side? 5.The perimeter of square is 40 cm, what is the side length?

6. The length of the rectangle is 10 cm and perimeter is 30 cm, what is the other side ?

7. Find the perimeter of a rectangle whose length and breadth are 150 cm and 1 m respectively.

8. Sachin takes 10 rounds of a rectangular park, 50 m long and 20 m wide. Find the total distance covered by him.

9. Find the distance travelled by Naina if she takes three rounds of a square park of side 60 m.

10. The lid of a rectangular box of sides 40 cm by 10 m is to be sealed all round with tape. What is the length of the tape required?

11. Find the areas of the rectangles whose sides are:

a. 12cm,32cm b.21m,15m

12. Find the areas of the squares whose sides are:

a.17cm b.23m

13. A room is 4 m long and 3 m 50 cm wide. How many square meters of caret is needed to cover the floor of the room.

14.Which has a larger perimeter

(a) a regular pentagon of side 3 cm (b) a regular hexagon of side 3 cm

(c) a regular heptagon of side 3 cm (d) a regular octagon of side 3 cm.

15. A table top measures 3 m by 50 cm, find the area in sq. m?

### FIVE MARK QUESTIONS

1.Length of a rectangular field is 250m and width is 150m. Anuradha runs around this field 3 times. How far did she run? How many times she should run around the field to cover a distance of 4km?

2.Sweety runs around a square park of side 75m. Bulbul runs around a rectangular park with length 60m and breadth 45m. Who covers less distance?

3.What is the cost of tiling a rectangular plot of land 500m long and 200 m wide at the rate of Rs 8 per hundred sq m.

4.A floor is 5m long and 4m wide. A square carpet of sides 3m is laid on the floor. Find the area of the floor that is not carpeted.

5. Five square flower beds each of sides 1m are dug on a piece of land 5m long and 4m wide. What is the area of the remaining part of the land?

6.Jatin wants to cover the floor of a room 3 m wide and 4 m long by squared tiles. If each square tile is of side 0.5 m, then find the number of tiles required to cover the floor of the room .

7.By splitting the following figures into rectangle, find their areas(The measurements are given In centimetres)



#### **10.RATIO AND PROPORTION**

## **ONE MARK QUESTIONS**

1. The ratio of 90 cm to 1.5 m is.....

- 2. 6:4 is equivalent ratio of .....
- 3. Find the ratio of 81 to 108 ?
- 4. The ratio is said to be in simplest form if common factor is \_\_\_\_\_\_.
- 5. Fill in the blank :- 35/42 = -/6
- 6. Two quantities can be compared only if they are in the same \_\_\_\_\_.
- 7. In proportion first and the last terms are called \_\_\_\_\_
- 8. Four terms a , b , c , d are said to be in proportion if \_\_\_\_\_
- 9. Find the value of x in 3: 4 = x: 16?
- 10. In a class there are 20 boys and 15 girls. The ratio of boys to girls is:
- 11. The ratio 35 : 84 in simplest form is:\_\_\_\_\_
- 12. Fill in the blank :- 32 m : 64 m = 6 sec : \_\_\_\_\_
- 13.When two ratios are equal, they are said to be in\_\_\_\_\_
- 14. 60 : 120 is equivalent ratio of \_\_\_\_\_
- 15. The cost of 105 envelopes is Rs 35. How many envelopes can be purchased for Rs10 ?
- 16. Find the ratio of 500 ml to 2 lt ?
- 17. Find the ratio of 55 paise to Re 1?
- 18. The ratio of 98 to 63 is \_\_\_\_\_
- 19. Which of the following is correct :-(a) 3 : 5 = 15 : 25 (b) 26 : 32 = 10 : 20 (c) 7 : 3 = 12 : 3 (d) 5 : 15 = 8 : 20
- 20. Fill in the blank :- 22/\_\_\_ = 2

## THREE MARK QUESTIONS

1.At the parking stand of Ramleela ground, Karthik counted that there are 115 bicycles, 75 scooters and 60 bikes. Find the ratio of the number of cycles to the total number of vehicles.

2. An office opens at 10 a.m. and closes at 6.30 p.m. with a lunch break of 30 minutes. What is the ratio of lunch break to the total period in the office?

3.In a year, Ravi earns Rs.480000 and paid Rs.24000 as income tax. Find the ratio of his income tax to income after paying income tax.

4. Which ratio is larger 10:21 or 21:93?

5.Out of 30 students in a class, 6 like football, 12 like cricket and remaining like tennis. Find the ratio of

a. Number of students liking foot ball to the number of students liking tennis

b. Number of students liking cricket to total number of students

6.Divide 20 pens between Sheela and Sangeeta in the ratio of 3 : 2.

7.A line segment 63cm long is to be divided into two parts in the ratio 2:5. Find the length of each part.

8.In a school, the ratio of the number of large classrooms to small rooms is 3:4. If the number of small rooms is 20, then find the number of large rooms.

9. The ratio of the length of the school hall to that of the width is 3:2. If the width is 28m. Find its length. 10. Determine if the following are in proportion

a. 15,45,40,120 b. 32,48,70,210 c.24,28,36,48

11.If x,24,9,12 are in proportion, then find x.

12.Determine if the following ratios form a proportion. Also, write the middle terms and extreme terms where the ratios form a proportion

a. 25cm : 1m and Rs.40 : Rs.160 b. 2kg : 80kg and 25g : 625g

c. 200ml : 2.5 litre and Rs4 : Rs50

13.If the cost of 7m of cloth is Rs.294, find the cost of 5m of cloth.

14.Ekta earns Rs1500 in 10days. How much will she earns in 30 days?

15. The weight of 72 books is 9kg. What is the weight of 40 such books?

16. Anish made 42 runs in 6 overs and Anup made 63 runs in 7 overs. Who made more runs per over?

#### FIVE MARK QUESTIONS

1.A father divided Rs.9,99,900 amongst his three sons Jack, John and Sam in the ratio 2:4:3. How much does each get?

2.Of the 288 persons working in a company,112 are men and the remaining are women. Find the ratio of the number of a. men to that of women b. men to the total number of persons c.women to the total number of persons

3.In an election, the votes cast for two of the candidates were in the ratio 7:5. If the successful candidate received 20734 votes, how many votes did his opponent receive?

4. Present age of father is 42 years and that of his son is 14 years. Find the ratio of

a. Present age of father to the present age of son.

b. Age of the father to the age of son, when son was 12 years old

c. Age of father after 10 years to the age of son after 10 years.

d. Age of father to the age of son when father was 30 years old.

5.Cost of 5kg of wheat is Rs.30.50. a. What will be the cost of 8kg of wheat?

b. What quantity of wheat can be purchased in Rs61?

6.a.Cost of 4 dozens bananas is Rs60. How many bananas can be purchased for Rs.12.50

b.The weight of 72 books is 9kg. What is the weight of 40 such books?

7.a.Raju purchases 10 pens for Rs 150 and Manish buys 7 pens for Rs84. Can you say who got the pens cheaper?

b.Anish made 42 runs 6 overs and Anup made 63 runs in 7 overs. Who made more runs per over?

## **11.DATA HANDLING**

#### **ONE MARK QUESTIONS**

1.Primary data is also called\_\_\_\_\_data

2.A table showing how many times has each value occurred is called a\_\_\_\_\_

3.A\_\_\_\_\_represents data through pictures of objects.

4.In a bar graph space between rectangles is always \_\_\_\_\_

5.True and false statement

a) In a bar graph, the width of bars may be unequal.

b) In a bar graph, bars of uniform width are drawn horizontally only.

c) In a bar graph, the gap between two consecutive bars may not be the same.

d) In a bar graph, each bar (rectangle) represents only one value of the numerical data

#### FIVE MARK QUESTIONS

1. The below bar graph shows the monthly expenditure of Rajesh family on various household items



a) Which item is taking the maximum expenditure?

b) which item is taking the least expenditure?

c) How much Rajesh spent on Food and transport?

2.In an examination, the grades achieved by 40 students of a class are given below

B, C, C, E, A, C, B, B, D, D, D, D, B, C, C, C, A, C, B, E, A, D, C, B, E, C, B, E, C, D, A, B, C, E, D, D, A, A, C, E

- (a)Arrange the grades using tally marks
- (b) How many students get grade A?
- (c) How many students get grade E?
- (d) The grade where maximum students are present
- (e) The grade where minimum students are present

3.Following pictograph shows the number of girls in five classes.

Class	
5 <sup>th</sup>	Number of Girls in classes $\checkmark = 5$ girls
6 <sup>th</sup>	
7 <sup>th</sup>	$\textcircled{\begin{tabular}{lllllllllllllllllllllllllllllllllll$
8 <sup>th</sup>	$\textcircled{\begin{tabular}{lllllllllllllllllllllllllllllllllll$
9 <sup>th</sup>	$\textcircled{\begin{tabular}{lllllllllllllllllllllllllllllllllll$

Answer the below questions:

- (a) Which class has the minimum number of girls?
- (b) Which class has the maximum number of girls?
- (c) How many girls are there in Class 6?
- (d) What is the total number of girls in the Classes 6 to 9?

4. The number of items sold by a shopkeeper on six consecutive days of a week is as follows :

Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Number of	140	120	60	100	180	220	200
items sold							

Draw a bar chart to represent the above information.(draw vertical bar)

5.Number of mobile users in various age groups in a city is listed below:

Age group(years)	1-20	21-40	41-60	61-80
No of mobile users	35000	80000	55000	20000

Draw a bar graph to represent the above information.(draw horizontal bars)