

SYLLABUS

Summative Assessment- I

1. Knowing Our Numbers
2. Whole Numbers
3. Playing with Numbers.
4. Basic Geometrical Ideas.
5. Integers
6. Understanding Elementary shapes.
7. Fractions
8. Data Handling

Summative Assessment- II

1. Decimals
2. Practical Geometry
3. Mensuration
4. Algebra
5. Ratio and Proportion
6. Symmetry (Only Lab Activity)

Test Papers

- 1 MCQ
- 2 Model test paper – Summative Assessment-I (Solved)
- 3 Model test paper – Summative Assessment-I (Unsolved-1)
- 4 Model test paper – Summative Assessment-I (Unsolved-2)
- 5 Model test paper – Summative Assessment-II (Solved)
- 6 Model test paper – Summative Assessment-II (Unsolved-1)
- 7 Model test paper – Summative Assessment-II (Unsolved-2)
- 8 Revision Worksheets

SCHEDULE FOR FORMATIVE ASSESSMENTS: 2013-14**FORMATIVE ASSESSMENT-I** [50 Marks]

MCQ	[25 Marks]
HOLIDAY HOMEWORK	[15 Marks]
LAB ACTIVITIES	[10 Marks]

~~~~~  
**FORMATIVE ASSESSMENT-II** [50 Marks]

|                                           |            |
|-------------------------------------------|------------|
| PEN & PAPER TEST                          | [30 Marks] |
| MCQ                                       | [10 Marks] |
| CLASS PERFORMANCE/<br>NOTEBOOK ASSESSMENT | [10 Marks] |

~~~~~  
FORMATIVE ASSESSMENT-III [50 Marks]

PEN & PAPER TEST	[30 Marks]
MCQ	[10 Marks]
ACTIVITIES	[10 Marks]

~~~~~  
**FORMATIVE ASSESSMENT-IV** [50 Marks]

|                     |            |
|---------------------|------------|
| MCQ                 | [20 Marks] |
| PROJECT WORK        | [15 Marks] |
| LAB ACTIVITY        | [10 Marks] |
| NOTEBOOK ASSESSMENT | [5 Marks]  |

MODULES**Module – 1****Chapter : Knowing Our Numbers****Contents:**

- |                                 |                    |
|---------------------------------|--------------------|
| (i) Comparing Numbers           | (iv) Estimation    |
| (ii) Ascending/Descending Order | (v) Roman Numerals |
| (iii) Place Value               |                    |

**Learning Objectives:**

Students acquire knowledge of whole numbers and natural numbers.

**Key Terms:**

Natural numbers, Whole numbers

~~~~~

Module – 2**Chapter : Whole numbers****Contents:**

- (i) Introduction of Natural and Whole Numbers
- (ii) Definitions of Key Terms
- (iii) Successor / Predecessor
- (iv) Define operations
- (v) Properties of Addition, Subtraction, Multiplication and Division
- (vi) Examples and related questions
- (vii) Distributive property

Learning Objectives:

Students acquire knowledge of operations possible on whole and natural numbers and properties of these operations. They apply the knowledge and develop skills in using properties on whole numbers in different kinds of problems.

Key Terms:

Natural numbers, Whole numbers

~~~~~

**Module – 3****Chapter : Playing with numbers****Contents:**

- (i) Define Factors and Multiples

- (ii) Properties of factors and multiples
- (iii) Prime and composite numbers
- (iv) Odd and even numbers
- (v) Perfect numbers
- (vi) Divisibility test for 2, 3, 4, 5, 6, 8, 9, 10, 11
- (vii) Properties of divisibility

**Learning Objectives:**

Students learn about factors and multiples. They develop understanding of different kinds of numbers and also acquire knowledge of applying different divisibility tests. They also learn about Prime factorization and develop ability to find HCF & LCM and their problem sums.

**Key Terms:**

Factors, Multiples, Perfect number

~~~~~

Module – 4**Chapter: Playing with numbers (contd.)****Contents:**

- (i) Prime factorization
- (ii) LCM & HCF

Learning Objectives:

Students learn about Prime factorization and method to find HCF and LCM of the given numbers.

Key Terms:

Prime factorization, HCF and LCM

~~~~~

**Module – 5****Chapter: Playing with numbers (contd.)**

- (i) Properties of LCM & HCF
- (ii) Problem sums

**Chapter: 2. Basic Geometrical Ideas****Contents:**

- (i) Concept of Point, Line and Plane
- (ii) Definition of Line, Line Segment and Ray
- (iii) Introduction of curves and its types
- (iv) Polygons

- (v) Angles
- (vi) Triangles
- (vii) Circles and its parts

**Learning Objectives:**

Develop ability to find HCF & LCM and their problem sums. They also develop understanding on basic geometrical concepts, different types of curves, polygons and other basic geometrical shapes.

**Key Terms:**

HCF, LCM, Point, Line, Line segment, Intersecting lines, Parallel lines, Ray, Polygons, Angles, Triangles, Circles

~~~~~

Module – 6**Chapter : Integers****Contents:**

- (i) Need of integers and their introduction
- (ii) Representation of integers on number line
- (iii) Ordering of integers
- (iv) Addition and subtraction of integers

Learning Objectives:

Students develop understanding of integers and operation on integers. Develop skills in using and solving operations on integers.

Key Terms:

Ordering, Additive Inverse

~~~~~

**Module – 7****Chapter : Understanding Elementary Shapes****Contents:**

- (i) Measurement of Line segments
- (ii) Angles - Its kinds and measurement
- (iii) Perpendicular lines
- (iv) Classification of Triangles
- (v) Quadrilaterals and types of Quadrilaterals
- (vi) Polygons and its classification
- (vii) Three dimensional shapes

**Learning Objectives:**

Students get indepth knowledge of Line segment, Angles, Triangles, Polygons and Quadrilaterals including their classification and measurements.

**Key Terms:**

Quadrilaterals, 3-D shapes

~~~~~

Module – 8**Chapter : Fractions****Contents:**

- (i) Concept of fractions
- (ii) Types of fractions
- (iii) Equivalent fractions
- (iv) Simplest form of fractions
- (v) Like and unlike fractions
- (vi) Comparison of fractions
- (vii) Addition & subtraction of fractions

Learning Objectives:

- (i) Imparting knowledge of fractions and its types.
- (ii) Students learn more about fractions and its operations i.e. Addition and subtraction.

Key Terms:

Equivalent fractions, Proper and improper fractions

~~~~~

**Module – 9****Chapter : Data Handling****Contents:**

- (i) Recording and organization of data
- (ii) Pictograph
- (iii) Drawing and interpretation of Pictograph
- (iv) Bar graph
- (v) Drawing and interpretation of bar graph

**Learning Objectives:**

- (i) Students learn recording and organization of data. They also acquire knowledge of drawing and interpretation of pictograph.

- (ii) Students acquire knowledge about the concept of bar graph and its interpretation from the data.

**Key Terms:**

Data, Pictograph, Bar graph

**Module – 10****Revision For Half Yearly Examination****Module – 11****Chapter : Decimals****Contents:**

- (i) Concept of Decimals
- (ii) Fractions as decimals and vice versa
- (iii) Place values
- (iv) Comparison of decimals

**Learning Objectives:**

Students learn the concept of decimals and its comparison.

**Key Terms:****Decimal and Number line****Module – 12****Chapter : Decimals (contd...)****Contents:**

- (i) Application of decimals
- (ii) Addition and subtraction of decimals

**Learning Objectives:**

Imparting knowledge on use of decimals in simple daily life problems and operations of decimals.

**Key Terms:**

Money, length, weight

**Module – 13****Chapter : Practical Geometry****Contents:**

- (i) Construction of a circle
- (ii) Construction of a line segment
- (iii) Constructing a line segment equal to the given line segment
- (iv) Draw a perpendicular to a given line through a point.
  - (a) Lying on it
  - (b) Not lying on it
- (iv) Draw the perpendicular bisector of a given line segment
- (v) Construct an angle equal to a given angle
- (vi) Construction of angles of measure  $60^\circ$ ,  $30^\circ$ ,  $90^\circ$ ,  $45^\circ$ , and  $120^\circ$ .

**Learning Objectives:**

- (i) Students develop skills to draw figures using ruler and compass.
- (ii) Students acquire skills to draw correct and accurate figure from the given data.

**Key Terms:**

Perpendicular bisector

~~~~~

Module – 14**Chapter : Mensuration****Contents:**

- (i) Perimeter of square and rectangle
- (ii) Area of square and rectangle
- (iii) Perimeter and area of irregular figures
- (iv) Problem sums

Learning Objectives:

Students get knowledge about concepts of Perimeter and Area which are of great practical utility.

Key Terms:

Area, Perimeter

~~~~~



**Module – 15****Chapter : Algebra****Contents:**

- |                                        |                                     |
|----------------------------------------|-------------------------------------|
| (i) Concept of constants and variables | (iv) Use of expressions practically |
| (ii) Use of variables                  | (v) Introduction of an equation     |
| (iii) Expressions with variables       | (vi) Solving an equation            |

**Learning Objectives:**

Students develop an understanding of literal numbers and operations of literal numbers. Gain knowledge of algebraic expressions. Develop skill in simplifying and solving the equation.

**Key Terms:**

Like / unlike terms, grouping symbols, exponential form, literal numbers, linear equation.

~~~~~

Module – 16**Chapter : Ratio and Proportion****Contents:**

- (i) Concept of ratio and proportion
- (ii) Extreme and middle terms
- (iii) Express in ratio form
- (iv) Express in proportion form

Learning Objectives:

Develop understanding of ratio and proportion. Students learn the method of comparing two quantities with the help of ratio and proportion.

Key Terms:

Ratio, Proportion, Extreme and middle term

~~~~~

**Module – 17****Chapter : Ratio and proportion contd.****Contents:**

- (i) Unitary method

**Learning Objectives:**

Students develop ability in understanding and solving problems based on unitary method and direct variation.

**Key Terms:**

Unitary method.

~~~~~  
Chapter : Symmetry (ACTIVITY BASED)

Contents:

- (i) Concept of Linear Symmetry
- (ii) Figures with 2 lines of symmetry

Learning Objectives:

Students get an idea about the symmetrical objects in daily life.

Key Terms:

Line of Symmetry

~~~~~  
**Module – 18**

**Revision for Annual Examination**

~~~~~  
=====

ASSIGNMENTS**Assignment – 1**Topic : Knowing Our Numbers

Q.1. Write the greatest and the smallest numbers from the following.

(i) 7245, 7545, 7524, 7425

Greatest number _____

Smallest number _____

Q.2. Write 14,40,460 in expanded form.

Q.3. Write in Hindu Arabic numerals:

(i) LV : _____

(iv) LXIX : _____

(ii) XCI: _____

(v) CCCXLIV: _____

(iii) CLIX: _____

Q.4. Write the number names for (a) 11,205,630 (b) 1,36,50,208

(i) _____

(ii) _____

Q.5. Write the numerals for the following number names:

(i) Thirty lakh four thousand and thirteen.

(ii) Twenty three million four hundred fifty four thousand six hundred and five.

Q.6. Round off the given numbers as directed:

(i) 534 to nearest hundreds

(ii) 67 to nearest tens

(iii) 45325 to nearest thousands

- Q.7. A cabinet maker needs 72m long board for making one cabinet. How many cabinets can he make by using 17496m long board?
- Q.8. In a library, there are 23,180 books of English, 9,128 books of Hindi and 709 books of other languages. Find the total number of books in library.
- Q.9. Estimate
- (i) $13,805 + 3,977$ (Rounding off to nearest thousand)
- (ii) 673×833 (Rounding off to nearest tens)
- Q.10. A student multiplied 6,285 by 75 instead of multiplying by 57. How much was his answer greater than the correct answer?
- Q.11. Find the product of face value and place value of 8 in 68340.

=====

Have Fun With Roman Numbers

Make a clock indicating numbers from 1 to 12 in Roman numerals.

=====

Assignment – 2

Topic: Whole Numbers And Natural Numbers

Q.1. Fill in the blanks:

- (i) The smallest natural number is _____.
- (ii) The whole number _____ has no predecessor.
- (iii) $61 \times (55 - 32) =$ _____ $\times 55 -$ _____ $\times 32$.
- (iv) _____ is called additive identity of whole numbers.
- (v) The sum of two whole numbers is a _____ number.
- (vi) Successor of 230 is _____.
- (vii) $19 \times 100 \times$ _____ $= 1900000$
- (viii) On the number line, the smaller whole number lies to the _____ of the greater whole number.
- (ix) Addition of two place values of 4 in 48406 is _____.

$$(x) \quad 180 + (400 + 320) = \underline{\hspace{2cm}} + (180 + 400)$$

Q.2. Write the next two consecutive number of the given numbers.

$$(i) \quad 9899, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}.$$

$$(ii) \quad 509, \underline{\hspace{2cm}}, \underline{\hspace{2cm}}.$$

Q.3. Evaluate the following using the suitable rearrangement of whole numbers.

$$(i) \quad 250 \times 1102 \times 4$$

$$(ii) \quad 2 \times 80 \times 125 \times 50$$

$$(iii) \quad 7564 + 2122 + 436$$

$$(iv) \quad 2062 + 453 + 1438 + 547$$

Q.4. Find the values using suitable properties.

$$(i) \quad 1489 - 1489 + 1489 - 1489$$

$$(ii) \quad 1230 \times 2 + 1230 \times 8 + 1230 \times 10$$

$$(iii) \quad 650 \times 482 - 65 \times 10 \times 382$$

$$(iv) \quad 125 \times 678 - 25 \times 678$$

Q.5. Evaluate using distributive property.

$$(i) \quad 750 \times 96$$

$$(ii) \quad 3500 \times 1002$$

Q.6. Study the following patterns and fill in the blanks.

$$(i) \quad (2 \times 2) - (1 \times 1) = 3$$

$$(ii) \quad (3 \times 3) - (2 \times 2) = 5$$

$$(iii) \quad (4 \times 4) - (3 \times 3) = 7$$

$$(iv) \quad (54 \times 54) - (53 \times 53) = \underline{\hspace{2cm}}$$

$$(v) \quad \underline{\hspace{2cm}} - (347 \times 347) = 695$$

$$(vi) \quad (1238 \times 1238) - (1237 \times 1237) = \underline{\hspace{2cm}}$$

=====

Assignment – 3Topic : Playing With Numbers

Q.1. Fill in the blanks:

- (i) A number is divisible by 6 if it is divisible by _____ and _____ both.
- (ii) H.C.F of two consecutive numbers is _____ and hence such numbers are _____ numbers.
- (iii) Two numbers are said to be _____ if they do not have any common factor.
- (iv) Every _____ number except 2 is an odd number.
- (v) A factor of a number is an _____ of that number.

Q.2. Find the greatest 4 digit number, which is exactly divisible by 20, 30, 32 and 36.

Q.3. Find the L.C.M of 40, 45 and 48.

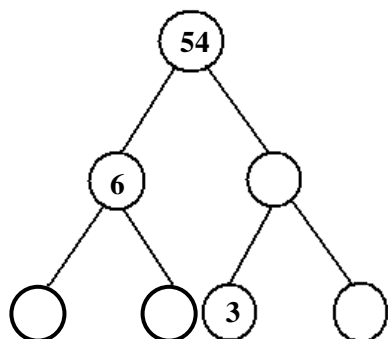
Q.4. Using divisibility test, check 6000 is divisible by

- (i) 8
- (ii) 3

Q.5. Find the H.C.F of 81 and 117.

Q.6. A merchant has 120 litres of oil of one kind, 180 litres of oil of another kind and 240 litres of third kind. He wants to sell the oil by filling three kinds of oil in tins of equal capacity. What should be the greatest capacity of such a tin?

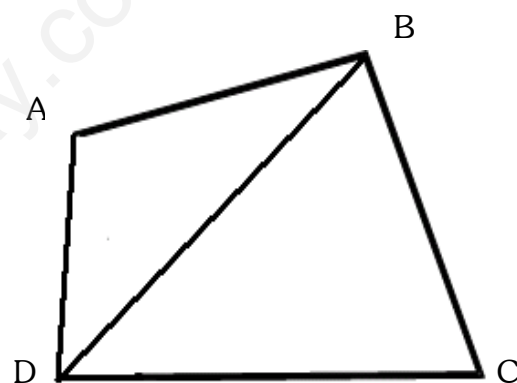
Q.7. Fill the missing numbers in the factor tree.



Assignment – 4

Topic - Basic Geometrical Ideas

Q.1. Name all the angles in the given figure. There are 8 angles in this figure.

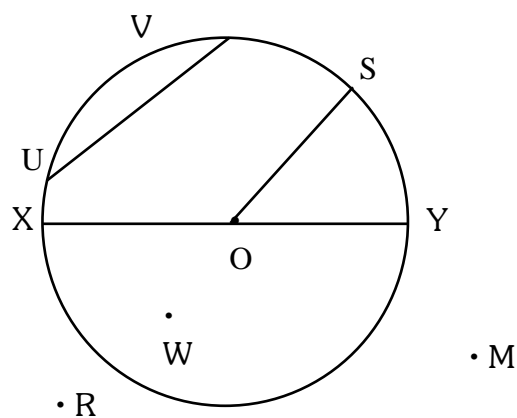


Q.2. Draw each of the following.

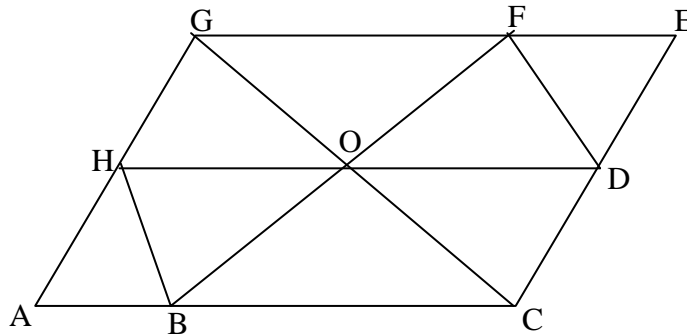
- (i) Simple curve (ii) Open curve (iii) Closed curve

Q.3. Identify the following from figure.

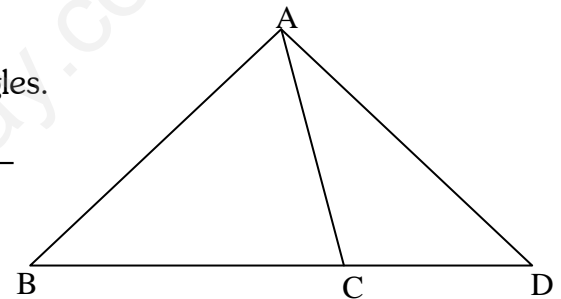
- (i) Centre of the circle _____
 (ii) A diameter _____
 (iii) 2 Radii _____
 (iv) 2 Chords _____
 (v) Exterior points _____
 (vi) Interior points _____



Q.4. Name all the triangle that can be seen in the given figure



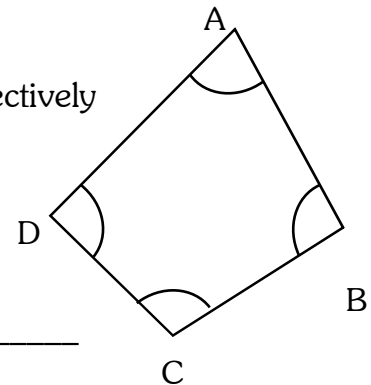
Q.5. In the given figure name the vertices, sides and angles.



Q.6. Observe the following and state;

- (i) Two pair of opposite sides and opposite angles respectively

- (ii) Two pair of adjacent sides & adjacent Angles



=====

Assignment – 5Topic : Integers

Q.1. Write the following integers in a descending order

– 3, –8, 15, – 20, 26, 10

Q.2. Write the opposite of each of the following statements

(i) Gain of 5kg

(ii) Loss of Rs. 360

(iii) Won by 2 goals.

(iv) – 55° C

Q.3. Write 5 negative integers less than – 15.

Q.4. Write 5 negative integers greater than – 10.

Q.5. Fill in the box by '<' or '>' so that the statement is true.

(i) 3 – 6

(iv) – 20 – 25

(ii) 0 – 8

(v) 3 0

(iii) 5 12

Q.6. Write the value of

(i) Successor of $-10 =$ _____

(ii) Predecessor of $810 =$ _____

Q.7. Represent the following on the number line-

(i) $4 + (-3)$



(ii) $-6 + 8$



Q.8. Simplify-

(i) $300 + (-205) + (-360) + 20$

(ii) $729 + (-715) + (-185)$

Q.9. Subtract:

(i) -3760 from -2890

(ii) -149 from 356

Q.10. Subtract the sum of -1050 and 813 from -23 .

Q.11. Fill in the blanks :

(i) $+5 + (-5) =$ _____

(ii) $-6 + (-3) =$ _____

(iii) $-5 + (-3) =$ _____

(iv) $-11 + (+7) =$ _____

(v) $+38 + (-37) =$ _____

(vi) $-18 + (-28) =$ _____

(vii) $-15 + (-16) =$ _____

(viii) $-7 + (-11) =$ _____

(ix) $+7 + (-11) =$ _____

(x) $-1 + (+36) =$ _____

(xi) $+1 + (-36) =$ _____

(xii) $(+1) + (-2) + (0) =$ _____

(xiii) $(+1) + (0) + (-2) =$ _____

(xiv) $(-3) + (+1) + (-2) =$ _____

(xv) $(+4) + (0) + (-4) =$ _____

=====

Assignment – 6Topic: Understanding Elementary Shapes

Q.1. Fill in the blanks:

- (i) The measure of a revolution is equal to the measure of a _____.
- (ii) Two intersecting lines are _____ if the angle between them is a right angle.
- (iii) A rhombus is a parallelogram whose all four sides are _____.
- (iv) A reflex angle is greater than a _____ angle.
- (v) A polygon with 6 sides is called _____.
- (vi) The distance between the end points of a line segment is its _____.
- (vii) A square is a _____ quadrilateral.
- (viii) Obtuse angle is always _____ $\frac{1}{4}$ of a revolution.
- (ix) The edges of a cube are of _____ length.

Q.2. What part of a revolution does a boy turn through if he is facing;

- (i) West and turns clockwise, to face North? _____

(ii) East and turns clockwise, all the way around back to East? _____

Q.3. Match the following:

<u>Column I</u>	<u>Column II</u>
(i) Right Angle	(a) Four sides
(ii) Isosceles Triangle	(b) 12 edges
(iii) Quadrilateral	(c) 360°
(iv) Cube	(d) $\frac{1}{4}$ revolution
(v) Complete angle	(e) 2 equal sides

Q.4. Name any 5 kinds of quadrilateral. Draw figure of each of them.

- (i) _____
- (ii) _____
- (iii) _____
- (iv) _____
- (v) _____

Q.5. Sagar is walking towards East. In which direction will he walk, if he suddenly changes his direction and turns to the right through:

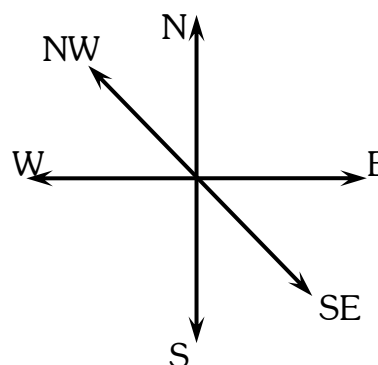
- (i) One complete angle _____
- (ii) One straight angle _____

Q.6. State the kind of angle and revolution that is formed between the following direction:

- (i) North and West (clock wise)

- (ii) East and South

- (iii) South east and North west



Q.7. Fill in the blanks:





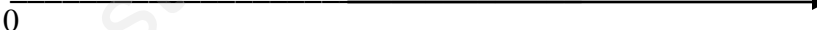
- (i) A circle has _____ vertex and _____ edge.
 (ii) A square pyramid has _____ edges and _____ faces.
 (iii) A triangular pyramid is also known as _____.
 (iv) Each face of a cuboid has _____ edges.

=====

Assignment – 7

Topic : Fractions

Q.1. Represent the following on the number line.

- a. $\frac{4}{8}$ 
 b. $\frac{1}{6}$ 
 c. $\frac{5}{10}$ 
 d. $\frac{3}{5}$ 
 e. $\frac{7}{3}$ 

Q.2. Write 3 equivalent fractions for each of the following

- (i) $\frac{12}{20}$ _____
 (ii) $\frac{6}{5}$ _____

Q.3. Compare the fractions by putting appropriate sign ($<$, $=$, $>$)

- (i) $\frac{1}{3}$ $\frac{6}{18}$ (ii) $\frac{3}{5}$ $\frac{5}{3}$
 (iii) $\frac{2}{3}$ $\frac{3}{4}$ (iv) $\frac{2}{4}$ $\frac{6}{12}$
 (v) $\frac{18}{30}$ $\frac{16}{30}$ (vi) $\frac{9}{10}$ $\frac{0}{10}$

Q.4. Find the equivalent fraction of $\frac{36}{72}$ with

(i) Numerator 3

(ii) Denominator 216

Q.5. Reduce to the lowest term & convert into mixed fractions.

(i) $\frac{45}{25} =$

(ii) $\frac{48}{32} =$

(iii) $\frac{68}{28} =$

Q.6. Arrange the following in ascending order: $\frac{4}{20}$, $\frac{7}{18}$, $\frac{2}{5}$, $\frac{3}{8}$

Q.7. Do as directed & express the answer in lowest term:-

(i) $\frac{2}{8} + \frac{3}{12}$

(ii) $3\frac{5}{12} + 6\frac{7}{12}$

(iii) $5\frac{6}{5} - 3\frac{5}{7}$

(iv) $1\frac{3}{8} - 1\frac{5}{16}$

Q.8. Manisha used $2\frac{3}{4}$ cups of sugar and $7\frac{1}{2}$ cups of flour for making a cake. How many cups of sugar and flour did she use altogether?

Q.9. What should be added to $7\frac{3}{5}$ to get 21?

- Q.10. Rita's weight is $50\frac{3}{4}$ kg and Anu's weight is $50\frac{4}{5}$ kg. Who is heavier and by how much?

=====

Assignment – 8

Topic – Data Handling

- Q.1. Observe the following data and answer the given questions.

Weight (in kg) of class VI students are indicated below.

35, 47, 37, 40, 45, 47, 35, 36, 32, 37, 42, 47, 46

45, 32, 30, 42, 47, 31, 32, 36, 37, 34, 42, 40, 32

- (i) Number of students having more than 40kg weight _____
- (ii) Number of students less than 35kg weight _____


- Q.2. A survey of 30 families conducted in a village by a company of Dairy products to record the number of goats in these families is given below.





















Frequency Distribution Table

12, 4, 5, 8, 12, 4, 5, 10, 7, 5, 4, 10, 11, 10, 4, 6,
7, 9, 12, 10, 6, 12, 10, 7, 11, 9, 7, 8, 4, 12

No. of goats	Tally marks	Frequency

- (i) Arrange the above data using tally marks.
- (ii) How many families have 12 goats? _____
- (iii) How many families have the least number of goats? _____
- (iv) How many families have the maximum number of goats? _____

Q.3. Pictograph shows the number of people who like different juices 1  = 10 persons.

Juices	Number of people	Frequency
Orange	       	
Grape	  	
Apple	    	
Mixed fruit	   	

(i) How many people chose orange juice?

(ii) Which juice is liked by the least number of people?

Q.4. The data given below shows the average rainfall in Cherrapunji, from June to November of a certain year:


Month	Rainfall (in cm)
June	30
July	35
August	25
September	20
October	15
November	15

Draw the bar graph to represent this information.

Q.5. Rohan collects data of the houses constructed in a society during the first six months of a year.

Month	Number of houses constructed
January	12
February	18
March	27
April	33
May	21
June	24

Draw a pictograph for the above data.

1  = _____ houses

Month	No. of houses constructed	Frequency
January		
February		
March		
April		
May		
June		

Q.6. Construct a frequency distribution table for the given data
2, 3, 4, 3, 2, 5, 4, 1, 3, 2, 2, 5, 3, 1, 2, 1, 1, 2, 2, 4, 3, 5, 1

No. of items	Tally marks	Frequency

=====

Assignment – 9

Topic : Decimals

Q.1. Compare the following by putting appropriate signs (< or > or =)

(i) 2.7 2.8

(ii) 4.6 4.006

(iii) 5.09 5.9

(iv) 49.25 49.253

(v) $9.27 \square 9.270$

(vi) $7.05 \square 7.50$

Q.2. Write the following as decimals:-

(i) $500 + 70 + 8 + \frac{3}{100} =$ _____

(ii) $90 + 5 + \frac{1}{10} + \frac{4}{100} =$ _____

(iii) Seventy nine point seven = _____

(iv) $7\frac{2}{10} =$ _____

(v) $\frac{7}{2} =$ _____

(vi) $\frac{11}{1000} =$ _____

(vii) 3 hundredths = _____

(viii) $33.05 - 4.05 =$ _____

(ix) $\frac{4}{25} =$ _____

(x) $86.75 + 0.21 =$ _____

Q.3. Express the following in Decimals

(i) 45 paise in rupees = _____

(ii) 38 rupees 40 paise in rupees = _____

(iii) 35 cm in metres = _____

(iv) 25 m 40 cm in metres = _____

(v) 261 cm in metres = _____

(vi) 52 mm in cm = _____

(vii) 10 cm 13 mm in cm = _____

(viii) 306 m in km = _____

(ix) 10 cm in m = _____

(x) 15 kg 850 g in kilogram = _____

Q.4. Convert following fractions in decimal notation.

(i) $\frac{52}{10} =$ _____

(ii) $\frac{6}{1000} =$ _____

(iii) $\frac{31}{100} =$ _____

(iv) $\frac{891}{1000} =$ _____

(v) $\frac{235}{100} =$ _____

Q.5. Write the following decimals as fraction and reduce it in lowest term.

Decimal	Fraction	Fraction in lowest form
4.5		
37.2		
0.85		
8.765		
0.072		

Q.6. Write in words

(i) 403.75 = _____

$$(ii) \quad 0.074 \quad = \quad \underline{\hspace{4cm}}$$

Q.7. Represent 3.7 on a number line

Q.8. Anushka has Rs 700 with her. She spent Rs 190.25 on her books, Rs 275 on grocery and Rs 85.50 on clothes. Find the total money left with her.

Q.9. Arrange the following decimals into ascending order. Also write the decimal numbers less than 3.5.

5.27, 4.32, 0.3 and 3.471

Q.10. A milkman had 78.5 litres of milk in his drums. He sold 38.25 litres in one colony and 32.75 litres in another colony. How much milk is left unsold?

Assignment – 10

Topic : Practical Geometry

Q.1. Construct a line segment of length 5cm and bisect it.

Q.2. Draw two intersecting line segments AB and CD with length 6.8cm and 5.2cm respectively. Name the point of intersection of the lines O. Measure $\angle BOC$.

Q.3. Draw an angle of measure 160° using protractor and construct its bisector using ruler and compass.

Q.4. Draw line segments AB and CD of lengths 3.2cm and 4cm respectively. Construct the line segment of following lengths.

(i) $2CD - AB$

(ii) $3AB$

Measure their lengths.

Q.5. Draw $\angle ABC$ of measure 120° where $BC = 7\text{cm}$. Take point P on BC such that $BP = 4.2\text{cm}$. Construct PR perpendicular to BC.

Q.6. Using ruler and compass construct the following angles:-

(i) 30°

(ii) 90°

=====

Fun With Construction:

1. Draw an angle PQR equal to 75° . Also construct its copy which is $\angle ABC$.

=====

Assignment – 11Topic : Mensuration

Q.1. Fill in the blanks:

- (i) By regular polygon, we mean the polygons having all its _____ and _____ equal.
- (ii) Amount of surface enclosed by a closed figure is called its _____.
- (iii) Area of square is the _____ of its two sides.
- (iv) Perimeter of regular pentagon of side b unit = _____ units

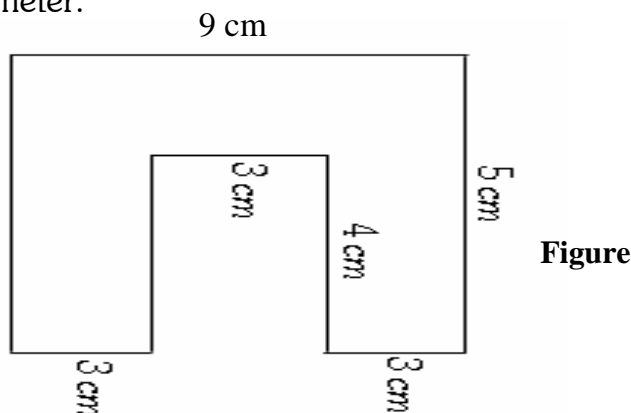
Q.2. A boy runs 4 rounds around a square park with side 22m.

- (i) Find the distance covered by him.
- (II) Also find the area covered by the square park.

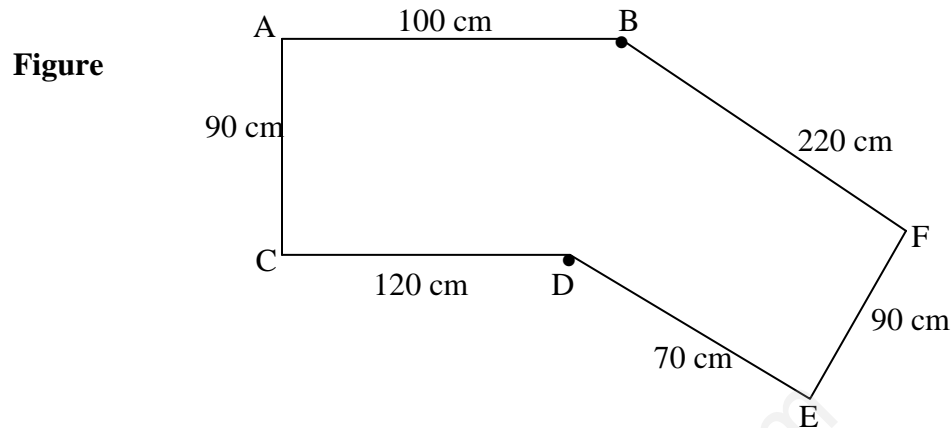
Q.3. The area of a rectangle is 216 m^2 and its breadth is 12m. Find the perimeter. Also find the cost of fencing this rectangular field @ Rs 4.50 per m.Q.4. Two sides AB and BC of $\triangle ABC$ are 28cm and 38cm respectively. Find the length of the side AC, if the perimeter of $\triangle ABC$ is 100 cm.

Q.5. Find the cost of fencing a rectangular park of side 20m and 10 m at the rate of Rs. 6 per metre.

Q.6. (i) Calculate area and perimeter.



Q.7 Find the perimeter of figure.



Assignment – 12

Topic – Algebra

Q.1. Fill in the blanks:

- Expressions involving constants and variables combined by arithmetical operations are called _____.
- Parts of algebraic expressions separated by a '+' or a '-' sign are called the _____ of the expressions.
- Letters which represent numbers are called _____.
- The sum of literals x and y can be written as _____.
- If price of a chocolate is Rs12, then price of x chocolate is _____.

Q.2. Write the following in algebraic form using numbers, literal numbers and arithmetic operations:

- y multiplied by -3 _____
- 7 more than number k _____
- One fourth of a number p _____
- A number 4 less than three times x _____
- 6 times x taken away from two fifth of y _____
- Quotient of x and y added to product of a and b _____

(vii) r less than the sum of t and q

(viii) $-p$ divided by 128

(ix) $-z$ multiplied to sum of a , $2b$ and 5

(x) 12 less than quotient of p and q

Q.3. Answer the following in the form of algebraic expression.

(i) If Seema is x years old now (a) How old she will be after 6 years? (b) What was her age 2 years before?

(ii) The side of a regular hexagon is x . What is its perimeter in terms of x ?

(iii) The teacher distributes 3 sheets per student. How many sheets are needed, if r is the number of students

(iv) Price of rice per kg is Rs y . Price of almonds per kg is 7 times the price of rice per kg. What is the price of almond?

Q.4. State the rule which gives the number of lines required to make the following pattern. Use a variable to write a rule.

(i) Letter V

(ii) Letter E

(iii) Letter F

Assignment – 13

Topic : Ratio & Proportion

Q.1. Fill in the blanks:

- (i) A _____ is a relation between two quantities of the same kind.
- (ii) A ratio has _____ units in itself.
- (iii) The ratio $x:y$ is said to be in simplest form if HCF of x and y is _____.
- (iv) A proportion consists of _____ terms.
- (v) Equivalent ratio of $6:4 =$ _____.

Q.2. Is $20:35 :: 45:60$ are in proportional.

Q.3. Find the ratio of the following :

(i) 21 hours to 49 hours

(ii) 75 cm to 3 metres

(iii) A dozen to a score

(iv) 250 g to 5 kg

(v) 5 days to 2 weeks

Q.4. Which of the following ratio is greatest and which is the least? Also write them in ascending order

1:2 ; 4:5 ; 3:4

Q.5. Divide Rs. 500 in the ratio 2 : 3 : 5.

Q.6. Out of 150 apples in a basket, 30 apples are found rotten. Find

(i) Ratio of rotten apples to the number of good apples.

(ii) Ratio of good apples to the total apples.

(iii) Ratio of rotten apples to the total apples.

Q.7. An office opens at 9.30 a.m and closes at 5.30 p.m with a lunch interval of 30 minutes. What is the ratio of lunch interval to the working period in the office?

Q.8. If 10 boys consume 3kg of rice in a day, how much rice will be consumed by 15 boys in a day.

Q.9. Half metre cloth costs Rs 30. How much would $2\frac{3}{5}$ metres cost?

Q.10. An employee earns Rs 18000 in 15 months.

(i) How much does he earn in 7 months.

(ii) In how many months, will he earn Rs 30,000?

=====

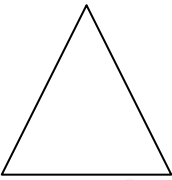
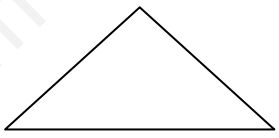
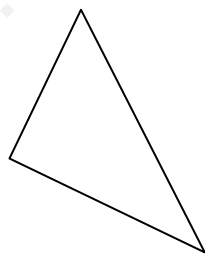
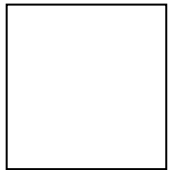

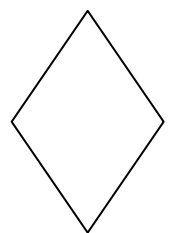
Assignment – 14

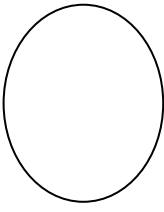
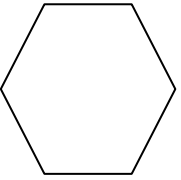
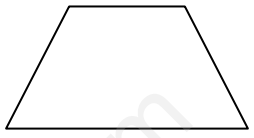
Fun With Symmetry

SYMMETRICAL CARD

A figure is said to be symmetrical about a line, if it is identical on either side of the line of symmetry.

* Complete the following table:

Name of shapes	Number of line of symmetry	Draw the figures with lines of symmetry
1. Equilateral triangle	3	
2. Isosceles triangle	1	
3. Scalene triangle	No	
4. Square	4	
5. Rectangle	2	
6. Rhombus	2	

7. Circle	Infinite	
8. Regular hexagon	6	
9. Isosceles trapezium	1	
10. Alphabets	1 for each alphabet	<p>A B C</p> <p>D E K</p> <p>M T U</p> <p>V W</p>
	2 for each alphabet	<p>H I</p>

=====

~~~~~

=====

**OBJECTIVE QUESTIONS****Chapter – 1 (Knowing Our Numbers)**

- Q.1. The difference between the place value and face value of 8 in 65874 is
- |          |           |
|----------|-----------|
| (i) 0    | (iii) 735 |
| (ii) 792 | (iv) 693  |
- Q.2. The total number of 4 digit number is
- |           |            |
|-----------|------------|
| (i) 8999  | (iii) 8000 |
| (ii) 9000 | (iv) 9999  |
- Q.3. In the international place value system, we write one million for
- |              |                |
|--------------|----------------|
| (i) 1 lakh   | (iii) 100 lakh |
| (ii) 10 lakh | (iv) 1 crore   |
- Q.4. The smallest counting number is
- |        |                    |
|--------|--------------------|
| (i) 0  | (iii) 10           |
| (ii) 1 | (iv) None of these |
- Q.5. Total number of numbers which when rounded off to nearest ten give us 200 is
- |         |         |
|---------|---------|
| (i) 9   | (iii) 8 |
| (ii) 10 | (iv) 7  |

**Chapter – 2 (Whole Numbers)**

- Q.1. The predecessor of 1 in natural numbers is
- |        |                    |
|--------|--------------------|
| (i) 0  | (iii) -1           |
| (ii) 2 | (iv) None of these |
- Q.2. The predecessor of 1 in whole numbers is
- |         |                    |
|---------|--------------------|
| (i) 0   | (iii) 2            |
| (ii) -1 | (iv) None of these |
- Q.3. The product of the predecessor and successor of an odd number is always divisible by
- |        |         |
|--------|---------|
| (i) 2  | (iii) 6 |
| (ii) 4 | (iv) 8  |

Q.4. The product of the successor and predecessor of 99 is

- |           |            |
|-----------|------------|
| (i) 9800  | (iii) 1099 |
| (ii) 9900 | (iv) 9700  |

Q.5. If any number is divided by zero, the quotient is

- |                       |                    |
|-----------------------|--------------------|
| (i) the number itself | (iii) not defined  |
| (ii) zero             | (iv) none of these |

### **Chapter – 3 (Playing With Numbers)**

Q.1. The total number of even prime numbers is

- |        |                |
|--------|----------------|
| (i) 0  | (iii) 2        |
| (ii) 1 | (iv) unlimited |

Q.2. Which of the following numbers is divisible by 4?

- |              |               |
|--------------|---------------|
| (i) 8675231  | (iii) 1234567 |
| (ii) 9843212 | (iv) 543123   |

Q.3. What least value should be given to \* so that the number 653 \* 47 is divisible by 11?

- |        |         |
|--------|---------|
| (i) 1  | (iii) 6 |
| (ii) 2 | (iv) 9  |

Q.4. If X and Y are co primes, then their LCM is

- |          |                     |
|----------|---------------------|
| (i) XY   | (iii) $\frac{X}{Y}$ |
| (ii) X+Y | (iv) 1              |

Q.5. The HCF of two consecutive even numbers is

- |        |                    |
|--------|--------------------|
| (i) 1  | (iii) 0            |
| (ii) 2 | (iv) None of these |

### **Chapter – 4 (Basic Geometrical Ideas)**

Q.1. Which of the following statements is false

- |                                                                    |
|--------------------------------------------------------------------|
| (i) Point has a size because we can see it as a thick dot on paper |
| (ii) By lines in geometry, are mean only straight lines            |

- (iii) Unlimited number of lines can be drawn through a given point.
- (iv) If two lines intersect at a point P, then P is called the point of intersection of the two lines

Q.2. If two lines are drawn in a plane, they will

- (i) always intersect
- (ii) are always parallel
- (iii) either intersect or are parallel
- (iv) None of these

Q.3. If three points are collinear, then

- (i) at least two will lie on the same line
- (ii) all three will lie on the same line
- (iii) at least two will not lie on the same line
- (iv) None of these

Q.4. The region enclosed by an arc and two radii of a circle is called

- (i) Segment
- (ii) Sector
- (iii) Curve
- (iv) Ray

Q.5. The shortest distance between two points is called

- (i) Line
- (ii) Line segment
- (iii) Ray
- (iv) Arc

### **Chapter – 5 (Integers)**

Q.1. Negative of a negative integer is

- (i) less than zero
- (ii) greater than zero
- (iii) zero
- (iv) none of these

Q.2. Which of the following statements are false

- (i) The opposite of zero is zero
- (ii) 0 is larger than every negative integer
- (iii) A positive integer is greater than its opposite
- (iv) zero is not an integer

Q.3. Which of the following is represented by negative sign

- |                           |                              |
|---------------------------|------------------------------|
| (i) A deposit of Rs. 2500 | (iii) $5^{\circ}$ below zero |
| (ii) A profit of Rs. 800  | (iv) 3 km above sea level    |

Q.4. The additive inverse of 0 is

- |                       |                    |
|-----------------------|--------------------|
| (i) greater than zero | (iii) zero         |
| (ii) less than zero   | (iv) none of these |

Q.5. Largest negative integer is \_\_\_\_\_

- |         |                    |
|---------|--------------------|
| (i) 1   | (iii) -1000000     |
| (ii) -1 | (iv) None of these |

### **Chapter – 6 (Understanding Elementary Shapes)**

Q.1. Total number of faces of a cuboid is

- |        |         |
|--------|---------|
| (i) 4  | (iii) 8 |
| (ii) 6 | (iv) 12 |

Q.2. A brick is an example of a

- |             |               |
|-------------|---------------|
| (i) cube    | (iii) prism   |
| (ii) cuboid | (iv) cylinder |

Q.3. A tetrahedron is a pyramid whose base is a

- |              |                    |
|--------------|--------------------|
| (i) triangle | (iii) rectangle    |
| (ii) square  | (iv) quadrilateral |

Q.4. The number of faces of a triangular pyramid is

- |        |         |
|--------|---------|
| (i) 3  | (iii) 6 |
| (ii) 4 | (iv) 8  |

Q.5. A gas pipe is an example of

- |                 |             |
|-----------------|-------------|
| (i) cone        | (iii) cube  |
| (ii) a cylinder | (iv) sphere |

**Chapter – 7 (Fractions)**

Q.1. The simplest form of fraction  $\frac{96}{144}$  is

(i)  $\frac{8}{12}$

(iii)  $\frac{4}{3}$

(ii)  $\frac{2}{3}$

(iv) None of these

Q.2. If  $\frac{11}{4} = \frac{77}{x}$ , then x=?

(i) 28

(iii) 44

(ii)  $\frac{77}{28}$

(iv) 308

Q.3. A fraction equivalent to  $\frac{3}{5}$  is

(i)  $\frac{3+2}{5+2}$

(iii)  $\frac{3-2}{5-2}$

(ii)  $\frac{3 \times 2}{5 \times 2}$

(iv) None of these

Q.4. Which of the following fractions is the greatest of all?

$\frac{7}{8}, \frac{6}{7}, \frac{4}{5}, \frac{5}{6}$

(i)  $\frac{6}{7}$

(iii)  $\frac{5}{6}$

(ii)  $\frac{4}{5}$

(iv)  $\frac{7}{8}$

Q.5.  $8 + \underline{\hspace{2cm}} = 8\frac{1}{3}$

(i)  $\frac{1}{3}$

(iii)  $\frac{3}{1}$

(ii) 0

(iv) None of these

**Chapter – 8 (Data Handling)**

Q.1. Collection of observations gathered initially is called

(i) frequency

(iii) range

(ii) raw data

(iv) array



- Q.2. The number of times an observation occurs in the given data, is called
- |                 |                 |
|-----------------|-----------------|
| (i) tally marks | (iii) frequency |
| (ii) range      | (iv) array      |
- Q.3. The raw data when put in ascending or descending order of magnitude is called
- |                  |                 |
|------------------|-----------------|
| (i) array        | (iii) frequency |
| (ii) tally marks | (iv) range      |
- Q.4. Pictorial representation of numerical data is called
- |                |                  |
|----------------|------------------|
| (i) pie chart  | (iii) pictograph |
| (ii) bar graph | (iv) histogram   |

### **Chapter – 9 (Decimals)**

- Q.1. The value of  $\frac{37}{10000}$  is
- |             |               |
|-------------|---------------|
| (i) 0.0370  | (iii) 0.00037 |
| (ii) 0.0037 | (iv) 0.000037 |
- Q.2.  $2 + \frac{3}{10} + \frac{5}{100}$  is equal to
- |           |            |
|-----------|------------|
| (i) 2.305 | (iii) 2.35 |
| (ii) 2.3  | (iv) 0.235 |
- Q.3. Which is greater among 2.3, 2.03, 2.33, 2.05?
- |           |            |
|-----------|------------|
| (i) 2.3   | (iii) 2.33 |
| (ii) 2.03 | (iv) 2.05  |
- Q.4. 15 litres and 15 ml is equal to
- |                    |                      |
|--------------------|----------------------|
| (i) 15.15 Litres   | (iii) 15.0015 Litres |
| (ii) 15.105 Litres | (iv) 15.015 Litres   |
- Q.5. The value of  $\frac{3}{25}$  is
- |           |                    |
|-----------|--------------------|
| (i) 1.2   | (iii) 0.012        |
| (ii) 0.12 | (iv) None of these |

**Chapter – 10 (Practical Geometry)**

- Q.1. Two lines perpendicular to each other, intersect at an angle of
- |                  |                  |
|------------------|------------------|
| (i) $60^\circ$   | (iii) $90^\circ$ |
| (ii) $180^\circ$ | (iv) $45^\circ$  |
- Q.2. A line segment can have the following number of perpendicular bisector
- |        |         |
|--------|---------|
| (i) 1  | (iii) 3 |
| (ii) 2 | (iv) 0  |
- Q.3. How many perpendiculars can be drawn to a given line segment?
- |        |                |
|--------|----------------|
| (i) 2  | (iii) infinite |
| (ii) 3 | (iv) 0         |
- Q.4. Circles having the same centre are called
- |                        |                       |
|------------------------|-----------------------|
| (i) concentric circles | (iii) similar circles |
| (ii) congruent circles | (iv) none of these    |
- Q.5. An angle is formed when two rays have
- |                             |                                |
|-----------------------------|--------------------------------|
| (i) the same length         | (iii) different starting point |
| (ii) the same initial point | (iv) none of these             |

**Chapter – 11 (Menuration)**

- Q.1. A polygon with all sides and all angles equal is called \_\_\_\_\_ polygon.
- |               |                 |
|---------------|-----------------|
| (i) Irregular | (iii) Congruent |
| (ii) Regular  | (iv) Closed     |
- Q.2. Side of a square, when perimeter is given is
- |                                  |                                    |
|----------------------------------|------------------------------------|
| (i) $\frac{4}{\text{Perimeter}}$ | (iii) $\frac{\text{Perimeter}}{4}$ |
| (ii) $4 \times \text{Perimeter}$ | (iv) $\text{Perimeter} + 4$        |
- Q.3. If the sides of a square are halved, then its area
- |                   |                          |
|-------------------|--------------------------|
| (i) remains same  | (iii) becomes one fourth |
| (ii) becomes half | (iv) becomes double      |

Q.4. The perimeter of 6 sided regular polygon with side 6 units is

(i)  $6+6$

(iii)  $6-6$

(ii)  $6\div 6$

(iv)  $6\times 6$

Q.5. Cost of fencing any field is given by

(i) Area of field multiplied by rate of fencing

(ii) Area of field added to rate of fencing

(iii) Perimeter of field added to rate of fencing

(iv) Perimeter of field multiplied to rate of fencing

## **Chapter – 12 (Introduction to Algebra)**

Q.1. The quotient of  $x$  by  $y$  added to the product of  $x$  and  $y$  is written as

(i)  $\frac{x}{y} + xy$

(iii)  $\frac{xy+x}{y}$

(ii)  $\frac{y}{x} + xy$

(iv)  $\frac{xy+y}{x}$

Q.2. The quotient of  $x$  by 3 is multiplied by  $y$  is written as

(i)  $\frac{x}{3y}$

(iii)  $\frac{3y}{x}$

(ii)  $\frac{3x}{y}$

(iv)  $\frac{xy}{3}$

Q.3. 9 taken away from the sum of  $x$  and  $y$  is

(i)  $(x+y)-9$

(iii)  $\frac{x+y}{9}$

(ii)  $9-(x+y)$

(iv)  $\frac{9}{x+y}$

Q.4. Literal numbers are called

(i) Constants

(iii) Expressions

(ii) Variables

(iv) Terms

Q.5. In a room there are  $y$  rows of chairs and each row contains  $2x$  chairs. The total number of chairs in the room is

(i)  $2x^3$

(iii)  $2xy$

(ii)  $2x^4$

(iv)  $2x^2$

**Chapter-13- Ratio And Proportion**

Q.1. In a ratio the first term is known as

- (i) Consequent  
(ii) Antecedent

- (iii) Means  
(iv) None of them

Q.2. If a, b, c, d are in proportion, then

- (i)  $ab=cd$   
(ii)  $ac=bd$

- (iii)  $ad=bc$   
(iv) None of them

Q.3. If a, b, c are in proportion, then

- (i)  $a^2=bc$   
(ii)  $b^2=ac$

- (iii)  $c^2=ab$   
(iv) None of them

Q.4. Ratio of Rs 2 to 50 paise in lowest term is

- (i) 2 : 1  
(ii) 20 : 5

- (iii) 1 : 2  
(iv) 4 : 1

Q.5. Equivalent ratio of 5:7

- (i) 40 : 56  
(ii) 25 : 45

- (iii) 7 : 5  
(iv) NOT

~~~~~  
=====

ANSWERS OF OBJECTIVE QUESTIONS**Chapter-1**

Q.1. (ii)

Q.3. (ii)

Q.5. (i)

Q.2. (ii)

Q.4. (ii)

Chapter-2

Q.1. (iv)

Q.3. (i)

Q.5. (iii)

Q.2. (i)

Q.4. (i)

Chapter-3

Q.1. (ii)

Q.3. (i)

Q.5. (ii)

Q.2. (ii)

Q.4. (i)

Chapter-4

Q.1. (ii)

Q.3. (ii)

Q.5. (ii)

Q.2. (iii)

Q.4. (ii)

Chapter-5

Q.1. (ii)

Q.3. (iii)

Q.5. (ii)

Q.2. (iv)

Q.4. (iii)

Chapter-6

Q.1. (ii)

Q.3. (ii)

Q.5. (ii)

Q.2. (ii)

Q.4. (ii)

Chapter-7

Q.1. (ii)

Q.3. (ii)

Q.5. (i)

Q.2. (i)

Q.4. (iv)

Chapter-8

Q.1. (ii)

Q.3. (i)

Q.2. (iii)

Q.4. (iii)

Chapter-9

Q.1. (ii)

Q.3. (iii)

Q.5. (ii)

Q.2. (iii)

Q.4. (iv)

Chapter-10

Q.1. (iii)

Q.3. (iii)

Q.5. (ii)

Q.2. (i)

Q.4. (i)

Chapter-11

Q.1. (ii)

Q.3. (iii)

Q.5. (iv)

Q.2. (iii)

Q.4. (iv)

Chapter-12

Q.1. (i)

Q.3. (i)

Q.5. (iii)

Q.2. (iii)

Q.4. (ii)

Chapter-13

Q.1. (ii)

Q.3. (ii)

Q.5. (i)

Q.2. (iii)

Q.4. (iv)

=====

MODEL TEST PAPER SUMMATIVE ASSESSMENT-I**SOLVED****Time : 3 hrs.****Maximum Marks: 80****General Instructions.**

- Section-A consists of 8 parts carrying 1 mark each
- Section-B– Q2 to Q11 carry 2 marks each
- Section-C– Q12 to Q20 carry 3 marks each
- Section-D– Q21 to Q25 carry 5 marks each

=====

SECTION -A**Q.1. Choose the correct answer-****(a) Which of the following Roman symbol is never repeated?**

- | | |
|--------|---------|
| (i) I | (iii) X |
| (ii) V | (iv) C |

(b) How many whole numbers are not natural numbers?

- | | |
|--------|--------------------|
| (i) 1 | (iii) 3 |
| (ii) 2 | (iv) None of these |

(c) H.C.F of two consecutive numbers is always-

- | | |
|--------|---------|
| (i) 1 | (iii) 0 |
| (ii) 2 | (iv) 4 |

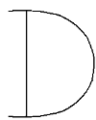
(d) A triangle having one angle 90° is called-

- | | |
|----------------------------|------------------------------|
| (i) Acute angled triangle | (iii) Obtuse angled triangle |
| (ii) Right angled triangle | (iv) None of these. |

(e) A _____ is a closed curve made up of entirely line segments.

- | | |
|------------|---------------|
| (i) Circle | (iii) Polygon |
|------------|---------------|

(ii)



(iv)

**(f) Which of the following is incorrect?**

- | |
|---|
| (i) Line \overleftrightarrow{AB} is same as \overleftrightarrow{BA} |
| (ii) Line segment \overline{AB} is same as line segment \overline{BA} |

(iii) Ray \overrightarrow{AB} is same as ray \overrightarrow{BA}

(iv) Both (ii) and (iii) are incorrect

(g) The greatest natural number is-

(i) 1 crore

(ii) 10 crore

(iii) 10 Arabs

(iv) None of these

(h) The prime factorization of 48 is-

(i) $2 \times 2 \times 2 \times 2 \times 3$

(ii) $3 \times 3 \times 3 \times 2 \times 2$

(iii) $2 \times 4 \times 3$

(iv) $8 \times 3 \times 3$

SECTION -B

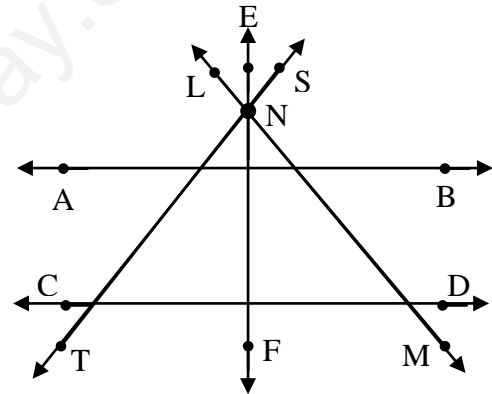
Q.2 What is the measure of one complete angle?

Q.3 What should be subtracted from 4 to get -6 ?

Q.4 From the given figure-

(a) Write a pair of parallel lines

(b) Two lines whose point of intersection is N



Q.5 Find the sum by suitable rearrangement:
 $937 + 146 + 263$ (Mention property used)

Q.6 Find all the factors of 54 and write the sum of even factors.

Q.7 Fill in the blanks:

(a) Minimum _____ sides are required to form a polygon.

(b) One complete angle is equal to _____ complete revolution of hands clock.

Q.8 Replace \square by $>$, $<$ or $=$

(a) $(-2) + (-5) \square (-7) + (3)$

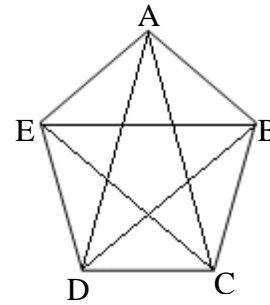
(b) $(-5) + (4) \square (-7) - (-6)$

Q.9 Round off the given number to the nearest hundred and find the estimated answer:

$8865 - 2360$

Q.10 Look at the figure and name the following

- (a) Two diagonals
(b) A pair of adjacent sides



Q.11 Find the value of the following:

$$-32 - (-65) + 25$$

SECTION -C

Q.12 Find the L.C.M. of 16, 24, 36.

Q.13 Construct three circles with centre 'O' and radii 2cm, 3cm and 4cm, respectively. What are such circles called? Mark a point 'P' in the interior of all the circles. Mark a point 'R' in the exterior of all the circles.

Q.14 Study the pictograph and answer the question below.



= 10 Students

Class	Number of students on Roll
I	
II	
III	
IV	
V	
VI	

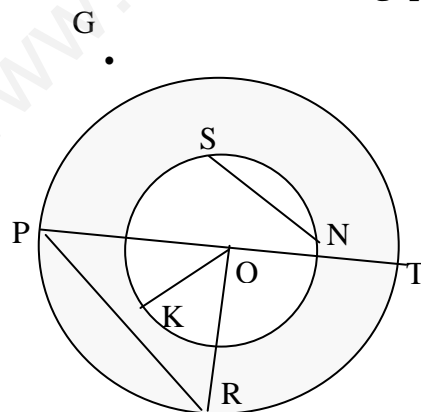
- (i) Which class has the maximum number of students on Roll?
(ii) How many students are on Roll in class V.
(iii) How many students are on Roll from class II to VI.

Q.15 Write the smallest 6- digit number by using the digits 4, 0, 1, 3 and 5. Multiply this number by 428 and find the product.

- Q.16** Three cans of water contain 825 litres, 675 litres and 450 litres of water respectively. Find the capacity (in litres) of the biggest container which can measure the water in the three cans exactly.
- Q.17** Madhuban Housing society has 7 buildings with 24 flats each in Block A and 20 buildings with 51 flats each in Block B. How many flats are there in the society?
- Q.18** (i) What is the sum of the greatest negative integer and the smallest positive integer?
(ii) Draw a number line and show an integer which is 3 less than -1 .
- Q.19** (i) A boy is standing facing towards the east. Find the kind of angle if he moves.
i) Clockwise from east to south west
ii) Anticlockwise from east to south east
(ii) At which point does the minute hand of a clock stop if it starts at 3 and makes $\frac{1}{2}$ a revolution, clockwise?
- Q.20** Find the greatest number of 5- digit which is exactly divisible by 14, 21, 35, 42 & 63.

SECTION -D

- Q.21** (i) Subtract (-31) from 59 and then 59 from (-31) . Is $59 - (-31) = (-31) - 59$?
(ii) Arrange the integers in descending order.
 $-3, 4, 0, -6, 8, -5$ and 1
- Q.22** Observe the figure and answer the following questions given below:



- (i) Name the centre of the inner and the outer circle.
(ii) Name the radii of the inner circle.
(iii) Name the diameter of the outer circle.

- (iv) Name the chord of the inner circle.
(v) Name the chord of outer circle.

Q.23 (i) Fill in the blanks:

- (a) Every prime number except _____ is an odd number.
(b) Two consecutive odd prime are known as _____.
(c) 4 and 15 are _____ (Co primes/ prime numbers).
(d) A _____ of a number is exactly divisible by the number itself.

(ii) Complete the pattern:

$$9 \times 9 + 7 = 88$$

$$98 \times 9 + 6 = 888$$

$$987 \times \underline{\quad} + 5 = 8888$$

$$9876 \times 9 + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} \times 9 + 3 = 888888$$

Q.24 Study the information from the table given below about the number of students on roll of a certain school for various years. Draw a bar graph to represent this information by taking appropriate scale.(attach a graph sheet)

Year	1999	2000	2001	2002	2003	2004
No. of students	800	750	830	870	920	950

Q.25 Ronit's house is $\frac{9}{10}$ km from his school. He walks some distance then took a bus for half km upto the school. How far did he walk?

=====

SOLUTION
SECTION-A

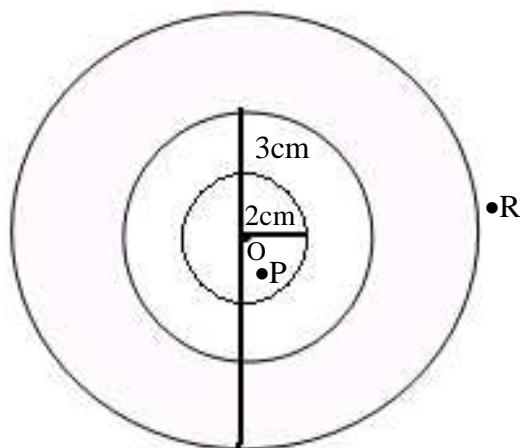
- Q.1. (e) (iii)
 (a) (ii) (f) (iii)
 (b) (i) (g) (iv)
 (c) (i) (h) (i)
 (d) (ii)

SECTION- B

- Q.2. 360°
 Q.3. 10
 Q.4. (a) $AB \parallel CD$ (b) LM and ST
 Q.5. $(937+263) + 146$
 $= 1200 + 146 = 1346$ (By associative property)
 Q.6. Factors of 54 = 1, 2, 3, 6, 9, 18, 27, 54
 Sum of even factors = $2 + 6 + 18 + 54 = 80$
 Q.7. (a) 3 (b) 1
 Q.8. (a) \angle (b) =
 Q.9. $8865 = 8900$
 $-23600 = -2400$
 Estimated Ans- 6500
 Q.10. (a) EC and BD (b) ED and DC
 Q.11. $-32 - (-65) + 25$
 $-32 + 65 + 25$
 $-32 + 90 = 58$
 Q.12.
$$\begin{array}{r|l} 2 & 16, 24, 36 \\ 2 & 8, 12, 18 \\ 2 & 4, 6, 9 \\ 3 & 2, 3, 9 \\ 2 & 2, 1, 3 \\ 3 & 1, 1, 3 \\ & 1, 1, 1 \end{array}$$

$$\text{L.C.M} = 2 \times 2 \times 2 \times 3 \times 2 \times 3 = 144$$

Q.13.



They are called concentric circles

Q.14. (i) VI class (ii) 70 students (iii) 340 students

$$\begin{array}{r}
 4, 0, 1, 3, 5 = 100345 \\
 \times 428 \\
 \hline
 802760 \\
 200690 \times \\
 401380 \times \times \\
 \hline
 4,29,47,660
 \end{array}$$

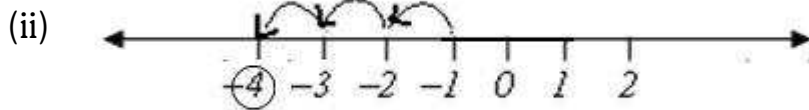
Q.16. H.C.F of 825, 675 and 450 should

$$\begin{array}{r|l}
 5 & 825, 675, 450 \\
 \hline
 5 & 165, 135, 90 \\
 \hline
 3 & 33, 27, 18 \\
 \hline
 & 11, 9, 6
 \end{array}$$

= 75 L container

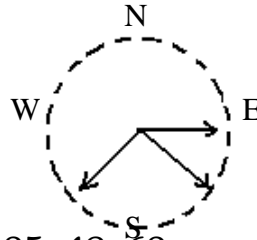
Q.17. Total Flats in Block A = $24 \times 7 = 168$
 Total Flats in Block B = $51 \times 20 = 1020$
 Total Flats in the Society = 1188

Q.18. (i) Greatest = -1
 Positive = 1 their Sum = $-1 + 1 = 0$



Ans is -4

- Q.19. (i) (a) Obtuse angle
(b) Reflex angle
(ii) At 9 it will stop



Q.20. We have to take the L.C.M of 14, 21, 35, 42, 63

$$\begin{array}{r|l}
 7 & 14, 21, 35, 42, 63 \\
 2 & 2, 3, 5, 6, 9 \\
 3 & 1, 3, 5, 3, 9 \\
 3 & 1, 1, 5, 1, 3 \\
 5 & 1, 1, 1, 1, 1
 \end{array}$$

$$\text{L.C.M} = 7 \times 2 \times 3 \times 3 \times 5 = 630$$

Now, Greatest number of

5 digit is = 99999

Therefore, required greatest number of 5 digit which is divisible by

$$630 = 99999 - 459 = 9540$$

$$\begin{array}{r}
 158 \\
 630 \sqrt{99999} \\
 \underline{-630} \\
 3699 \\
 \underline{-3150} \\
 5499 \\
 \underline{-5040} \\
 459
 \end{array}$$

- Q.21. (i) $59 - (-31)$ then $-31 - 59$

$$59 + 31 = 90 \quad -90$$

$$\text{No } 59 - (-31) \neq (-31) - 59$$

- (ii) $8 > 4 > 1 > 0 > -3 > -5 > -6$

- Q.22. (i) Centre O

- (ii) OK

- (iii) PT

- (iv) SN

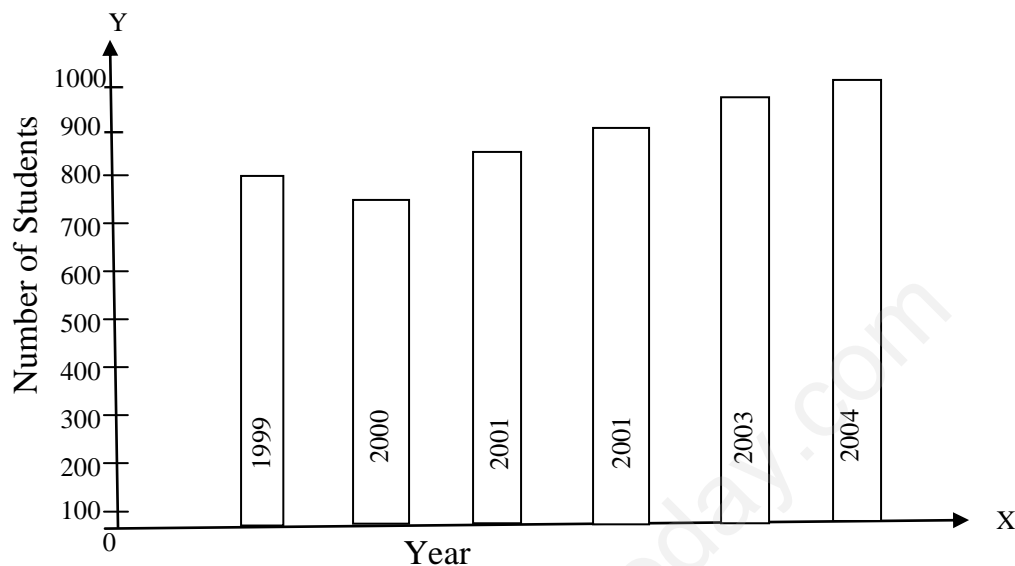
- Q.23. (i) (a) 2 (b) Twin prime (c) Coprimes (d) Multiple

- (ii) $9 \times 9 + 7 = 88$
 $98 \times 9 + 6 = 888$
 $987 \times 9 + 5 = 8888$

$$9876 \times 9 + 4 = 88888$$

$$98765 \times 9 + 3 = 888888$$

Q.24. Bar graph

Q.25 Total distance = $\frac{9}{10}$ km

$$\text{Distance covered by bus} = \frac{1}{2} \text{ km}$$

$$\begin{aligned} \text{Distance covered by foot} &= \frac{9}{10} - \frac{1}{2} \\ &= \frac{18-5}{20} = \frac{13}{20} \text{ km} \end{aligned}$$

=====

MODEL TEST PAPER SUMMATIVE ASSESSMENT-I**UNSOLVED-1****General Instructions.**

- Section-A consists of 8 parts carrying 1 mark each
- Section-B– Q2 to Q11 carry 2 marks each
- Section-C– Q12 to Q20 carry 3 marks each
- Section-D– Q21 to Q25 carry 5 marks each

=====

SECTION A**Q.1. Fill in the blanks:-**

- (i) The Roman numeral symbol, _____ is never subtracted.
- (ii) There are _____ odd prime numbers less than 15.
- (iii) Two intersecting lines are _____ if the angle between them is a right angle.
- (iv) Smallest composite number is _____.
- (v) A number is divisible by 6 if it is divisible by _____ and _____ both.
- (vi) 1 lakh = _____ thousand.
- (vii) _____ is a whole number which occurs just before 909100.
- (viii) The whole number _____ has no predecessor.

SECTION B

- Q.2. Make the greatest and smallest 5 digit number using digits 3, 7, 0, 5. (Use any one digit twice)**
- Q.3. (i) Which is the largest negative integer?
(ii) What is the additive inverse of – 5?**
- Q.4. Correct the following statement by replacing a word or a number?**
- (i) There are 21 whole numbers between 32 and 53.
 - (ii) 2 is neither prime nor composite numbers.
- Q.5. Evaluate using the suitable rearrangement of whole numbers: $250 \times 1102 \times 4$**
- Q.6. State true or false.**
- (i) The predecessor of two digit number is never a single digit number.
 - (ii) The natural numbers along with zero form the collection of whole numbers.
- Q.7. Write the four negative integers less than –2.**

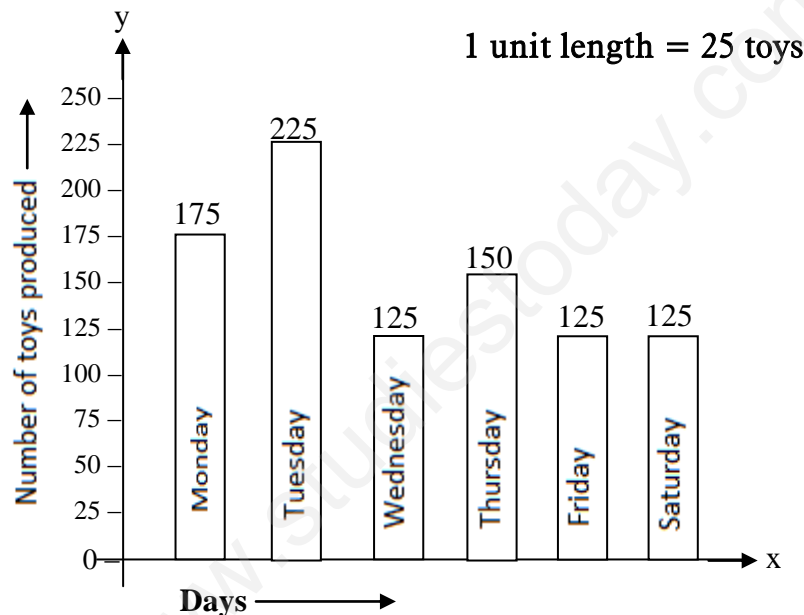
Q.8. Draw a neat diagram of the following :

- (i) A closed curve that is not a polygon.
- (ii) An open curve made up of only line segments.

Q.9. Name the type of triangles:

- (i) ΔFIT with $m \angle F = 80^\circ$, $m \angle I = 40^\circ$ and $m \angle T = 60^\circ$.
- (ii) ΔDAY with $DA = 4.6$ cm, $AY = 3$ cm and $DY = 3.8$ cm.

Q.10. The bar graph shows the number of toys produced by a factory during a certain week:



Observe the given bar graph and answer the following questions:

- (i) On which day maximum number of toys are produced?
- (ii) How many total number of toys were produced by a factory on Monday and Thursday?

Q.11. Estimate each of the following to the nearest 100 and then find the estimated sum of 8792 and 5814.

SECTION C

Q.12 In a state, number of bicycles sold in the year 2009 was 7, 43, 214. In the year 2007 the number of bicycles sold was 8, 00, 112. In which year were more bicycles sold? And how many more?

Q.13 Draw a circle and mark a sector and a diameter using proper labels.

Q.14 Write the measure of an acute, an obtuse angle and a straight angle.

(Figures not required)

Q.15 Find the least number which when divided by 6, 15 and 18 leaves remainder 5 in each case.

Q.16 Do as directed:-

- Represent the following statement as an integer with appropriate sign.
“A withdrawal of rupees 900”
- Write the successor and the predecessor of -7 ?
- Find $23 + (-53)$

Q.17 The Pictograph shows the number of people who like different kinds of juices, where $1 \Delta = 10$ person.

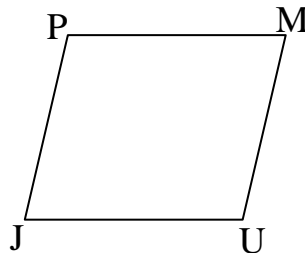
Juices	Number of people
Orange	$\Delta \Delta \Delta \Delta \Delta \Delta \Delta \Delta$
Grape	$\Delta \Delta \Delta$
Apple	$\Delta \Delta \Delta \Delta \Delta \Delta$
Mixed fruit	$\Delta \Delta \Delta \Delta$

Study the given pictograph and answer the following questions:

- Which juice is liked by maximum number of people?
- How many people like apple juice?
- Which juice is liked by 40 people?

Q.18 In a given quadrilateral JUMP name the following:

- A pair of opposite sides.
- A pair of adjacent angles.
- A pair of opposite vertices.



Q.19 Answer the following questions:

- Find the number of right angles turned through by the hour hand of a clock when it goes from 5 to 11?

- (ii) What direction will you face if you start, facing east and make $\frac{3}{4}$ of a revolution anti clockwise?
- (iii) What fraction of a clockwise revolution does the hour hand of a clock turn through when it goes from 1 to 10?

- Q.20** (i) Write 4125687 using international system of numeration.
- (ii) Write the numeral for Two lakh fifty three thousand eight hundred sixty one.
- (iii) Write the expanded form of 3275892.

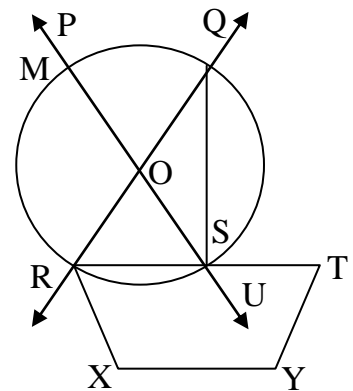
SECTION D

- Q.21** The length, breadth and height of a room are 1050 cm, 750 cm and 425 cm respectively. Find the length of the longest tape which can measure the three dimensions of room exactly.

- Q.22** (i) Find the sum of $49 + (-154) + (-27)$.
- (ii) Use number line and add the following: $(-5) + 7 + (-4)$

- Q.23** Study the given figure carefully and answer the following questions:

- (a) Name any one triangle.
- (b) Name any two points which lie in exterior of circle.
- (c) Name a chord of the circle.
- (d) Name the lines intersecting at O.



- Q.24** Find the value of given expression using suitable property. (Name the property used)
- (a) $394 \times 17 + 394 \times 3$
- (b) $1962 + 453 + 1538 + 647$ (Use suitable rearrangement)

Q.25 The number of pencil boxes sold in a stationery shop on six consecutive days are as follows:

Days	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Number of pencil boxes sold	20	65	35	40	30	70

Draw a bar graph to represent the above information choosing an appropriate scale.

=====

MODEL TEST PAPER SUMMATIVE ASSESSMENT-II
UNSOLVED-2**General Instructions.**

- Section-A consists of 8 parts carrying 1 mark each
- Section-B– Q2 to Q11 carry 2 marks each
- Section-C– Q12 to Q20 carry 3 marks each
- Section-D– Q21 to Q25 carry 5 marks each

=====

SECTION A**Q.1. Fill in the blanks:-**

- (i) The natural number _____ has no predecessor.
- (ii) 1 crore = _____ lakh.
- (iii) Two numbers having only 1 as a common factor is called _____.
- (iv) A _____ of a line segment is a perpendicular to the line segment and also divides it into two equal parts.
- (v) The Roman numeral symbol, _____ is never repeated.
- (vi) There are _____ even composite numbers less than 15.
- (vii) A number is divisible by 8 if number formed by last _____ digits is divisible by 8.
- (viii) _____ is a whole number which occurs just after 100909.

SECTION B

Q.2. Make the greatest and smallest 4 digit number using any 4 different digits, where digit 9 is always at hundreds place. (Digits must not be repeated)

Q.3. State true or false.

- (i) The whole numbers leaving zero form the collection of natural numbers.
- (ii) The successor of two digit number is always a two digit number.

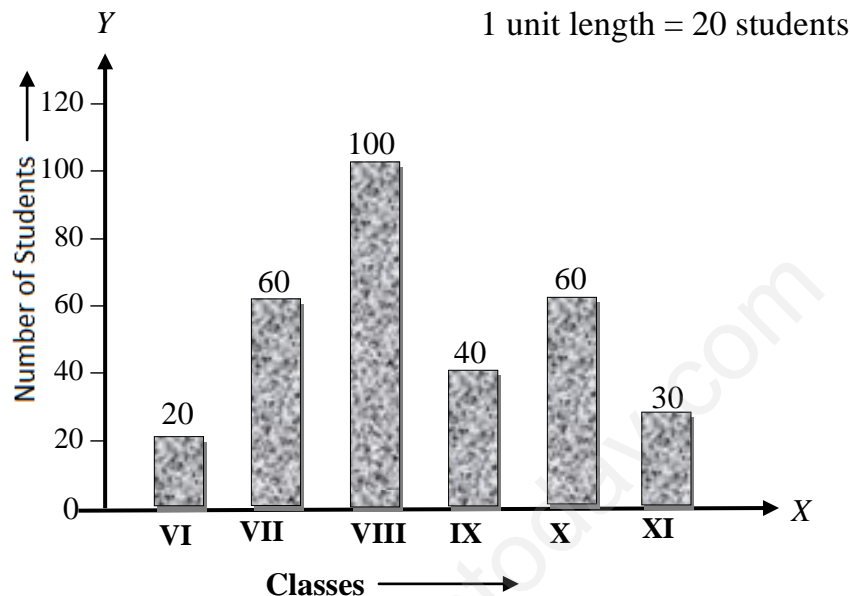
Q.4. Name the type of triangles:

- (i) ΔTIP with $TI = 4.5$ cm, $IP = 4.5$ cm and $TP = 3.4$ cm.
- (ii) ΔFUN with $m \angle F = 30^\circ$, $m \angle U = 60^\circ$ and $m \angle N = 90^\circ$.

Q.5. Estimate each of the following to the nearest 10 and then find the estimated product of 849 and 298.

Q.6. Write four integers greater than -15 .

Q.7. The following graph shows the number of students in each class of a school. Study the graph and answer the questions that follow:



- (i) Which class has maximum number of students?
- (ii) How many students are there in class VII and IX together?

Q.8. (i) Write any two integers between -3 and 3 ?

(ii) What is the additive inverse of -7 ?

Q.9. Correct the following statement by replacing a word or a number?

- (i) There are 21 whole numbers between 34 and 55.
- (ii) 3 is the smallest prime number which is even.

Q.10. Draw a neat diagram of each of the following :

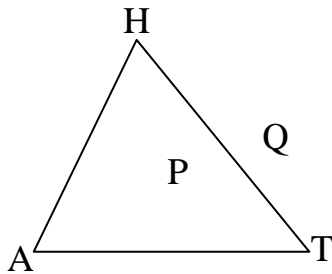
- (i) A closed curve made up of only line segments.
- (ii) An obtuse angle with proper labels.

Q.11. Evaluate using the suitable rearrangement: $2 \times 3479 \times 50$

SECTION C

Q.12 Find the least number which when divided by 18, 15 and 6 leaves remainder 5 in each case.

Q.13 In a given triangle HAT, name the following:



- (a) A pair of angles.
- (b) A pair of line segments.
- (c) A point in the interior and a point in the exterior of $\triangle HAT$.

Q.14 Write the measure of a right angle, a straight angle and an acute angle.
(Figures not required)

Q.15 Draw a circle and mark a segment and a diameter using proper labels.

Q.16 Do as directed:-

- (i) Find $23 + (-47)$.
- (ii) Write the successor and the predecessor of -9 ?
- (iii) Represent the following statement as an integer with appropriate sign.
“900 m below sea level”

Q.17 (i) Write 3275829 using Indian system of numeration.

(ii) Write the numeral of Five million two hundred and thirty six thousand four hundred and eighty seven .

(iii) Write the expanded form of 9285723.

Q.18 In a state, number of two wheelers sold in the year 2010 was 8,47,305. In the year 2009 the number of two wheelers sold was 9, 00, 412. In which year were more two wheelers sold? And how many more?

Q.19 Answer the following questions:

- (a) Where will the hand of a clock stop if it starts at 5 and makes $\frac{1}{4}$ of a revolution clockwise?
- (b) What part of revolution have you turned through if you stand facing south and turn clockwise to face east.
- (c) How many right angles do you make if you start, facing west and turn to west.

Q.20 The Pictograph shows the number of people who like different kinds of juices, where $1 \Delta = 10$ person.

Juices	Number of people
Orange	$\Delta \Delta \Delta \Delta \Delta \Delta \Delta \Delta$
Grape	$\Delta \Delta \Delta$
Apple	$\Delta \Delta \Delta \Delta \Delta \Delta$
Mixed fruit	$\Delta \Delta \Delta \Delta$

Study the given pictograph and answer the following questions:

- Which juice is liked by minimum number of people?
- How many people like mixed fruit juice?
- Which juice is liked by 60 people?

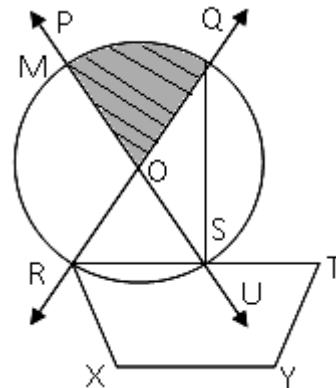
SECTION D

Q.21 (i) Find the sum $54 + (-149) + (-37)$.

(ii) Use number line and add the following: $(-4) + 6 + (-7)$

Q.22 Study the given figure carefully and answer the following questions.

- Name a quadrilateral.
- Name the lines intersecting at O.
- Name a sector.
- Name a chord of the circle.



Q.23 Find the value of given expression using suitable property.

- $348 \times 18 + 348 \times 2$
- $2948 + 543 + 1352 + 357$ (Use suitable rearrangement)

Q.24 The number of colour boxes sold in a stationery shop on six consecutive days are as follows:

Days	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Number of colour boxes sold	25	60	30	45	35	65

Draw a bar graph to represent the above information choosing an appropriate scale.

Q.25. Three tankers contain 750 litres, 425 litres and 1050 litres of diesel respectively.

Find the maximum capacity of a container that can measure the diesel of the three containers exact number of times.

MODEL TEST PAPER SUMMATIVE ASSESSMENT-II**SOLVED****Time: 2 hrs 30 min.****Maximum Marks: 80**

NOTE : Attempt all the questions.

- Section-A consists of 8 parts carrying 1 mark each
- Section-B– Q2 to Q11 carry 2 marks each
- Section-C– Q12 to Q20 carry 3 marks each
- Section-D– Q21 to Q25 carry 5 marks each

SECTION – A**[1×10=10]****Q1. CHOOSE THE CORRECT OPTION:**

- (i) The distance covered along the boundary forming a closed figure when you go round the figure once is called _____ .
- (a) Area (b) Perimeter
(c) circle (d) None of these
- (ii) Select a variable from the given options :
- (a) 53 (b) -7
(c) r (d) All of these
- (iii) $P^2 - 1$ is
- (a) Twice of P minus 1.
(b) P multiplied by itself subtracted from 1.
(c) 1 subtracted from square of P.
(d) None of these
- (iv) In collection of toys $\frac{1}{4}$ of 1200 toys are only balls. The number of balls are :
- (a) 800 (b) 4800
(c) 300 (d) None of these
- (v) Ratio which is not equivalent to 6:4
- (a) 48:32 (b) 3:2
(c) 600:400 (d) 24:64
- (vi) If we move 4 numbers to the left of 1 on the number line, where will we reach?
- (a) - 5 (b) 5
(c) - 3 (d) - 4

- (vii) Regular pentagon has each side x units, then its perimeter is :
 (a) $5x$ units (b) $6x$ units
 (c) $5 + x$ units (d) $6 + x$ units
- (viii) Write '65 subtracted from sum of x and y ' as an algebraic expression.
 (a) $(x - y) + 65$ (b) $(x + y) - 65$
 (c) $(65 + x) - y$ (d) $(y + 65) - x$

SECTION – B**[2×10=20]**

- Q2.** Divide ₹ 70 in the ratio 3:4 between Satyam and Manpreet.
- Q3.** Find whether $m = 4$ is a solution of equation $17 - 3m = 2$?
- Q4. (a)** Write 203.078 in words.
(b) Subtract 7.8 from 12.
- Q5.** Solve:
 $(-483) + (-682) - (-19) - (500)$
- Q6.** Write a statement of an algebraic expression $\frac{p}{q} - 2X$ in words. How many variables are there in this expression?
- Q7.** Snow fall during the three winter months was 31.6cm, 42.35cm and 22.75cm. What was the total snowfall in these three months?
- Q8.** Draw a circle of radius 2 cm. Take PQ chord in it and draw its perpendicular bisector.
- Q9. (a)** What fraction of numbers from 11 to 25 are multiple of 2.
(b) Write fraction with numerator 3 and denominator is more than the numerator by 7 .
- Q10.** The number of halls on ground floor of hotel is 8 more than thrice the number of halls on first floor. If first floor has p halls? How many halls does ground floor has?
- Q11.** The area of rectangular piece of board is 36 sq cm and its length is 9 cm. What is the width of board?

SECTION – C**[3×10=30]**

- Q12. (a)** Convert 419 cm into metres.
(b) Write 3.04 as fraction and express it into lowest form.
(c) Which is greater 1.432 or 1.49?

Q13. Answer the following questions:

- (a) Which digit is neither positive nor negative?
- (b) Arrange given integers in ascending order:
- 5, - 3, 4, 0, 5, - 2
- (c) Draw $\frac{3}{5}$ on number line.

Q14. A rectangular piece of land measures 0.7 km by 0.6 km. Each side is to be fenced with 4 rounds of wires. What is the length of wire needed?

Q15. Aditya covered $\frac{2}{15}$ of his journey by car, by rickshaw and on foot. Find by which means he covered the major part of his journey?

Q16. Subtract (-32) from the sum of (-15) and 9. Also write additive inverse of final value.

Q17. (a) Akshit scores 95 marks in Mathematics, x marks in English and y marks in Science. What is his total score in three subjects?

(b) A rectangular box has height t cm. Its length is 4 times the height and breadth is 9 cm less than the length. Express length and breadth of box in terms of the height.

Q18.(a) Nikita had 30 m 7 cm long ribbon. She used 4 m 70 cm long ribbon for her project. Find the length of ribbon left with her.

(b) Write two hundreds and 4 tenths seven thousandths as decimal.

Q19.(a) Avneesh painted $\frac{1}{3}$ of wall space in his room, Tanisha painted $\frac{8}{12}$ of the wall space. How much did they paint together?

(b) Write $12 + \frac{7}{10} + \frac{6}{100}$ as decimal.

Q20. Rashi read 25 pages of a comic book file containing 100 pages. Ankita read $\frac{2}{5}$ of the same book. Who read more and by how much?

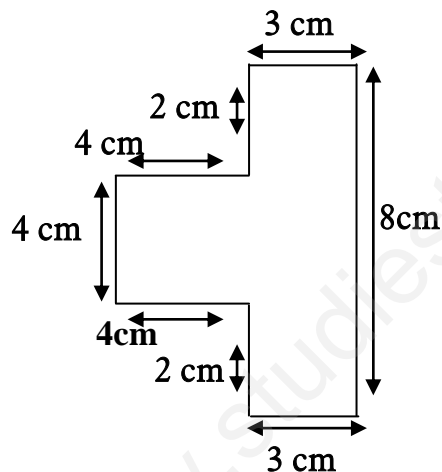
SECTION – D

[4x5=20]

Q21. (a) Out of 4000 vehicles in trade fair 2500 vehicles are cars. Find the ratio of other vehicles to cars.

(b) Find the ratio of 90 paisa to ₹ 1.5

- Q22. (a)** Draw a line segment AB 4.6 cm using ruler and compass. Take any point P on it and draw a perpendicular on AB.
- (b)** Draw an angle of measure 95° and construct its bisector.
- Q23.** How many tiles each measuring 2 m by 1 m, are required to cover a rectangular hall 12 m long and 8 m broad? Find the cost of tiles at ₹ 25 per tile?
- Q24. (a)** Kshamita purchased 10 pens for ₹ 175 and Diksha bought 8 pens for ₹ 96. Who got the pen cheaper?
- (b)** If train fair for 14 km is ₹ 98, find the fare for 28 km.
- Q25.** Find area and perimeter of given figure:



SOLUTIONSECTION- A

Q.1

- (i) (b)
 (ii) (c)
 (iii) (c)
 (iv) (c)

- (v) (d)
 (vi) (c)
 (vii) (a)
 (viii) (b)

SECTION- B

Q.2 Satyam has $= \frac{10}{70} \times \frac{3}{7} = \text{Rs } 30$
 Manpreet has $= \frac{10}{70} \times \frac{4}{7} = \text{Rs } 40$

Q.3

$$17 - 3m = 2$$

L.H.S $17 - 3 \times 4 = 2$ R.H.S
 $17 - 12 = 2$
 $5 \neq 2$

No 4 is not the solution.

Q.4 (a) Two hundred three and seventy eight thousandths

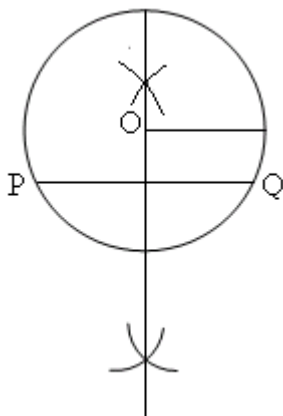
(b) 12.0
 $\begin{array}{r} 12.0 \\ -7.8 \\ \hline 4.2 \end{array}$

Q.5 $-483 - 682 + 19 - 500$
 $(-483 - 682) + (19 - 500)$
 $-1165 + (-481)$
 $-1165 - 481$
 (-1646)

Q.6 Twice a number x subtracted from the quotient of P by Q. There are 3 variables in this expression.

Q.7 Snowfall in I month = 31.6 cm
 Snowfall in II month = 42.35 cm
 Snowfall in III month = 22.75 cm
 Total Snowfall = 96.70 cm

Q.8

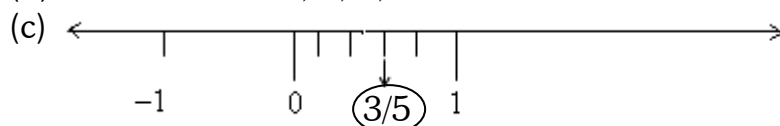
Q.9 (a) Number of multiples = 7, Fraction of multiples = $\frac{7}{15}$ (b) Fraction = $\frac{3}{4}$ Q.10 The number of halls on I floor = P
The number of halls on Ground floor = $3P+8$ Q.11 Area of rectangular board = 36 cm^2

Length = 9 cm

Breadth = $\frac{36}{9} = 4 \text{ cm}$ **SECTION- C**Q.12 (a) $\frac{419}{100} = 4.19 \text{ m}$ (b) $3.04 = \frac{304}{100} = \frac{152}{50} = \frac{76}{25}$

(c) 1.49 is greater

Q.13 (a) 0

(b) $-5 < -3 < -2, 0, 4, 5$ 

Q.14 Length of land piece = 0.7 km = 700 m

Breadth of land piece = 0.6 km = 600 m

Perimeter of the piece = $2(700+600) = 2(1300)$
= 2600 m

Length of the wire needed = $4 \times 2600 \text{ m} = 10,400 \text{ m}$

$$\begin{aligned}\text{Q.15 Covered by car} &= \frac{2}{15} \times \frac{3}{3} = \frac{6}{45} \\ \text{Covered by Rickshaw} &= \frac{1}{5} \times \frac{9}{9} = \frac{9}{45} \\ \text{Covered on foot} &= \frac{2}{3} \times \frac{15}{15} = \frac{30}{45}\end{aligned}$$

$$\begin{array}{r|l} 3 & 15, 5, 3 \\ 5 & 5, 5, 3 \\ 3 & 1, 1, 3 \\ \hline & 1, 1, 1 \end{array}$$

L.C.M = 45

So major part of his journey covered on foot.

$$\begin{aligned}\text{Q.16 Sum of } (-15) \text{ and } 9 &= -15 + 9 = -6 \\ \text{Subtract } -32 \text{ from } -6 &= -6 - (-32) = -6 + 32 = 26 \\ \text{Additive inverse} &= -26\end{aligned}$$

$$\begin{aligned}\text{Q.17 (a) Total score in three subjects} &= 95 + x + y \\ \text{(b) Height of the box} &= t \text{ cm} \\ \text{Length of the box} &= 4t \text{ cm} \\ \text{Breadth of the box} &= (4t - 9) \text{ cm}\end{aligned}$$

$$\begin{aligned}\text{Q.18 (a) Total length of the ribbon} &= 30 \text{ m } 07 \text{ cm} \\ \text{Nikita used} &= \underline{4 \text{ m } 70 \text{ cm}} \\ \text{Ribbon left} &= \underline{25 \text{ m } 37 \text{ cm}}\end{aligned}$$

$$\text{(b) } 200.407$$

$$\begin{aligned}\text{Q.19 (a) Avneesh painted the portion of his wall} &= \frac{1}{3} \\ \text{Tanisha painted the portion of his wall} &= \frac{8}{12} \\ \text{Portion they paint altogether} &= \frac{1}{3} + \frac{8}{12} = \frac{4+8}{12} = \frac{12}{12} = 1 \\ &= 1 \text{ (The complete wali)}\end{aligned}$$

$$\text{(b) } 12.760$$

Q.20 Pages Rashi read = 25
 Pages Ankita read = $100 \times \frac{2}{5} = 40$

Ankita read more by 15 pages than rashi.

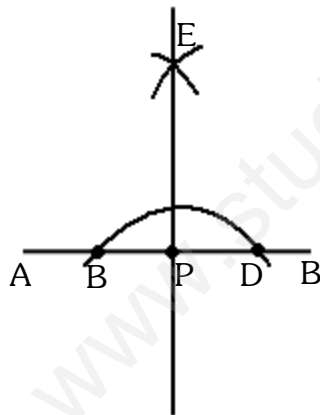
SECTION- D

Q.21 (a) Total vehicles = 4000
 Total cars = 2500
 Others = 1500

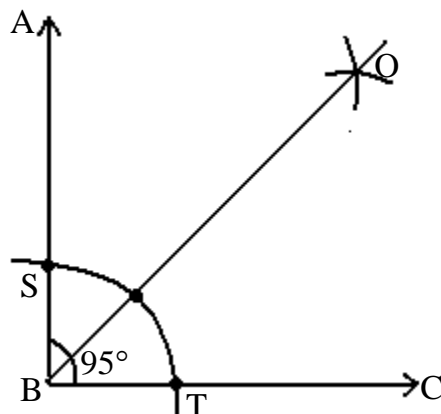
Ratio of other vehicles to cars = $\frac{1500}{2500} = \frac{3}{5} = 3:5$

(b) 90 paisa: Rs 1.5
 90 P : 150 P
 $\frac{90}{150} = \frac{3}{5} = 3:5$

Q.22 (i) —



(ii)



- Q.23 Length of hall = 12 m
 Breadth of hall = 8 m
 Area of the hall = $12 \times 8 = 96 \text{ m}^2$
 Area of tiles = 2 m^2
 Number of tiles required = $\frac{96}{2} = 48$
 Cost of 1 tile = Rs 25
 Cost of 48 tiles = $25 \times 48 = \text{Rs } 1200$

- Q.24 (a) Kshamita purchased 10 pens for Rs 175
 Cost of 1 pen = $\frac{175}{10} = \text{Rs } 17.5$
 Diksha bought 8 pens for Rs 96
 Cost of 1 pen = $\frac{96}{8} = \text{Rs } 12$
 Diksha got the pen cheaper

- (b) Train fare for 14 km = Rs 98
 Train fare for 1 km = $\frac{98}{14}$
 Train fare for 28 km = $\frac{98}{14} \times 28 = \text{Rs } 196$

- Q.25 (i) Area of the figure = I + II
 Area of I = 4×4
 $= 16 \text{ cm}^2$
 Area of II = 3×8
 $= 24 \text{ cm}^2$
 Total area = $16 + 24 = 40 \text{ cm}^2$
 (i) Perimeter of the figure = $(3 + 8 + 3 + 2 + 4 + 4 + 4 + 2)$
 $= 30 \text{ cm}$

~~~~~  
 =====  
 .....

**MODEL TEST PAPER SUMMATIVE ASSESSMENT-II**  
**UNSOLVED-1****Time: 2 hrs 30 min.****Maximum Marks: 80**

NOTE : Attempt all the questions.

- Section-A consists of 8 parts carrying 1 mark each
- Section-B– Q2 to Q11 carry 2 marks each
- Section-C– Q12 to Q20 carry 3 marks each
- Section-D– Q21 to Q25 carry 5 marks each

**SECTION A****[1 × 8 = 8]****Q.1. Do as directed:-**

- (a)  $\frac{1}{10}$  can also be written as 0.01 in decimal notation. State True or False.
- (b) Which is greater 9.058 or 9.12?
- (c) If the price of a notebook is Rs 35, then what will be the price of 'z' notebooks?
- (d) Correct the statement:  
"In a proportion, the second and third terms are called extremes".
- (e) The lowest term of the ratio 350:750 is \_\_\_\_\_.
- (f) The total distance around the length of the boundary of a closed figure is called \_\_\_\_
- (g) The symbols which stand for unknown numbers and can take any numerical value are called \_\_\_\_\_.
- (h) An equilateral triangle has \_\_\_\_\_ lines of symmetry.

**SECTION B****[11 × 2 = 22]****Q.2.**

- (i) Identify the decimal number indicated by point B.
- (ii) Convert the decimal number indicated by point D in fraction.

**Q.3. Arrange in ascending order**

1.12, 1.5, 1.01, 1.001 and 1.00

Q.4. Convert:

- (i) 80 rupees 4 paise in rupees
- (ii) 65 kg 37 g in kg

Q.5. Find the length of the side of a square, if its perimeter is 1604 cm.

Q.6. Find the area of the rectangle in sq m whose length and breadth are 45 m and 2500 cm respectively.

Q.7. (i) Write the algebraic expression for “Five times the product of x and y divided by z”.

(ii) Is  $3 > 10y + 7$  is an equation with a variable?

Q.8. Marbles are to be transferred from a larger box to the two smaller boxes, when a larger box is emptied, the marbles from it fill these smaller boxes and still 7 marbles remain outside. If the number of marbles in a smaller box is taken to be ‘m’, what was the total number of marbles in the larger box?

Q.9. The length and breadth of a rectangle are denoted by ‘a’ and ‘b’ respectively. What will be the formula for its perimeter, if it is denoted by ‘p’?

Q.10. Divide Rs 7500 between Anu and Manu in the ratio 2 : 3.

Q.11. Determine whether the given ratios are in proportion or not.

Rs 4500 : Rs 5400 and 60 km : 72 km

### SECTION C

[3 × 10 = 30]

Q.12. Out of 450 apples in a basket, 20 are found rotten. Find?

- (i) Ratio of rotten apples to total apples.
- (ii) Ratio of good apples to rotten apples.
- (iii) Ratio of good apples to total apples.

Q.13. Sarthak’s father’s age is 4 times that of Sarthak’s, while his mother’s age is 3 times that of his sister’s age, who is 5 years younger to Sarthak. If Sarthak’s age is ‘y’ years, then find the age of each family member.

Q.14. A carpenter wants to border a dining table measuring 4 m by 3 m with an aluminium strip. If the cost of bordering is Rs 40 per metre, find the total cost of bordering.

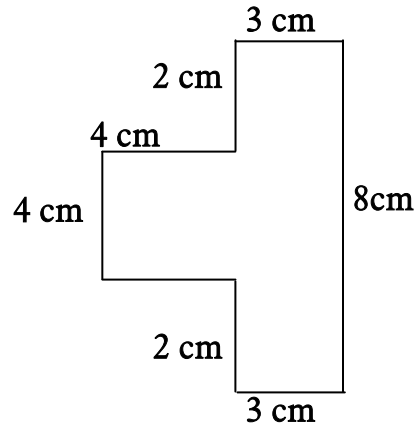
- Q.15. A string is 240 cm long. What will be the length of each side if the string is used to form?
- An equilateral triangle
  - A regular pentagon
- Q.16. Draw two circles of radius 3 cm and 4.5 cm respectively with the same centre 'O'. Mark a point 'Q' which is in the exterior of the smaller circle and in the interior of the larger circle.
- Q.17. Draw QR of length 4.5 cm and ST of length 6 cm. Construct a line segment of the length  $2ST - QR$ .
- Q.18. Draw any line segment XY. Take any point 'Z' not on it. Through 'Z' draw a perpendicular to XY with the help of ruler and compasses.
- Q.19. A milkman had 78.5 litres of milk in his drums. He sold 38.25 litres in one colony and 32.75 litres in another colony. How much milk is left unsold?
- Q.20. (i) Express 14.085 in expanded form.  
(ii) Write twenty one and seventy five thousandths as a decimal number.

SECTION D

[4 × 5 = 20]

- Q.21. (i) Construct with ruler and compasses an angle of  $30^\circ$ .  
(ii) Draw an angle of  $85^\circ$  with the help of protractor and construct a copy of it, using ruler and compasses.
- Q.22. (i) Pick out the solution from the given values in the bracket and show that the other value does not satisfy the equation.  
 $2 - 4x = -26$  (– 7, 7)  
(ii) What is the rule that gives the number of matchsticks required in terms of number of alphabet 'Z'.  
(iii) Form an expression using p, 3 and 8 such that expression has p in it. Use only two mathematical operations.
- Q.23. The cost of 16 chairs is Rs 3600.  
(i) What will be the cost of 100 chairs?  
(ii) Find the number of chairs that can be purchased in Rs 4275.

Q.24. Find the area and the perimeter of the given figure.



- Q.25. (i) Name the geometrical figure with infinite lines of symmetry  
(ii) Name 2 letters in the English Alphabet with only horizontal line of symmetry.  
(iii) Draw a regular hexagon and draw its all lines of symmetry.  
(iv) Draw a figure with no line of symmetry.

=====

**MODEL TEST PAPER SUMMATIVE ASSESSMENT-II**  
**UNSOLVED-2****Time: 2 hrs 30 min.****Maximum Marks: 80**

NOTE : Attempt all the questions.

- Section-A consists of 8 parts carrying 1 mark each
- Section-B– Q2 to Q11 carry 2 marks each
- Section-C– Q12 to Q20 carry 3 marks each
- Section-D– Q21 to Q25 carry 5 marks each

**SECTION A****[1 × 8 = 8]****Q.1. Do as directed:-**

- (i)  $\frac{5}{100}$  can also be written as 0.5 in decimal notation. State True or False.
- (j) Which is smaller 7.85 or 7.185?
- (k) If the price of a pen is Rs 18, then what will be the price of 'x' notebooks?
- (l) Correct the statement:  
"Comparison of two quantities using division is called a proportion".
- (m) The lowest term of the ratio 625:250 is \_\_\_\_\_.
- (n) The amount of surface enclosed by a closed figure is called its \_\_\_\_\_.
- (o) The symbols which have a fixed numerical value are called \_\_\_\_\_.
- (p) A circle has \_\_\_\_\_ lines of symmetry.

**SECTION B****[11 × 2 = 22]****Q.2. Determine whether the given ratios are in proportion or not.**

440 km : 200 km and Rs 55 : Rs 25

**Q.3. Divide Rs 8400 between Amit and Mohit in the ratio 5 : 7.****Q.4. (i) Is  $45 = (50 \div 10) + 40$  is an equation with a variable?**

(ii) Write the algebraic expression for "Six times the product of a and b divided by d".

**Q.5. The length and breadth of a rectangle are denoted by k and l respectively. What will be the formula for its area, if it is denoted by 'a'?**

Q.6.



- (i) Convert the decimal number indicated by point R in fraction.
- (ii) Identify the decimal number indicated by point P.

Q.7. Arrange in descending order

58.3, 58.63, 58.5, 58.41 and 58.09

Q.8. Convert:

- (i) 45 m 6 cm in metres
- (ii) 5 litres 75 millilitres in litres

Q.9. Find the area of the square in sq m whose length of the side is 575 cm.

Q.10. Find the length of the side of a square, if its perimeter is 3028 cm.

Q.11. Apples are to be transferred from a larger box to the two smaller boxes, when a larger box is emptied, the apples from it fill these smaller boxes and still 13 apples remain outside. If the number of apples in a smaller box is taken to be 'c', what was the total number of apples in the larger box?

SECTION C

[3 × 10 = 30]

Q.12. Draw two circles of radius 2.5 cm and 5 cm respectively with the same centre 'p'. Mark a point 'k' which is in the exterior of the smaller circle and in the interior of the larger circle.

Q.13. Draw PQ of length 3 cm and YZ of length 5 cm. Construct a line segment of the length  $2PQ - YZ$ .

Q.14. Draw any line segment AB. Take any point 'E' on it. Through 'E' draw a perpendicular to AB with the help of ruler and compasses.

Q.15. (i) Write the decimal number for  $20 + 5 + \frac{1}{10} + \frac{3}{1000}$ .

(ii) Write 389.74 in words.

Q.16. The total weight of three parcels is 48.057 kg. If two of them weigh 12.64 kg and 18.57 kg. Find the weight of the third parcel?

Q.17. The present ages of Ravi and Tanya are 22 years and 16 years, respectively. Find

- (i) The ratio of their present ages.



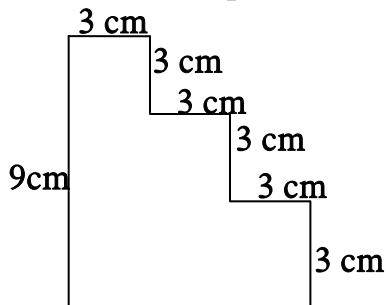
- (ii) Ravi's age to the difference of their ages.  
(iii) Tanya's age after 8 years to Ravi's age after 8 years.

- Q.18. A room has rectangular floor of size 800 cm by 500 cm. A square carpet of side 100 cm is laid on the floor. Find the area of the floor which is not covered with carpet.
- Q.19. Maya runs around a square park of side 60 m and takes 3 rounds of it. Kanchan takes 4 rounds of a rectangular park of length 40 m and breadth 25 m. Find who covers a lesser distance.
- Q.20. Esha's father's age is 4 times that of Esha's, while her mother's age is 3 times that of her brother's age, who is 4 years elder to Esha. If Esha's age is 't' years, find the age of each family member.

SECTION D

[4 × 5 = 20]

- Q.21. Four dozen bananas cost Rs 192.
- (iii) Find the cost of 35 bananas.
- (iv) How many bananas can be purchased in Rs 2284?
- Q.22. (i) Form an expression using k, 2 and 7 such that expression has k in it. Use only two mathematical operations.
- (ii) Pick out the solution from the given values in the bracket and show that the other value does not satisfy the equation.
- $$\frac{y}{4} + 8 = 10 \quad (10, 8)$$
- (iii) What is the rule that gives the number of matchsticks required in terms of number of alphabet ' '.  $\begin{array}{|c|} \hline \square \\ \hline \square \\ \hline \end{array}$
- Q.23. (i) Draw an angle of  $65^\circ$  with the help of protractor and construct a copy of it using ruler and compasses.
- (ii) Construct with ruler and compasses an angle of  $45^\circ$ .
- Q.24. Find the area and the perimeter of the given figure.



- Q.25. (i) \_\_\_\_\_ is a figure with no line of symmetry. (Fill up)  
(ii) Rhombus has \_\_\_\_\_ lines of symmetry. (Fill up)  
(iii) Name 2 letters in English Alphabet with only vertical line of symmetry.  
(iv) Draw a regular hexagon & draw its all lines of symmetry.

\*\*\*\*\*

=====

[www.studiestoday.com](http://www.studiestoday.com)

**REVISION ASSIGNMENT****ASSIGNMENT- 1****Knowing Our Numbers**

- Q.1. How are the numbers 1000 and 500 represented in Roman numerals?
- Q.2. Arrange 7724, 7247, 2474, 7742 in ascending order.
- Q.3. Write the expression for “eighteen is added to the product of fifteen and seven”.
- Q.4. Estimate to the nearest hundred  $151 \times 72$ .
- Q.5. Write 50,998 in expanded form.
- Q.6. Write Hindu- Arabic number for LXXIX.
- Q.7. Write the number name for 88,88,808.
- Q.8. Using the given digits 9, 0, 4, 3, 6 without repetition and make the greatest and the smallest 5- digit numbers.
- Q.9. Arrange the numbers 93124, 94213, 98234, 94823, 93128 in descending order.
- Q.10. You have the following digits 4, 5, 6, 0, 7 and 8. Using them, make the greatest and the smallest numbers each with 6- digit.
- Q.11. A bus covers the distance of 160 km 575m every day. Find the total distance covered by it in 7 days.
- Q.12. Shekhar is a famous cricket player. He has so far scored 6,980 runs in test matches. He wishes to complete 10,000 runs. How many more runs does he need?
- Q.13. A vessel has 4ℓ 500 ml of curd. In how many glasses, each of 25 ml capacity, can it be filled?

**ASSIGNMENT- 2****Whole Numbers**

- Q.1. What is the successor and the predecessor of 599?
- Q.2. How many numbers are there between 92 and 103?
- Q.3. Calculate the product of  $4 \times 233 \times 25$  using rearrangement.
- Q.4. Calculate  $761 \times 999 + 761$  using property.
- Q.5. Which is the greater number among 803838 and 830838?
- Q.6. Solve by suitable rearrangement  $1762 + 553 + 1338 + 547$ .
- Q.7. Write the natural number which has no predecessor.
- Q.8. Solve:  $8 \times 62 \times 8 - 64 \times 60$
- Q.9. Find the value of  $54279 \times 92 + 8 \times 54279$  using property.
- Q.10. Multiply  $25 \times 96$  using suitable property.
- Q.11. The total number of children in VI- A are 45 and in VI- B are 47. If each child pays Rs. 135 as donation amount, how much money is collected by both sections?
- Q.12. Rita pays Rs 1500 to her Piano teacher and Rs 750 to the donation club every month. Find the total amount paid by her in 1 year.

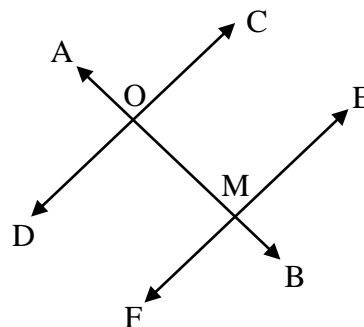
**ASSIGNMENT- 3****Playing with numbers**

- Q.1. Explain how 28 is a perfect number?
- Q.2. Determine the prime factorization.
- (i) 468 (ii) 7325
- Q.3. Find the smallest 4- digit number which is divisible by 18, 24 and 32
- Q.4. Find the greatest number of 6 digits exactly divisible by 24, 15 and 36.

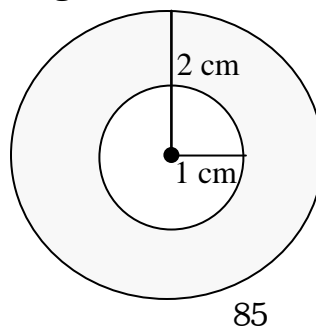
- Q.5. Find first four common multiples of 3, 4 and 9.
- Q.6. The students in a class can be divided into groups of 2, 3, 5 and 6. What is the least number of children this can have.
- Q.7. Check the divisibility of 3340 by  
     (i) 2                                      (ii) 3                                      (iii) 6
- Q.8. Check the divisibility of 88169308 by 11.
- Q.9. The length, breadth and height of room are 625cm, 675cm and 500cm respectively, find the longest tape to measure the dimensions of the room exactly.
- Q.10. Find the greatest number such that if 245 and 1029 be divided by it, then remainder in each case is 5.

**ASSIGNMENT- 4****Basic Geometrical Ideas**

- Q.1. Construct a segment  $AB = 1.8$  cm long. Construct another segment  $PQ$  whose length is thrice as that of  $AB$ . Measure its length.
- Q.2. From the given figure, find out:  
     (i) all pairs of intersecting lines.  
     (ii) all points of intersection.



- Q.3. In the concentric circles given below, find the radius and diameter of the bigger circle.

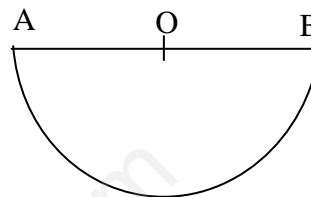


Q.4. If  $AB = 2.4$  cm and  $CD = 2.5$  cm, construct a segment whose length is equal to  $3AB - 2CD$ .

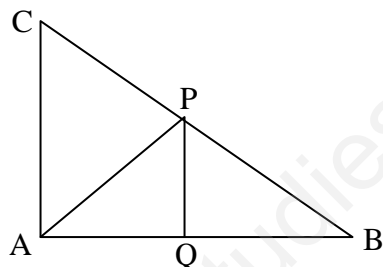
Q.5. How many diameters of a circle can be drawn? Where do they intersect? Is the point of intersection of diameter in the interior or exterior of the circle?

Q.6. Name from drawn figure.

- (i) name its diameter.
- (ii) name its radius.
- (iii) name its arc.
- (iv) is the figure half of a circle?



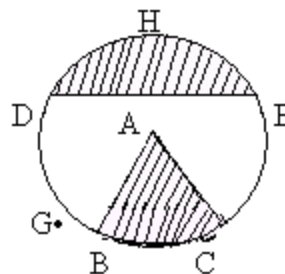
Q.7.



- (i) Name all the triangles formed in the figure.
- (ii) Which two points lie on sides BC and AB respectively?
- (iii) Name any two line segments inside the triangle ABC

Q.8. From the drawn circle, name the following :

- (i) a chord.
- (ii) a point in the interior and a point in the exterior.
- (iii) A sector.
- (iv) A segment.
- (v) An arc.

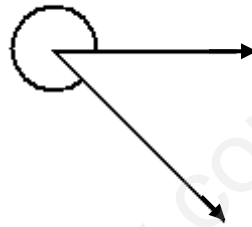




**ASSIGNMENT- 6****Understanding elementary shapes**

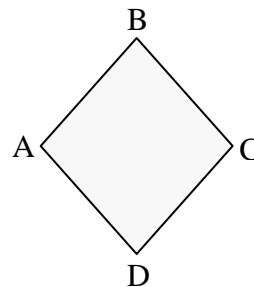
- Q.1. Name the angle whose measure is more than  $90^\circ$  and less than  $180^\circ$ .
- Q.2. Which direction will you face if you start facing west and make  $\frac{3}{4}$  of a revolution from left?

- Q.3. Is the given angle acute or reflex?



- Q.4. What is the diameter of the circle, if the radius is 3.6 cm.
- Q.5. Name the triangle in which:
- One angle is obtuse angle.
  - Two sides are equal.
- Q.6. When two lines are drawn having distance 5cm equally between them, then what do we call them?

- Q.7. In the drawn rhombus, name the type of angles:



- $\angle A$  and  $\angle C$
  - $\angle A$  and  $\angle D$
- Q.8. Where will the hour hand of a clock stop, if it starts from 8 and turns:
- Two right angles
  - Three right angles
- Q.9. Find the faces, edges and corners of a:
- Cylinder
  - Prism

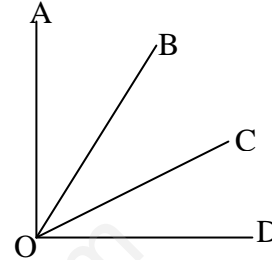


Q.10. When two lines drawn from adjacent vertices cut each other in the interior part of a square at  $90^\circ$  then what do we call them?

Q.11. Construct a segment  $RS = 2.8\text{cm}$  long, construct another segment  $PM$  whose length is twice as that of  $RS$ . Measure its length.

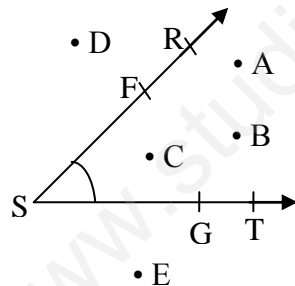
Q.12. Write the names of –

- (i) All angles formed with vertex O.
- (ii) All pairs of adjacent angles with vertex O.



Q.13. In the given adjoining figure, list the points which:

- (i) are in the interior of  $\angle RST$
- (ii) are in the exterior of  $\angle RST$
- (iii) lie on  $\angle RST$



### **ASSIGNMENT- 7**

#### **Fractions**

Q.1. What fraction of numbers from 2 to 15 are prime numbers?

Q.2. Form the fraction of 750g to a kilogram and reduce it to the lowest term.

Q.3. Find fraction of 25 paise to Rs 2.

Q.4. Convert  $\frac{54}{5}$  into mixed fraction.

Q.5. Find whether the given set of fractions is like or unlike?

$$\frac{2}{12}, \frac{3}{14}, \frac{4}{12}, \frac{14}{12}.$$

Q.6. Put the following set of fractions in descending order:

$$\frac{1}{2}, \frac{1}{21}, \frac{1}{5}, \frac{1}{32}, \frac{1}{50}, \frac{1}{9}, \frac{1}{15}.$$

Q.7. Solve the following:

$$(i) \quad \frac{1}{7} + \frac{2}{7}$$

$$(ii) \quad \frac{13}{9} - \frac{5}{9}$$

Q.8. Simplify:  $8\frac{1}{4} - 2\frac{5}{6}$

Q.9. Find the value of:

$$(i) \quad \frac{5}{7} + \frac{1}{6}$$

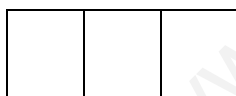
$$(ii) \quad \frac{5}{8} - \frac{1}{2}$$

Q.10. Reema ate  $\frac{2}{3}$  of a bread. Her sister ate  $\frac{1}{3}$  the part. How much did they eat altogether?

Q.11. Represent  $\frac{1}{4}$  on a number line.

Q.12. Is  $\frac{4}{7}$  equal to  $\frac{16}{28}$ ? Solve and show.

Q.13. Colour the fraction as indicated:



$$\frac{1}{3}$$

**ASSIGNMENT- 8****Data Handling**

Q.1. The total number of animals in five zoos is as follows:

|       |       |
|-------|-------|
| Zoo A | : 50  |
| Zoo B | : 80  |
| Zoo C | : 120 |
| Zoo D | : 90  |
| Zoo E | : 50  |

Prepare a pictograph to represent the above information (taking the scale 1 \* = 10 animals) and answer the following questions:

- (i) Which zoo has maximum animals and which has minimum.
- (ii) Which zoo has more animals B or C and by how much?
- (iii) Which two zoos have same number of animals?

Q.2. The numbers of people using different modes of transport are shown below:

Scale is 1 ☺ = 10 people.

|         |          |
|---------|----------|
| Car     | ☺☺☺☺☺☺   |
| Scooter | ☺☺☺☺     |
| Cycle   | ☺☺☺      |
| Bus     | ☺☺☺☺☺☺☺☺ |
| Auto    | ☺☺☺      |

- (i) Which is the popular mode of transport? most
- (ii) How many people like to go by bus?
- (iii) How many more people like to go by bus than cycle?
- (iv) Which two modes of transport are equally liked by people?

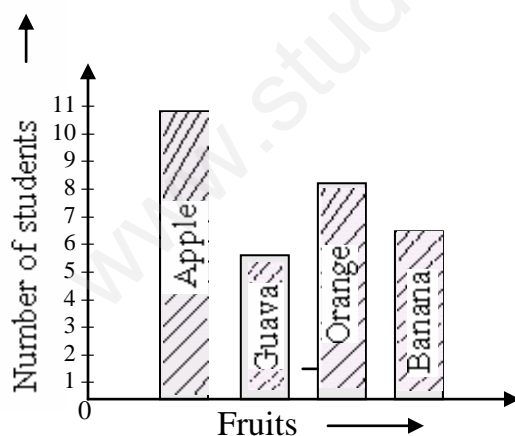
- Q.3. The data for the various heights found in a class given below. The number of students for each group is given. Make a table and enter the data using tally marks:

|          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|
| <b>4</b> | <b>5</b> | <b>2</b> | <b>2</b> | <b>5</b> | <b>4</b> |
| <b>3</b> | <b>4</b> | <b>5</b> | <b>5</b> | <b>3</b> | <b>2</b> |
| <b>4</b> | <b>2</b> | <b>2</b> | <b>2</b> | <b>2</b> | <b>3</b> |

- Q.4. The number of magazines sold by shopkeeper on seven days is shown below. Draw a bar graph to represent the information choosing scale of your choice:

| <i>Days</i>                     | <u>Sun</u> | <u>Mon</u> | <u>Tue</u> | <u>Wed</u> | <u>Thu</u> | <u>Fri</u> | <u>Sat</u> |
|---------------------------------|------------|------------|------------|------------|------------|------------|------------|
| <i>Number of magazines sold</i> | 75         | 50         | 30         | 50         | 45         | 20         | 65         |

- Q.5. In the bar graph shown below, the likings of different fruits by students:



- Which fruit is liked by most students?
- How many students like orange?
- How many more students like banana than guava?
- How many more students like apple than orange?

**ASSIGNMENT- 9****Decimals**

- Q.1. Represent 7.2 on a number line.
- Q.2. Write  $900 + 90 + \frac{9}{10}$  in decimal form.
- Q.3. Convert 5.25 in the fractional form. Also reduce it to its lowest form.
- Q.4. Write seventy seven point two three in decimal form.
- Q.5. Convert  $\frac{11}{1000}$  in the decimal form.
- Q.6. Which is greater, 7.35 or 7.05?
- Q.7. Write using decimals:
- (i) 85cm (ii) 575 paise
- Q.8. Convert :
- (i) 14.35m into m and cm
- (ii) 56.904kg into kg and g
- Q.9. Add: 92.5, 16.542 and 1.711.
- Q.10. Subtract: 19.05 from 25.56.
- Q.11. Reema had Rs. 7.25 with her. She spent Rs. 1.50. how much money is left with her?
- Q.12. Romi has to cover a distance of 20km 50m. She walked 1 km and went by bus for 15km and hired an auto for rest of the distance. How much distance did she cover by auto?
- Q.13. Natu bought 500g potatoes, 250g capsicums, 700g onions, 500g tomatoes, 100g gingers and 300g radish. Find the total weight of the vegetables in terms of decimal.
- Q.14. Bulbul spent Rs. 190.25 on her books, Rs. 275 on grocery and Rs. 85.50 on clothes. Find the total money spent by her.

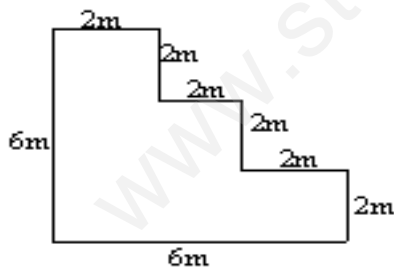
**ASSIGNMENT- 10****PRACTICAL GEOMETRY**

- Q.1. Given  $\overline{AB}$  of length 5cm. Construct PQ such that the length of  $\overline{PQ}$  is twice that of AB.
- Q.2. With the same centre, draw two circles of radius 6cm and 5cm.
- Q.3. Draw any line segment  $\overline{CD}$ . Take any point M not on it. through M, draw a perpendicular to CD. (Use rules and compasses)
- Q.4. Draw a line segment of length 10cm. Using compasses divide it into four equal parts.
- Q.5. Draw  $\overline{CD}$  of length 8cm and find its axis of symmetry.
- Q.6. Construct an angle of  $90^\circ$  and bisect it.
- Q.7. Draw an angle of  $70^\circ$  and construct an angle whose measure is twice of the given angle.
- Q.8. Draw a line segment of 5.6cm. From it cut 3.6cm. How much part of the line is remaining?

**ASSIGNMENT- 11****Mensuration**

- Q.1. The lid of a rectangular box of sides 40cm by 10cm is sealed all round with tape. What is the length of the tape required?
- Q.2. What is the length of the wooden strip required to frame a photograph of length and breadth 32cm and 21cm respectively?
- Q.3. A piece of string is 30cm long. What will be the length of each side if the string is used to form.
- (i) Square (ii) An equilateral triangle
- Q.4. Find the distance covered by Rahul if he takes four rounds of a rectangular park whose length is 25m and breadth is 10m.

- Q.5. A table top measures 12m 25cm by 9m 50cm. What is the perimeter of tabletop?
- Q.6. Kanchan runs around a square park of side 90m and Vinita runs around a rectangular park whose length is 120m and breadth is 80m. Who covers the longer distance and by how much?
- Q.7. The length and breadth of three rectangles are given below.
- (i) 9m and 6m (ii) 17m and 3m
- (iii) 14m and 4m
- Find which rectangle has greatest area and which has least.
- Q.8. A tile is a square of side 20cm, how many such tiles would be required to cover the floor of a square bathroom of side 3m?
- Q.9. The area of a square of side 16cm is the same as that of a rectangle of length 32cm. Find its breadth.
- Q.10. A room has rectangular floor of size 300m by 200m. A square carpet of side 180m is laid in the room. Find the area of floor which is not carpeted.
- Q.11. Find the area of the following figures by splitting into rectangles.



**ASSIGNMENT- 12****Algebra**

Q.1 Give expression for the following statements:

- (i) added to  $xm$ ,
- (ii)  $x$  subtracted from 4
- (iii) 2 subtracted from the sum of  $x$  and  $y$
- (iv) multiplied by  $-5$
- (v) Product of 2 and  $x$  divided by 3
- (vi)  $n$  multiplied by 2 and 1 subtracted from the product
- (vii)  $-5$  divided by  $z$
- (viii)  $a$  increased by twice of  $b$
- (ix) Multiply  $x$  by  $y$  and then add 7 to it
- (x) Subtract  $a$  from  $b$  and then multiply the difference by 7
- (xi) 170 increased by the product of  $x$  and  $y$
- (xii) Three times the difference of 30 and  $a$
- (xiii) Multiplied by the sum of  $x$  and  $y$  by 3 and divide the product by  $z$
- (xiv) Add 3 and  $x$  and subtract from the product of  $y$  and  $z$
- (xv)  $Z$  multiplied by 7 and result subtracted from 85

Q.2 Write the statement for the given expression:

- |               |                        |                |
|---------------|------------------------|----------------|
| (i) $3X + 5$  | (iii) $2Y + 2$         | (v) $5 - 3p$   |
| (ii) $6 - 4X$ | (iv) $\frac{x}{2} + 1$ | (vi) $-2m + 5$ |

Q.3. If the cost of  $x$  metres of cloth is Rs  $y$ . Find the cost of 4 metres of cloth.

Q.4. Aditi's marks in maths are 15 more than two- third of her Hindi marks. If she scores ' $x$ ' marks in Hindi, find her marks in maths.

Q.5. If the cost of one shirt is Rs  $a$  and the cost of 1 trouser is Rs.  $b$ , then find the cost of 6 shirts and 7 trousers.



Q.6. Complete the table and find the solution of  $2x + 10 = 30$

|           |   |    |    |
|-----------|---|----|----|
| x         | 5 | 10 | 15 |
| $2x + 10$ |   |    |    |

### **ASSIGNMENT- 13**

#### **Ratio And Proportion**

Q.1. Find the ratio of the following:

(i) 21 hours to 49 hours

(iii) A dozen to a score

(ii) 75 cm to 3 metres

Q.2. Find the ratio of 250g to 5kg.

Q.3. Out of total 1450 students in a school, 1000 went for the picnic. Find the ratio of:

(i) Students who went to the picnic to total students.

(ii) Students who did not go to the picnic to those who went for the picnic.

Q.4. Write the middle terms and the extreme terms, if the numbers form the proportion in 1 kg: 40 kg and 25g: 625 g.

Q.5. A scooter needs 3 litres petrol to cover 90 km. How many litres of petrol is required to cover 120 km?

Q.6. A car travels 90 km in  $2\frac{1}{2}$  hours.

(i) How much time is required to cover 40 km with the same speed?

(ii) Find the distance covered in 3 hours with the same speed.

Q.7. Check whether the following are in proportion or not:

(i) 2:9 and 18:81

(ii) Rs. 10 to Rs. 15 and 4 to 6.

Q.8. A horse and cart together cost Rs 2880. Find the cost of each if their costs are in ratio 5 : 3.

Q.9. Give two equivalent ratios of 6:4.

Q.10. Lakshmi earns Rs 1, 44, 000 in 15 months.

- (i) How much does she earn in 7 months  
(ii) In how many months will she earn Rs 2, 40, 000

Q.11. Fill in the blanks:

$$\frac{14}{21} = \frac{\square}{3} = \frac{6}{\square}$$

~~~~~  
=====