

Syllabus for Session (2020-21)

Subject: Mathematics

Month	Units	Skills	Inculcation	Activity(Integrated)	Learning outcome	Internal Assessment
April	Unit 2 Fractions & decimal	To improve calculation skill using four fundamental operations on fractions & decimals	Students will be able to use concept of decimals and fractions when dividing the whole region into different parts in different real life situations	To find the product of two decimal numbers on a squared paper by drawing horizontal, vertical lines & shading	Understanding concept of arithmetic operations on fractions and decimals	Weekly Test
	Unit 1 Integers	To improve calculation Skill using four basic arithmetic operations on integers.	Students will be able to use positive integers ,negative integers in solving real life problems related to 'directions', 'temperature' etc.	To express multiplication fact & division fact of integers using number line.	Concept of properties of operations on integers	Periodic Test -I
May	Unit 3 Data handling	To develop skill of observing data from bar graph, skill of drawing the same.	Students will be able to analyses and synthesize tabular, graphical data in newspapers, magazines etc.	To find probability of different outcomes by using real objects.	Concept of mean, median, mode, probability.	Periodic Test -I
	Unit 4 Simple equations	To develop skill of identifying linear equations and different methods to solve them.	Forming word problems from real life situations, forming equations then finding solutions of them.	To draw a bar graph by recording the time taken by students in 100m, 200m races. (Physical Education) To find solution of an equation using linear equation scale set.	Concept of linear equation and finding its solution.	Periodic Test -I
June			Summer Vacation			
July	Unit 5 Lines and angles	To develop skill of identifying different types of angles.	Students will apply knowledge in recognizing angles in real life shapes, objects etc.	To verify experimentally that if two parallel lines are cut by transversal then corresponding angles are equal.	Understanding of different types of angles & its properties.	Class Test
	Unit 15 Visualizing Solid shapes	To develop their abstract thinking by using concept of 2D and 3D objects.	Students will be able to make the objects (2D, 3D) objects using nets of same.	Different types of angles formed with Yoga Asans (Yoga) To draw net of cuboid and triangular pyramid by paper cutting and pasting.	Understanding different types of 2D,3D shapes and their nets.	

Aug.	Unit 6 Triangle & its properties Unit 7 Congruence of triangles	To develop their critical thinking by making them able to use different properties of triangle. To develop observation skill to recognize congruent shapes.	Students will be able to verify facts about triangles in real life situations. Identifying congruent shapes & using the knowledge gained in solving real life problems.	To verify exterior angle property of a triangle. To verify Pythagoras Property of a right angled triangle. Worli Art (Art Education)	To know about triangle and its properties. Understanding congruence of triangles.	Class Test Revision Test
Sept.	MID TERM EXAMS Unit- 1,2,3,4,5,6,7,15					
Month	Units	Skill	Inculcation	Activity(Integrated)	Learning outcome	Internal Assessment
Oct.	Unit 8 Comparing quantities Unit 9 Rational numbers	Developing skill of making comparison. To develop calculation skill using basic arithmetic operations on rational numbers.	To make them able to apply concept in sale & purchase, to compare the performance in class etc. Solving real life problems related to rational numbers.	Concept of Percentage using marks of the students obtained in different subjects. Role play using the concepts of profit, loss and interest. (Theatre Club) To find rational numbers between two given rational numbers.	Understanding concept of %, its application, loss, profit, loss%, profit%, simple interest. Understanding concept of addition, subtraction, multiplication, division of rational numbers.	Weekly Test Periodic Test -II
Nov.	Unit 10 Practical geometry Unit – 11 Perimeter And Area	To improve drawing skill. To develop critical thinking and calculation skill.	Making students able to draw mathematical diagrams. Making the students able to find perimeter, area of different shapes (rectangular, square, circular, triangular etc.).	To make wall hangings by using different mathematical shapes of different areas and perimeters. (Work Experience) To derive area of circle using area of rectangle.	Construction of triangles. Understanding perimeter and area of triangle, parallelogram, rectangle, square, circle.	Periodic Test -II Periodic Test -II
Dec.	Unit – 12 Algebraic Expressions Unit – 13 Exponents And Powers	To develop observation skill, to improve skill of simplifying the expressions. To improve observation skill, calculation skill using laws of exponents	Using this concept, students will be able to form expressions for different number patterns. To express very short number or very large number in short form, standard form can be used.	 To verify law of exponent i.e. $a^m \times a^n = a^{m+n}$	Understanding addition and subtraction of algebraic expressions. Various laws of exponents and their use.	Class Test Revision Test

Jan.	Unit – 14 Symmetry	To develop aesthetic sense in students, to improve observation skill.	Students will be able to recognize symmetrical figures in daily life.	To draw two mathematical shapes having rotational symmetry of order more than 1.	Understanding rotational and line symmetry.	Class Test
Feb, March Revision & Exams Ch.- 8,9,10,11,12,13,14,1,4,3						