ACADEMIC PLAN: 2016-17
SUBJECT: MATHEMATICS
CLASS VIII

Syllabus for Summative Assessment-I

S.No	Name of the Chapter	Marks
1	Squares and Square Roots	13
2	Cubes and Cube Roots	10
3	Direct and Inverse Variation	11
4	Profit, Loss and Discount	13
5	Algebraic Identities	12
6	Parallel Lines	10
7	Introduction to graphs	07
8	Mensuration	14

Syllabus for Summative Assessment-II

S.No	Name of the Chapter	Marks
1	Exponents and Radicals	12
2	Compound Interest	15
3	Polynomials	12
4	Linear Equations in one variable	12
5	Understanding Quadrilaterals	14
6	Construction of Quadrilaterals	07
7	Statistics and Probability	14
8	.Rotational Symmetry	4

SCHEDULE OF FORMATIVE ASSESSMENT & UNIT TEST

FORMATIVE ASSESSMENT-I	FORMATIVE ASSESSMENT-II	FORMATIVE ASSESSMENT-III	FORMATIVE ASSESSMENT-IV
UNIT TEST (20)	UNIT TEST (20) HOLIDAY HOME WORK (10) • (INTERDISCIPLINARY PROJECT) Activity (10)	UNIT TEST (20) ACTIVITY(10)	UNIT TEST (20) HOME WORK/ ASSIGNMENT (10) (SA-I(5) + SA-II(5))

SYLLABUS FOR UNIT TEST -I
1) Squares & Square Roots
2) Cubes & Cube Roots

SYLLABUS FOR UNIT TEST -II
1) Direct and Inverse Variation
2) Profit & loss Discount

SYLLABUS FOR UNIT TEST -III
1) Exponents and Radicals
2).Compound Interest
3).Polynomials

SYLLABUS FOR UNIT TEST –IV
1.Linear Equations in one variable
2.Understanding Quadrilaterals

ACTIVITY FOR FORMATIVE ASSESSMENT -II

Dividing a line segment into 'n' equal parts or in a given ratio.

ACTIVITY FOR FORMATIVE ASSESSMENT -III

MCQ on Exponents and Radicals and Polynomials

ACADEMIC PLAN: 2016-17

		Topics	Learning Outcomes Students will be able to	HW	Assgn	Act. To be Taken/Assessed*
FA-I Apr- 22		Unit-I: Squares and Square Roots	i) identify perfect square numbers ii) calculate square root of numbers by prime factorization and long division method.	3	1	Recapitulation worksheet on prime factorization. Class tests: 2
		Unit-II: Cubes and Cube Roots	i) identify perfect cubes ii) calculate cube root of perfect cube numbers by prime factorization method.	2	1	Class test: 1
May- 11		Unit-IV: Direct and Inverse Variation	i) apply the concept of direct variation to find value of dependent quantity w.r.t independent quantity ii) apply the concept of inverse variation to find value of dependent quantity w.r.t independent quantity	4	1	Recapitulation worksheet on unitary method. Class tests: 2

FA-2 Jul- 24	Unit-V: Profit & Loss and Discount	i) apply formulae of profit, loss and discount in different situations. ii) calculate C.P, S.P and M.P using formulae.	3	1	1*. PROJECT (Mensuration) Making 3-D structures of cylinder and cone using 2-D structures, rectangle and sector of a circle Class test : 1
	Unit-VII: Algebraic Identities	i)factorize the given algebraic expressions by middle term splitting method.	3	1	Recapitulation by asking questions on algebraic expressions. Class test :1
	Unit-XIV: Mensuration	i) learn the formulae of volume and surface area of solid figures. ii) apply the formulae to find the volume and surface area of different solids and their combination.	4	1	Recapitulation of the concept of perimeter and area. Class test: 2
Aug- 22	Unit-X: Parallel Lines	i) identify corresponding and alternate angles. ii) divide the given line segment in the given ratio.	3	1	2*. Dividing a line segment into 'n' equal parts or in a given ratio. (Worksheet)
	Unit-XIII: Introduction to Graphs	i) plot the coordinates of the point in a coordinate plane.	1	1	
Sep	**REVISION**	**SUMMATIVE ASSESSMENT-I EXAMINATION**			

FA-3 Oct- 17	Unit-III: Exponents and Radicals	i) understand the concept of exponents and radicals ii) apply the laws of exponents to simplify given expression	2	1 +1 (Recap Assign ment)	3*. MCQ on Exponents and Radicals and Polynomials Class test: 1
	Unit-VI: Compound Interest	i) differentiate between compound interest and simple interest. ii)Compute compound interest when rate of interest is compounded annually, half yearly or quarterly.	3	1	Recapitulation of the concept of simple interest. Class test :1
Nov- 17	Unit-VIII: Polynomials	i) define a polynomial ii) define and write the degree of a polynomial iii) divide a polynomial by another polynomial	3	1	Class test : 1
	Unit-IX: Linear Equations in one variable	i) solve the linear equation in one variable. ii) form the linear equation in variable for day to day problems and obtain its solution.	3	1	Recapitulation of the concepts studied in class VII by asking questions. Class test: 1
FA-IV Dec- 21	Unit-XI: Understanding Quadrilaterals	i)identify convex and concave polygons. ii) state and apply angle sum property of quadrilateral. ii) learn the properties of rectangle square and rhombus.	2	1	4*. HW &Assignment notebooks will be assessed. Class test: 1
	Unit-XII: Construction of Quadrilaterals	i) construct a quadrilateral when its five parts are given.	3		
Jan- 10	Unit-XV: Statistics and Probability	i) collect and organize the data in tabular form ii) make and analyze the pie chart.	3	1	Recapitulation of the concepts studied in class VII. Class tests: 2

		iii) understand the concept of measure of uncertainty i.e. probability			
	Unit-XVI: Rotational Symmetry	i) understand the concept of symmetry ii) find the angle and order of rotation.			
Feb	**REVISION**	**SUMMATIVE ASSESSMENT-II EXAMINATION**			

NOTE: Students have to maintain three notebooks

i) one class work note book.

ii) one home work notebook

iii) Assignment note book.

* Separate assignments to be made for remedial purposes.

* Class tests to be planned weekly.

* Assignments will contain HOTS and Value based questions.