



**Syllabus for Certificate Course of Vedic Mathematics for Class 10<sup>th</sup>**

(Total No. of Modules=10, Total No. of Lectures = 30)

Sr. No.	Name of Topics	No. and Name of Lectures	Marks Allotted 100
Module 1	Fundamental Operations: Addition, Subtraction, Multiplication & Division	1. Vinculum Numbers 2. Addition, Subtraction by Ekadhikena & Shunyant 3. Multiplication, by Nikhilam, Ekadhikena, Ekanyunena & Urdhvatiryagbhyam 4. Tables, LCM. & HCF 5. Straight Division by Nikhilam, Paravartya & Dhvajank 6. Percentage, Profit and Loss 7. Prime Factors and Sum of factors	15
Module 2	Extended Operations: Square, Square root, Cube and Cube root	1. Square by Ekadhikena, Nikhilam and Dwandvayoga 2. Square root by Vilokanam & Dwandva yoga 3. Cube by Nikhilam and Dwandvayoga 4. Cube root by Vilokanam	10
Module 3	Osculators	1. Fractions as Recurring Decimals by Ekadhikena 2. Divisibility Test by Ekadhikena	10
Module 4	Mixed Operations	1. Mixed Operations in Addition, Subtraction, Multiplications, Square, Cube, Square root and Cube root	10
Module 5	Polynomials	1. Products of Polynomials 2. Solutions of a pair of Linear Equations in two Variables 3. Division of Polynomials 4. Factorization of Polynomials 5. Polynomials as Square, Cube and Higher Powers	10
Module 6	Quadratic Equations & Cubic Equations	1. Quadratic Equations by General formula by sutra 3 & 4 2. Cubic Equations by Sutra 3 & 4	10
Module 7	Surface Area and Volume	1. Surface Area & Volume of Cube, Cuboid, Cylinder, Cone & Sphere	5
Module 8	Coordinate Geometry	1. Distance Formula & Section Formula 2. Formation of Line having passing through Vertices 3. Area of Triangle	5



Module 9	Trigonometry	1. Fundamental T-ratios 2. Height and Distance	15
Module 10	Ganit Sutras Texts	1. Devanagari Alphabet 2. Ganita sutras 1& 2 and Ganit Up-sutras-1& 2 3. Intelligence Field Growth	10

### Summary of Modules and Lecturers with Weightage

No. of Modules	No. of Lecturers	Marks Allotted in Assignments(20Marks)	Marks Allotted in Examination(80Marks)
1	7	3	12
2	4	2	8
3	2	2	8
4	1	2	8
5	5	2	8
6	2	2	8
7	1	1	4
8	3	1	4
9	2	3	12
10	3	2	8
Total	30	20	80