



Syllabus for Certificate Course of Vedic Mathematics for Class 12th

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

Sr. No. of Modules	Name of Modules	No. and Name of Lectures	Marks Allotted 100
Module 1	Fundamental Operations in Arithmetic	1. Aims and Objectives of Vedic Mathematics, Sutras and Up-sutras of Vedic Mathematics 2. Vinculum Numbers and their Applications in Tables, Addition, Multiplication and Division 3. Multiplication, by Nikhilam, Ekadhikena, Ekanyunena & Urdhvatiryagbhyam 4. Beejank and their Applications in Addition, Subtraction, Multiplication, Square and Division 5. Straight Division by Nikhilam, Paravartya & Dhvajank	15
Module 2	Extended Operations	1. Square and Square root by Dwandvayoga, Addition and Difference of Squares 2. Square root by Vilokanam & Dwandva yoga, 3. Cube and Cube root 4. Meru Prastar in Higher Powers	10
Module 3	Osculators	1. Recurring Decimals by Ekadhikena and Ekanyunena 2. Divisibility Test and Quotient by Ekadhikena and Ekanyunena	10
Module 4	Mixed Operations	1. Mixed Operations of Addition, Subtraction Multiplication and Square by Simultaneous Operations	10
Module 5	Polynomials	1. Products of Polynomials, Solutions of a pair of Linear Equations in two and three Variables 2. Square, Cube and Higher Powers of Polynomials 3. Solution of Quadratic and Cubic Equations 4. Meru Prastar in Higher Powers	10
Module 6	Baudhayan Numbers	1. Baudhayan Numbers of Sum and Differences of Angles 2. Formation of Trigonometric Identities 3. Solution of Trigonometric functions	10
Module 7	Coordinate Geometry	1. Equations of Straight Lines 2. Area of Triangles (When vertices are given) 3. Distance and Section Formula	10



Module 8	Differentiation and Integration	1. Differentiation of Composite 2. Functions upto Third Order 3. Integration of Composite functions and Integration by Partial Fractions 4. Definite Integral	10
Module 9	Determinants	1. Determinants of Order 2x2, 3x3 2. Inverse of Matrices and Solutions of Equations using Determinants	5
Module 10	Ganit Sutras Texts	1. Shad Chakras Format of Human Frame with Focus upon the fourth Chakra Format of Heart 2. Intelligence Field and Processing Steps of Ganita-sutras and Ganita up-sutras. 3. Organization Format and Features of Vedic Ganita sutras and Upsutras text.	10

Summary of Modules and Lectures with Weightage

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