

## CERTIFICATE COURSE IN VEDIC MATHEMATICS

Semester	Course Code	Course Category	Hours/ Week	Credits	Marks for Evaluation		
					CIA	ESE	Total
Non - Semester	24MACVM	Certificate Course	2	2	-	100	100
<b>Course Title</b>		<b>Vedic Mathematics</b>					

SYLLABUS		
Unit	Contents	Hours
I	Addition – addition using zero ending numbers – addition of algebraic expression. Subtraction – subtraction using “Ekadhikena Poorvena” – subtraction using “Ekanyunena Poorvena” – subtraction of polynomials - Multiplication – multiplication using “Nikhilum” sutra - multiplication using “Urdhva Triyagbhyam”	6
II	Division – division using “Nikhilum” sutra - division using “Paravartya Yojayet” – division of polynomials - Divisibility – Positive Osculators - Negative Osculators Square and Square root – square using Yavadunam Method – square using “Ekadhikena Poorvena” – square root	6
III	Cube and Cube roots – cube using Yavadunam Method – cube using “Anurupyena” method – cube root - Decimals – operation on decimals – conversion into decimals – addition of decimals – subtraction of decimals – multiplication of decimals Factorization – simple quadratic equation – homogeneous quadratic equation – complex quadratic non homogenous polynomials – cubic polynomials	6
IV	Highest common factor - Simple equation - Quadratic equation	6
V	Cubic equation – solving cubic equation using “Purna and Paravartya” – special types of cubic equations - Biquadratic equation - Simultaneous Equation – Solving for X – Solving Y	6

<b>Text Book:</b>
Pandit Ramnandan Shashtri, For Competitive Exams Vedic Mathematics MADE EASY Arihanth Publication (I) Pvt. Ltd, Meerut. 2011. Unit I Chapter 1, 2, 3 Unit II Chapter 4, 5, 6 Unit III Chapter 7, 8, 9 Unit IV Chapter 10, 11, 12 Unit V Chapter 13, 14, 15
<b>Reference Books:</b>
1. Rajesh Kumar Thakur, Speed Mathematics Do It Quick, Do It Right! Rupa Publication Pvt. Ltd, 2022 2. Dhaval Bathia, Vedic Mathematics The Problem Solver, Maple Press Private Limited Edition, 2020
<b>Web Resources:</b>
1. <a href="https://www.youtube.com/watch?v=0UL8P-mpRfU">https://www.youtube.com/watch?v=0UL8P-mpRfU</a> 2. <a href="https://www.youtube.com/watch?v=S7G1uAK6c-s">https://www.youtube.com/watch?v=S7G1uAK6c-s</a> 3. <a href="https://www.youtube.com/watch?v=8WS-O1XA7_o">https://www.youtube.com/watch?v=8WS-O1XA7_o</a>

**Course Coordinator: Dr. A. Prasanna**

**Evaluation Pattern: Descriptive pattern**

Part-A (5 Questions out of 8) 5 x 8 = 40 Marks

Part-B (5 Questions out of 8) 5 x 12 = 60 Marks

**Total = 100 Marks**