



**INTEGRAL
UNIVERSITY**



Department of Mathematics & Statistics

Integral University, Lucknow

Value Added Course

On

Vedic Mathematics – I (MTV08)

Vedic Mathematics, as an alternative approach to mathematical education, exhibits a commendable level of organisation, conciseness, and unity. The utilisation of this mental calculator provides students with a wide range of opportunities for flexibility, enjoyment, and satisfaction. It effectively fosters the development and utilisation of intuition and creativity among students. Providing students with this opportunity will facilitate their academic and professional growth by equipping them with a distinct competitive advantage, enabling them to optimise their scholastic achievements, and fostering proficiency in mathematics and logical reasoning.

Upon successful completion of the course, each candidate shall receive a certificate.

This is an online course.

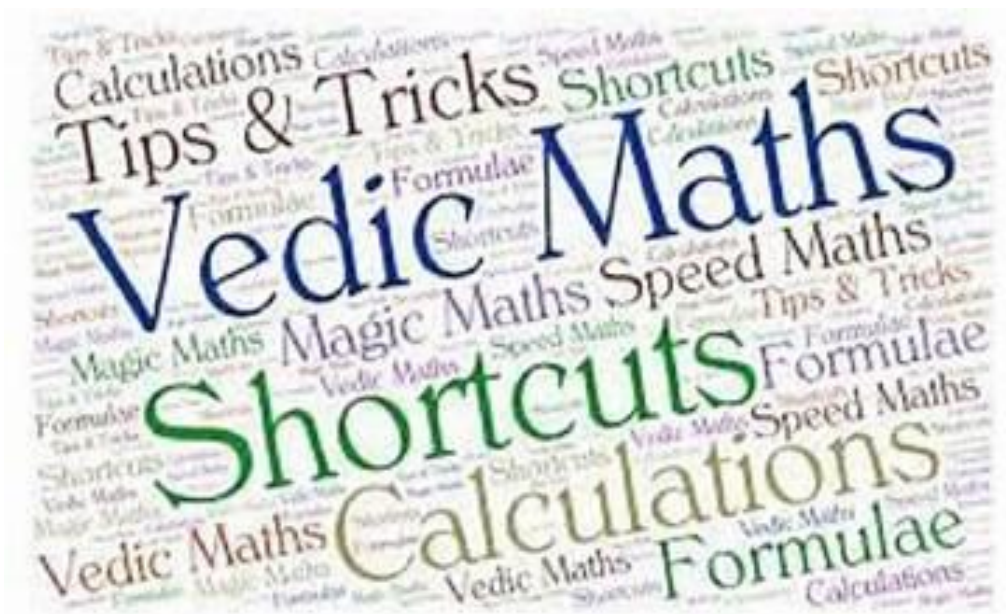
Course Platform : ILI-LMS

Conduct of sessions : Online - Google Meet

Duration : 30 hours

Course Commencement : 07-November-23

End of Course : 07-December-23



Course Objective:

- To enhance students' numerical mathematical abilities.
- To facilitate students' ability to identify and understand fundamental arithmetic computation techniques.
- To provide the necessary skills to students in order to proficiently and precisely execute computations by employing the concepts of Vedic Mathematics.
- To enable students to uncover the inherent capabilities of Vedic Mathematics.

Key USPs:

- The aim of this course is to facilitate comprehension of the underlying principles pertaining to the theoretical utilization of Vedic techniques.
- This program is specifically tailored for students who aspire to pursue a professional path in the field of logical reasoning.
- The course offers the convenience of flexible deadlines and the ability to view course information anywhere.
- One can access quizzes to acquire knowledge and improve proficiency in the field of logical mathematics.

Learning Outcomes:

- Upon successful completion of the course, students will acquire the ability to engage in critical thinking and demonstrate proficiency in solving algebraic equations via mathematical methods.
- This study aims to explore methods for efficiently and effortlessly solving systems of linear equations and matrices.
- The purpose of this discourse is to express admiration for the mathematical achievements of Ancient India.

Coordinators of the Course:

1. Dr. Mohammad Aamir Qayyoom, Assistant Professor, Department of Mathematics & Statistics. (qayyoom@iul.ac.in)

Name of Resource Persons

1. Dr. Najmuddin Ahmad, Associate Professor, Department of Mathematics & Statistics. (nahmad@iul.ac.in)
2. Dr. Mohammad Aamir Qayyoom, Assistant Professor, Department of Mathematics & Statistics. (qayyoom@iul.ac.in)
3. Dr. Istkhar Ali, Assistant Professor, Department of Mathematics & Statistics. (istkhar@iul.ac.in)
4. Dr. Sameena Saba, Assistant Professor, Department of Mathematics & Statistics. (sameena@iul.ac.in)
5. Dr. Abdul Gaffar, Assistant Professor, Department of Mathematics & Statistics. (aqaffar@iul.ac.in)

For registration click on following link: <https://forms.gle/Xfsm5uemg8GX4RxDA>



Course Outline

Module 1: History of Vedic Mathematics and Addition (Number of Lectures- 04)

- History of Vedic Mathematics
- Addition using Zero ending number
- Addition of algebraic expressions

Module 2: Subtraction using Vedic methods (Number of Lectures- 05)

- Subtraction using “EkadhikenaPoorvena”
- Subtraction using “EkanyunenaPoorvena”
- Subtraction using “Nikhilum Sutra”
- Subtraction of Polynomials

Module 3: Multiplication using Vedic methods (Number of Lectures- 08)

- Multiplication using “Nikhilum Sutra”
- Multiplication using “UrdhvaTriyagbhyam”
- Multiplication of polynomials using “UrdhvaTriyagbhyam”

Module 4: Division using Vedic methods (Number of Lectures- 05)

- Division using “Nikhilum Sutra”
- Division using “ParavartyaYojayet”
- Division using “UrdhvaTriyagbhyam”
- Division of polynomials
- Positive and negative osculators

Module 5: Square, square root, cube and cube root using Vedic methods (Number of Lectures- 08)

- Square using “Yavadunam” method
- Square using “EkadhikenaPoorvena”
- Square using “Anurupyena sutra”
- Square using “Dwandwa Yoga”
- Square root using Vedic methods
- Cube using “Yavadunam” method
- Cube using “Anurupyena sutra”
- Cube root using Vedic methods