University of Alumbai



No.AAMS(UG)/ 72 of 2021-22 Mumbai-400 032, 24 September, 2021.

To,
Co-Ordinator,
Charitrakar Padma Bhushan Dr.Dhananjay Keer,
Sub –Centre, Ratnagiri,
University of Mumbai,
P-61, MIDC, Mirjole
Ratnagiri – 415 639

Madam/Sir,

I am to invite your attention to Ordinances, Regulations and Syllabus relating to the Certificate Course in Vedic Mathematics and to inform you that the resolution passed by the Board of Deans at its meeting held on 28th June, 2021 vide item No. 5 have been accepted by the Academic Council at its meeting held on 29th June, 2021 vide item No. 9.19 and that in accordance therewith, for O.6721 & O.6722 relating to the Certificate Course in Vedic Mathematics, has been introduced and accepted by the Hon'ble Vice Chancellor as per the power confirmed upon him under Section 12(7) of the Maharashtra public Universities Act, 2016, has been brought into force with effect from the academic year 2021-22, accordingly. (The same is available on the University's website www.mu.ac.in).

MUMBAI – 400 032 24th September, 2021

(Dr. B.N. Gaikwad) I/c. REGISTRAR

A.C/4.19/29/06/2021

No. AAMS (UG)/72 of 2021

MUMBAI-400 032

24th September, 2021

Copy forwarded with Compliments for information to:-

- 1) The Chairman, Board of Studies,
- 2) The Director, Board of Examinations and Evaluation,
- 3) The Director, Board of Students Development,
- 4) The Co-ordinator, University Computerization Centre,

(Dr. B.N.Gaikwad)
I/c REGISTRAR

Copy to:-

- 1. The Deputy Registrar, Academic Authorities Meetings and Services (AAMS),
- 2. The Deputy Registrar, College Affiliations & Development Department (CAD),
- 3. The Deputy Registrar, (Admissions, Enrolment, Eligibility and Migration Department (AEM),
- 4. The Deputy Registrar, Research Administration & Promotion Cell (RAPC),
- 5. The Deputy Registrar, Executive Authorities Section (EA),
- 6. The Deputy Registrar, PRO, Fort, (Publication Section),
- 7. The Deputy Registrar, (Special Cell),
- 8. The Deputy Registrar, Fort/ Vidyanagari Administration Department (FAD) (VAD), Record Section,
- 9. The Director, Institute of Distance and Open Learning (IDOL Admin), Vidyanagari,

They are requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to in the above circular and that on separate Action Taken Report will be sent in this connection.

- 1. P.A to Hon'ble Vice-Chancellor,
- 2. P.A Pro-Vice-Chancellor,
- 3. P.A to Registrar,
- 4. All Deans of all Faculties,
- 5. P.A to Finance & Account Officers, (F.& A.O),
- 6. P.A to Director, Board of Examinations and Evaluation,
- 7. P.A to Director, Innovation, Incubation and Linkages,
- 8. P.A to Director, Board of Lifelong Learning and Extension (BLLE),
- 9. The Director, Dept. of Information and Communication Technology (DICT) (CCF & UCC), Vidyanagari,
- 10. The Director of Board of Student Development,
- 11. The Director, Department of Students Walfare (DSD),
- 12. All Deputy Registrar, Examination House,
- 13. The Deputy Registrars, Finance & Accounts Section,
- 14. The Assistant Registrar, Administrative sub-Campus Thane,
- 15. The Assistant Registrar, School of Engg. & Applied Sciences, Kalyan,
- 16. The Assistant Registrar, Ratnagiri sub-centre, Ratnagiri,
- 17. The Assistant Registrar, Constituent Colleges Unit,
- 18. BUCTU,
- 19. The Receptionist,
- 20. The Telephone Operator,
- 21. The Secretary MUASA

for information.

UNIVERSITY OF MUMBAI



Syllabus for the

Certificate Course in Vedic Mathematics

(to be introduced with effect from the academic year 2021-22)

UNIVERSITY OF MUMBAI



Syllabus for approval

Sr. No.	Heading	Particulars	
1	Title of the Course	Certificate Course in Vedic Mathematics	
2	Eligibility for Admission	Candidate who passed std 10+2 Examination from any stream	
3	Intake Capacity	30 students per batch	
4	Passing Marks	The candidate must obtain 40% marks at both Internal and Semester End Examination	
5	Selection	First Come First Served Basis	
6	Credits	02 credits	
7	Duration	3 months (July to September, January to March)	
8	Number of Lectures	At least 30 hours (Not more than 40)	
9	Fee Structure	Rs. 2000/- (The fee covers tuition fees, remuneration of teacher, infrastructural expenses, examination fees etc.)	
10	Teaching Faculty Qualification	He / She must possess skill sets in Vedic Mathematics	
11	Remuneration of Teacher	As per University / Government Guidelines	
12	Teaching mode	Online / Offline	
13	Level	Certificate	
14	Status	To be implemented from academic year 2021-22	
	Evaluation	60 Internal + 40 Semester End Examination	
15	Exam pattern	3 internal assessments of 20 marks each = 60	
		and	
		40 marks Semester End Exam	
		Total marks = 100	
		Separate heads of passing.	
		Minimum 24 / 60 needed for passing at Internal Assessment	
		Minimum 16/40 needed for passing at Semester End Examination.	

Date Signature

Name of BOS Chairperson / Dean -

University of Mumbai

Ordinance, Regulations and Syllabus related to the

CERTIFICATE COURSE IN VEDIC MATHEMATICS

Ordinance: Title of Course

'Certificate Course in Vedic Mathematics'

Ordinance: Eligibility

A candidate for being eligible at admission to the Certificate Course

in

Vedic Mathematics must have passed XII standard examination From any stream from Maharashtra State Board of Higher Education

or as

equivalent thereto.

Regulation: Duration of Course

3 months (July to September, January to March)

Regulation: Intake Capacity:

30 candidates in one batch

Teachers: He / She must possess skill sets in Vedic Mathematics

Regulation: Fees

S. N.	Heads	Amount (Rs.)
1.	Tuition Fee	2000

Regulation: Examination

60 Internal + 40 Semester End Examination 3 internal assessments of 20 marks each = 60

and 40 marks Semester End Exam

Total marks = 100

Regulation: Standards of Passing of Examination

The candidate must obtain 40% marks at both Internal and Semester

End

Examination

Separate heads of passing.

Minimum 24 / 60 needed for passing at Internal Assessment Minimum 16/40 needed for passing at Semester End Examination.

Regulation: Pedagogy (Instructional System)

Online/Offline

The fees for the course are proposed to be Rs. 2000. With the intake capacity of 30 candidates the amount to be collected will be Rs. 60,000.00. The recurring expenses are estimated to be

Rs. 30,000

The sinking fund for collective expenditure of the center like publicity for the courses, purchase of the instruments, chemicals, glass wares, etc. will be Rs. 30,000

Certificate Course in Vedic Mathematics:

Preamble:

<u>Vedic Mathematics</u> is a super-fast way of calculation whereby you can do supposedly complex calculations like 996 x 998 in less than five seconds flat. It is highly beneficial for school and college students and students who are appearing for their entrance examinations.

Vedic Mathematics is far more systematic, simplified and unified than the conventional system. It is a mental tool for calculation that encourages the development and use of intuition and innovation, while giving the student a lot of flexibility, fun and satisfaction. It means giving them a competitive edge, a way to optimize their performance and gives them an edge in mathematics and logic that will help them to shine in the classroom and beyond.

Therefore it's direct and easy to implement in schools – a reason behind its enormous popularity among academicians and students. It complements the Mathematics curriculum conventionally taught in schools by acting as a powerful checking tool and goes to save precious time in examinations. The methods & techniques are based on the pioneering work of late Swami Shri. Bharati Krishna Tirthaji, Shankracharya of Puri, who established the system from the study of ancient Vedic texts coupled with a profound insight into the natural process of mathematical reasoning.

There are just 16 Sutras or Word Formulae which solve all known mathematical problems in the branches of Arithmetic, Algebra, Geometry and Calculus. They are easy to understand, easy to apply and easy to remember.

Benefits of Vedic Maths:

- Eliminates math-phobia.
- Increases speed and accuracy.
- More systematic, simplified, unified & faster than the conventional system.

- Gives the student flexibility, fun and immense satisfaction
- Provides powerful checking tool
- Saves precious time in examinations.
- Gives the student a competitive edge.
- Develops Left & Right Sides of the brains by increasing visualization and concentration abilities.
- Knowledge of Vedic Mathematics will be helpful to crack Numerical Aptitude part for students appearing for Competitive Examinations

Objectives:

- To enable the learners to explore the power of Vedic Maths.
- To make learners strong in Numerical Maths.
- To enable learners to recognize and understand simple techniques of Arithmetic Calculations.
- To train learners to use the ideas of Vedic Maths in daily calculations and make those calculations with accuracy and speed.

Learning Outcomes:

By successfully completing this course, the learner will be able to:

- Perform simple arithmetic calculations with speed and accuracy
- Will be able to generate tables of any number
- To perform products of large numbers quickly
- Develop confidence in calculating square roots and cube roots of integers
- Perform difficult calculations speedily.
- Face Numerical Aptitude part of any Competitive Examination confidently.

University of Mumbai

Draft Ordinance, Regulations and Syllabus related to the

CERTIFICATE COURSE IN VEDIC MATHEMATICS

Total Hours: 30 hours

Module	Detailed Syllabus	Lectures
Module	Detailed Syllabus	Lectures

History and Evolution of Vedic Mathematics,	5
Introduction of Basic Vedic Mathematics	
Techniques in Multiplication (Special Case, Series	
of 9, Series of 1 etc), Tables etc., Comparison of	
Standard Methods with Vedic Methods.	
Various techniques to carry out basic operations	5
covering Addition, Subtraction, Multiplication,	
Division, Complements and Bases, Vinculum	
number, General multiplication (Vertically Cross-	
wise).	
Multiplications by numbers near base, Verifying	5
answers by use of digital roots, Divisibility tests,	
Division of numbers near base, Comparison of	
fractions.	
Applications of Vinculum, Different methods of	5
Squares (General method, Base method, Duplex	
method etc.)	
Cubes, Cube roots, Square roots, General division	5
Quadratic Equations, Simultaneous Equations, Use	5
- '	
-	
Examinations	
	Introduction of Basic Vedic Mathematics Techniques in Multiplication (Special Case, Series of 9, Series of 1 etc), Tables etc., Comparison of Standard Methods with Vedic Methods. Various techniques to carry out basic operations covering Addition, Subtraction, Multiplication, Division, Complements and Bases, Vinculum number, General multiplication (Vertically Crosswise). Multiplications by numbers near base, Verifying answers by use of digital roots, Divisibility tests, Division of numbers near base, Comparison of fractions. Applications of Vinculum, Different methods of Squares (General method, Base method, Duplex method etc.) Cubes, Cube roots, Square roots, General division Quadratic Equations, Simultaneous Equations, Use of various Vedic Techniques for answering numerical aptitude questions from Competitive

Suggested Readings:

1) Bhatiya Dhaval, Vedic Mathematics Made Easy, Jaico Publishing House

- 2) Thakur Rajesh Kumar, Vedic Mathematics for students taking Competitive Examinations. Unicorn Books 2015 or Later Edition
- 3) Gupta Atul, Power of Vedic Mathematics with Trigonometry , Jaico Books
- 4) V. G. Unkalkar, Magical World of Mathematics (Vedic Mathematics), Vandana Publishers, Bangalore