



SKILL COURSE ON 'VEDIC MATHEMATICS'

Open for Second Year Graduate Student w.e.f. 2022-23

**Approved by the Board of Studies in Mathematics
And**

Finalized by the Academic Council

Devrukh Shikshan Prasarak Mandal's

Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and
Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh.
Tal.Sangmeshwar, Dist. Ratnagiri-415804, Maharashtra, India

Academic Council Item No: _____

Name of the Implementing Institute	:	Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal. Sangmeshwar, Dist. Ratnagiri-415804,
Name of the Parent University	:	University of Mumbai
Name of the Programme	:	Bachelor of Science
Name of the Class to Which the course is Open	:	Second Year, Semester Third
No. of Credits	:	03
Title of the Course	:	Vedic Mathematics
Course Code	:	UMTSK31
Passing Marks	:	40%
Nature of Course	:	Skill Course
Level	:	UG/ PG
Pattern	:	70:30
Status	:	Multidisciplinary- Open to all in the Second Year
To be implemented from Academic Year	:	2022-2023

Syllabus for Skill Course on Cartography
(With effect from the academic year 2022-2023)

Title of the Course: Vedic Mathematics

COURSE CODE: UMTSK31

Credits - 03

COURSE CONTENT			
Module No.	Content	Theory Lectures	Practical
1	Unit-I– Addition, Subtraction and Multiplication (15L) <ul style="list-style-type: none"> ○ Addition ○ Subtraction Section B – Multiplication with Recognizable Patterns ○ Multiplication of complementary numbers like 23×27 ○ Multiplication by numbers consisting of all 9s ○ Multiplication by numbers above the base ○ Multiplication by numbers below the base ○ Multiplication by 11 ○ Multiplication by 12 ○ Multiplication of any number by 9, 99, 999 ○ Generic Multiplication ○ Multiplication by two-digit numbers ○ Multiplication by three and four-digit numbers 	10	5
2	Unit-II – Squaring, Square Root and Cubing (15L) <ul style="list-style-type: none"> ○ Squaring of numbers in patterns ○ Squaring numbers with any number of digits ○ Square root ○ Cubing 	10	05
3	Unit- III – Advanced Multiplication and Division (15L) <ul style="list-style-type: none"> ○ Working base ○ Multiplication above and below the base ○ Multiplication above and below the working base ○ Compound multiplication Section F – Division ○ Nikhilaam-division ○ Division Section G – Miscellaneous Matters 	10	05
	Total	30	15

Practical Record: A journal comprising one exercise each needs to be submitted by the student at the end of the semester.

Course Outcome:-

After completing the course, the learner will be able to...		
Course Learning Outcome No.	Blooms Taxonomy	Course Learning Outcome
CLO-01	Remember	Remember the fundamentals of Vedic Mathematics
CLO-02	Understand	Understand the concept of 'Vedic sutras' for calculation
CLO-03	Apply	Apply the Vedic sutras to numeric calculations quickly
CLO-04	Analyze	Analyze the problems based on Vedic sutras
CLO-05	Evaluate	Evaluate the multiplication, division quickly
CLO-06	Create	Create his/her own examples and solve it.

Required Previous Knowledge

No previous knowledge is necessary to start learning the course.

Access to the Course

The course is available for all the students admitted for Bachelor of Arts, Commerce, and Science and admitted in the second year at UG as well as PG.

Forms of Assessment

The assessment will be in the form of a Continuous Assessment. Students completing the Course as per the direction of the concerned teacher and submitting the day to the journal will be graded according to the quality of the work done by the student.

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade on the grading scale, and grade F is a fail. The Board of Examinations of the college reserves the right to change the grading scale.

References:-

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