



(Shri Ramkrishna Seva Mandal's)
ANAND COMMERCE COLLEGE

An Autonomous College (2025-26 to 2034-35)

(Affiliated to Sardar Patel University)

NAAC ACCREDITED 'A' GRADE (3.04 CGPA)

ISO 9001:2015

Syllabus as per NEP 2020 with effect from the Academic Year 2025-26



Bachelor of Computer Applications

BCA Semester – I

Course Code	UCA01IKBCA08E	Title of the Course	Vedic Mathematics
Total Credit of Course	02	Hours Per Week	02

Course Objectives:	<ol style="list-style-type: none">1. To introduce students to the fundamental principles and Sutras (aphorisms) of Vedic Mathematics.2. To demonstrate the elegance, simplicity, and efficiency of Vedic mathematical methods.3. To encourage a problem-solving approach through alternative techniques.4. To develop mental calculation skills and improve speed and accuracy in arithmetic operations.
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Course Content		
Unit	Description	Weightage* (%)
1.	Foundations of Vedic Mathematics and Basic Operations: <ul style="list-style-type: none">• Introduction to Vedic Mathematics• Historical background• Benefits of learning Vedic Mathematics (speed, accuracy, mental agility)• Basic Addition Techniques• Basic Subtraction Techniques	35%
2.	Multiplication and Division: <ul style="list-style-type: none">• Multiplication techniques• General Multiplication• Division techniques• General Division• Division by numbers close to a base• Division by numbers slightly larger or smaller than the base	35%
3.	Squaring and Cubing, Square Roots and Cube Roots: <ul style="list-style-type: none">• Squaring and cubing techniques• Square roots techniques• Cube roots techniques• Squaring any number (Duplex method)• Cubing Numbers• General method for cubing any number.	30%

Teaching- Learning Methodology	Class Room Teaching, Lectures, Case Discussion, Video and Presentation
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Internal and / or External Examination Evaluation

Sr. No.	Details of the Evaluation / Exam Pattern	50 Marks (%)	25 Marks (%)
1	Class Test (at least one)	15 (30%)	10 (40%)
2	Quiz (at least one)	15 (30%)	05 (20%)
3	Active Learning	05 (10%)	----
4	Home Assignment	05 (10%)	05 (20%)
5	Class Assignment	05 (10%)	----
6	Attendance	05 (10%)	05 (20%)
Total Internal (%)		50 (100%)	25 (100%)
College External Examination (%)		50 (100%)	25 (100%)

Course Outcomes: Having completed this course, the learners will be able to	
1.	Understand the origins and benefits of Vedic Mathematics while developing mental agility through basic addition, subtraction, and multiplication strategies.
2.	Apply efficient techniques for complex multiplication and division using base methods and general strategies suited for large numbers.
3.	Apply efficient techniques including squaring, cubing, and extracting square and cube roots using Vedic methods for rapid mental computation.

Suggested References	
Sr. No.	References
1	Maharaja, B. K. T. (n.d.). <i>Vedic mathematics</i> .
2	Thakur, R. K. (n.d.). <i>The essentials of Vedic mathematics</i> .
3	Tripathi, M. (n.d.). <i>Vedic mathematics for students</i> .

Digital resources to be used if available as reference material
Digital Resources
https://youtu.be/grkWGeqW99c?si=JPP2II0g8AAOFbG2
https://youtu.be/eyLsbv8E4Kg?si=z2QrZueHCj08GQiH
https://youtu.be/eWAeojCHNB0?si=YcPr09KyknXPezQZ



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Anand Commerce College



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