



## ST. XAVIER'S COLLEGE, MAPUSA-GOA

### Report of Activity conducted in the Academic Year 2025-26

<b>Name of Activity</b>	Session on 'Vedic Mathematics'
<b>Date/Duration</b>	08 <sup>th</sup> November 2025 (Session from 11.00 a.m. to 12.30 p.m.)
<b>Venue</b>	St. Thomas Higher Secondary School, Aldona
<b>Name of organizing Department/Cell</b>	MoU between Village Panchayat, Aldona & St. Xavier's College, Mapusa St. Xavier's College, Mapusa, Goa, Centre for Indian Knowledge Systems
<b>In collaboration with</b>	
<b>Name/s of Faculty Coordinator</b>	Dr. Maria Claudette Gomes
<b>Stratum of Event</b>	State Level/ Community Level
<b>Name &amp; details of Resource Person/s (If any)</b>	Mr. Soham Ashvenkar, Assistant Professor, Department of Mathematics, St. Xavier's College, Mapusa, Goa
<b>Report</b>	<p>Objective: To demonstrate how Vedic Mathematics transforms complex operations into simple, fast, and intuitive calculations.</p> <p>The presentation outlined the history of Vedic Mathematics, which originates from the ancient Sanskrit texts known as the Vedas. Several techniques demonstrating simplicity over traditional, time-consuming methods were presented to the students:</p> <p>Sutra 1: Ekadhikena Purvena ("By one more than the one before"): This principle was used for specific multiplication cases, such as when the tens digits are the same and the ones digits sum to 10 (e.g., <math>74 \times 76</math>). It demonstrated a one-line calculation for solving problems like <math>9997 \times 9993</math> to yield 99900021. It also provided a simple method for squaring any number ending in 5 (e.g., <math>995^2 = 990025</math>).</p> <p>Sutra 2: Nikhilam Navatascaramam Dasatah ("All From 9 and the Last From 10"): This efficient, two-step method was used for multiplying numbers by a series of 9s. This technique allowed the audience to see the solution to the Grand Challenge: <math>48649673 \times 99999999</math>, resulting in the 16-digit answer 4864967251350327, calculated mentally in seconds. Concepts briefly covered included finding complements, the general multiplication sutra Urdhva-Tiryagbhyam ("Vertically and Cross-wise"), and pattern-based methods for finding cube roots.</p> <p>In the QnA session the students were able to successfully answer all questions posed by the speaker using the quick calculation tricks demonstrated during the talk.</p>

<b>Brochure/Poster</b>	<a href="https://xavierscollegegoa.ac.in/wp-content/uploads/2025/12/Brochure-16.pdf">https://xavierscollegegoa.ac.in/wp-content/uploads/2025/12/Brochure-16.pdf</a>
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<b>Certificate</b>	--