

## HINDI MAHAVIDYALAYA (ARTS, COMMERCE, SCIENCE & PG CENTRE) (Autonomous & NAAC RE-ACCREDITED) PROFORMA FOR THE ACTIVITY REPORTS (Extension lecture/Guest lecture/Workshop)

Enclosures: Circular/Notice/Photographs/List of Students with signatures / Feedbacks (If any)

Department	Department of Mathematics
Extension lecture	Srinivasa Ramanujan efforts on Number theory
Resource Person	Smt. L. Vishnupriya, Department of Mathematics, GDC Vidyanagar, Hyderabad
Name (s) of the Teachers(s)	Smt. G.Srivani
involved	Smt. T. Ramadevi Sri. T. Thirupathaiah
No. of Students	55
Date	21-12-2019
Objectives	The student will able to :
	<ol> <li>Ramanujan made substantial contributions to the analytical theory of numbers and worked on elliptic functions, continued fractions, and infinite series.</li> <li>Students develops their research abilities .</li> <li>Students discovering a new ideas for solving</li> </ol>
	challenging mathematical problems.
Report	<ol> <li>She explained briefly life history of Srinivasa Ramanujan, the mathematical genius, came to be recognized only posthumously for his incredible contribution to the world of Mathematics. Leaving this world at the young age of 32, Srinivasa Ramanujan (1887-1920) contributed a great deal to mathematics that only a few could overtake in their lifetime.</li> <li>Explained 1729 is known as the Hardly - Ramanujan's number. It is the sum of the cubes of two numbers 10 and 9. For instance, 1729 results from adding 1000 (the cube of 10) and 1729 (the cube of 9). This is the smallest number that can be expressed in two different ways as it is the sum of these two cubes. Interestingly, 1729 is a natural number following 1728 and preceding 1730.</li> <li>She explained One of Ramanujan's notebooks was discovered by George Andrews in 1976 in the library at Trinity College. Later the contents of this notebook were published as a book.</li> </ol>
	<ul><li>4. Ramanujan's contributions stretch across mathematics fields, including complex analysis, number theory, infinite series, and continued fractions.</li><li>5. She explained Ramanujan's contribution to game theory is purely based on intuition and natural talent and remains unrivalled to this day.</li></ul>

Outcomes	After this extension lecture, students should be understand to:
	<ol> <li>Ramanujan's contributions to mathematics world in various fields.</li> <li>Increase the research abilities in students</li> <li>Students also understand Ramanujan compiled around 3,900 results consisting of equations and identities.</li> </ol>
	4. Students will be discovering new ideas to solve many challenging mathematical problems.





