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THE MATHEMATICS STUDENT

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INDIAN MATHEMATICAL SOCIETY

Fifty-Sixth Annual Conference

Department of Mathematics

South Gujarat University

Surat

December 27, 1990 to December 30, 1990

ABSTRACTS OF PAPERS

SECTION—A

COMBINATORICS AND DISCRETE MATHEMATICS

A-1. Fuzzy Resemblances—Sucharita Ranganathan (Bangalore).

Fuzzy relations have been defined on ordinary sets and on fuzzy sets. A fuzzy relation R which is reflexive and symmetric is called a resemblance relation or a proximity or a tolerance relation. The complement of a resemblance is a disresemblance. This paper presents results on resemblance relations. In particular, the conditions under which the compositions of resemblances are again resemblances are investigated.

A-2. A Note on Irreducibility Index of a Graph—I.H. Nagaraja Rao and M.S. Narasimham (Waltair).

B.D. Archarya, in one of his papers, proved the following:

Theorem: For any graph G of order n with independence number $t \geq 2$,

$$n \leq \pi(G) \leq P_{k(t)+n-t-2},$$

where $\pi(G)$ is the irreducibility index of G and $P_{k(t)}$ is the least prime which is not a divisor of any of the integers $2, 4, \dots, 2t$.

We critically examine this and extend the result as follows:

Theorem: For any graph G of order $n (\geq 2)$ with independence number t ,

- (i) $\pi(G) = p_{n-1}$, when $t = 1$,
- (ii) $\pi(G) = n$ when $t \geq 2$ and $0 \leq n - t \leq 2$,

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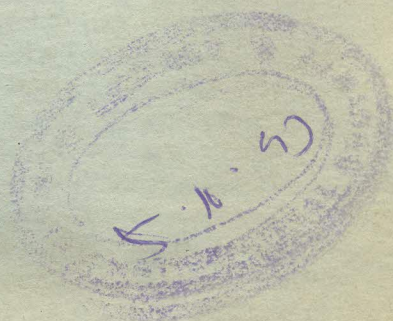
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PRESIDENTIAL ADDRESS

Respected Chief guest, Honourable Chancellor of Andhra University, Honourable Vice-Chancellor, Mathematicians, dear members of the Indian Mathematical Society, delegates and lovers of mathematics gentlemen!

I consider it a great honour to have the opportunity of addressing this distinguished gathering on the occasion of the 25th Anniversary of the Indian Mathematical Society. I do feel honoured by this. All the more so, when I think of the past Presidents of the Society who have been well known in the world of mathematics, respectable for their scholarship and service to the Society.

I begin by expressing my gratitude to the members of the Indian Mathematical Society, for having elected me to the office of President. I do feel honoured by this. All the more so, when I think of the past Presidents of the Society who have been well known in the world of mathematics, respectable for their scholarship and service to the Society.

Most of the members and delegates may be aware that the Indian Mathematical Society has been engaged in various academic activities and introducing new programmes like Special Lectures, Special IMS Lectures in various parts of the country, and Prizes etc. The credit for these should go to the past Presidents of the Society who have been well known in the world of mathematics, respectable for their scholarship and service to the Society.

It is my pleasure to serve as the Office-bearers of the Society in the year 1994. Their tireless efforts have enthusiastically encouraged and supported these programs. I take this opportunity to express my appreciation to these Office-bearers. I am sure that the active involvement of more and more expert members of the Society, it is bound to grow further.

Thirdly, I feel fortunate to have the opportunity of addressing this distinguished gathering on the occasion of the 25th Anniversary of the Indian Mathematical Society. I do feel honoured by this. All the more so, when I think of the past Presidents of the Society who have been well known in the world of mathematics, respectable for their scholarship and service to the Society.

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PROFESSOR (Dr.) C.S. VENKATARAMAN

A BIOGRAPHICAL NOTE

(1918 - 1994)

By

R. SIVARAMAKRISHNAN

1. INTRODUCTION

Professor C. S. Venkataraman, popularly known as C.S.V. was an eminent mathematician and a dedicated teacher. He had been a towering personality in the realm of higher mathematics in Kerala for more than three decades. Research and teaching were his passions and he impressed every one with his original ideas and practical suggestions. He confined himself to teaching and research at Sree Kerala Varma College, Thrissur for over thirty years. He could have occupied a higher chair/position in India or abroad had he allowed himself to be lured away by the glitter of gold. He took pleasure in pursuing mathematics and in particular, number theory. Furthermore, he carried on his academic activities even after retirement. With his passing away on the 16th of March, 1994, Kerala has lost a distinguished mathematician.



Prof. C. S. VENKATARAMAN



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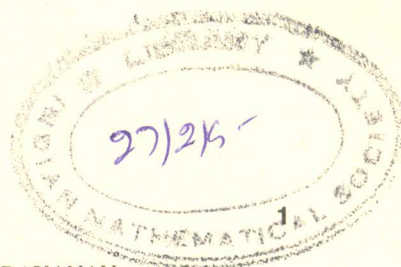
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MATHEMATICAL
OFFICE
President

Ladies and Gentlemen:

In the traditional Indian manner, I thank those who are older than me or from whom I have learned, and to the rest I offer my greetings. The only all-encompassing word I have...

When I cast a backward glance at the distinguished mathematicians who have served the Indian Mathematical Society, I am in a state of wonderment. Nevertheless, it is those who put their faith in me, who put me in the chair of the President, in the most dignified manner. May God give me the strength to discharge my duties in the most appropriate manner.

I am aware that:

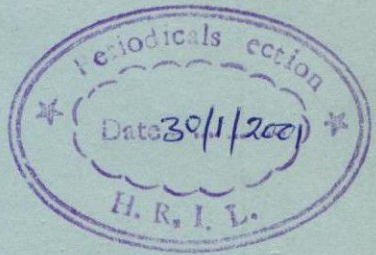
- I am expected to conduct the affairs of the Indian Mathematical Society in a most dignified manner.
- It is for me to discharge my duties in the most appropriate manner.
- I should provide a platform for the advancement of mathematics, and to show how and why we have achieved this.
- There is the duty to provide a platform for the advancement of mathematics, and to show how and why we have achieved this.
- The natural sense of responsibility to provide a greener platform and to show how and why we have achieved this.

*Presidential Address given at the Indian Mathematical Society held at New Delhi, 27-30, 1997.

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Edited by Prof. V.M. Shah, Department of Mathematics, Faculty of Science,
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