

**Address of Hon ( Mrs) L.D.Dookun- Luchoomun**  
**Minister of Education & Human Resources**  
**Tertiary Education & Scientific Research**  
**Award Ceremony of Ramanujan Contest 2016**  
**27 February 2017**

**Good Afternoon.**

It is indeed an honour and a privilege for me to be with you this afternoon on the occasion of the Award Ceremony of the Srinivasa Ramanujan Contest 2017. I would like at the very outset to thank and congratulate both the Ramanujan Trust Mauritius and the University of Mauritius for successfully fulfilling one of their cherished goals—that of making this Contest become an annual feature.

Today, there will be a lot of talk about Mathematics.

It was W. S. Anglin, the Mathematics Professor and author who once wrote,

*“Mathematics is not a careful march down a well-cleared highway, but a journey into a strange wilderness, where the explorers often get lost”.*

It is just as well that we remind ourselves that, despite all the innovations and discoveries that have been carried out in the field of Mathematics, there is probably a lot more waiting for exploration and discovery.

I believe that is what makes Mathematicians so humble. In fact, this is what makes Scientists and Mathematicians in general so humble.

Only last week, we had the privilege of welcoming and listening to Professor Venkatraman Ramakrishnan, Nobel Laureate in Chemistry and President of the Royal Society, UK, and this week we are celebrating the memory of Srinivasa Ramanujan.

And both are, to my mind, the perfect personifications of humility.

And that as well is a lesson that we should all learn. As John Ruskin put it,

*“the first test of a truly great man is in his humility”.*

And that was certainly true of Srinivasa Ramanujan. This great Mathematical genius of the 20<sup>th</sup> Century was most definitely guided by the conviction that there is more to Mathematics than meets the eye. His seminal work, captured in *Number Theory* and elsewhere through the theta functions or Ramanujan’s sum, indicated the extent to which Pure Mathematics can be a place where the non-initiated could get lost unless some of its mysteries are cracked.

And that, Ramanujan did extraordinarily well in the short span of time of his existence.

### **Ladies and Gentlemen,**

I will not expatiate too lengthily on this mathematical genius—those with a keen interest in Mathematics like many of you present today would have already gained new insights into his work when preparing the paper for the Contest.

But there are simple and self-evident truths that we cannot get away from.

One of them is that Mathematics will always remain at the core of change and transformation.

We cannot do without it.

We cannot do without Mathematics since our very livelihood is dependent upon our ability to calculate, subtract or multiply.

We need Mathematics to be able to design and build cars, highways and planes. The world of architecture as well as that of medicine, of engineering and even of business prospers and innovates because of it.

The relevance of Mathematics is also clearly demonstrated in such fields as ICT which is full of logic and the structuring of data, in the field of financial services and to carry out survey and evaluations. Mathematical modelling has also demonstrated its usefulness in the Meteorological services and in the Social sciences.

Perhaps its importance in the world of Science and Innovation is perhaps best reflected by the acronym that has become commonplace today—the acronym of STEM—i.e., Science, Technology, Engineering and Mathematics.

### **Ladies and Gentlemen, Students**

Everyone talks of STEM today. It has become a priority for Africa, Asia, Europe and America. We who are working towards making Mauritius a high income economy, we need to produce much more than a critical mass of young people conversant with Science and high- tech.

The Ocean Economy, Sustainable development, renewable energy, food security, biotechnology, eradication of poverty, smart cities, the development of hubs----all have one thing in common: the scientific, technological and the mathematical principles underlying them all.

This is why I have been systematically insisting on giving a boost to the study of the sciences and, especially of Mathematics, which is a compulsory subject up to Form V.

The results for Mathematics at School Certificate over the last 5 years have been within the average range of 78 to 82 per cent of passes. Good but not enough. Obviously, we cannot rest happy with that.

Thus, we must encourage an interest in Mathematics right from an early age. In fact, research has demonstrated the importance of early experiences in mathematics.

For, through Mathematics, one acquires such values as precision and a sense of rigour in all that one does. It also helps to develop learners' self-confidence, logical thinking and problem solving ability as well as builds up such dispositions as curiosity, flexibility, inventiveness, and persistence.

Incidentally, most of these are part of the 21<sup>st</sup> skills we want our learners to assimilate.

### **Ladies and Gentlemen,**

I will take advantage of this platform to encourage Mathematics Teachers to motivate students to study Further Mathematics at the HSC/ A level. In fact, numerous Universities expect their freshmen to have a sound grounding in Further Mathematics rather than the current Mathematics syllabus being widely studied.

I will equally make a special plea to all Educators to make Mathematics more appealing to students, to make their classes both based on problem-solving strategies as well as on using new

pedagogical approaches such that the study of Mathematics can be fun and interactive.

Well structured math classes based on sound pedagogies have a more positive impact on students who develop a love for mathematics.

**Ladies and gentlemen,**

Allow me to congratulate both the Srinivasa Ramanujan Trust Mauritius and the University of Mauritius for the commendable work they are doing. I must recognize the efforts of the Trust in working towards the newer ways of bringing Mathematics to the forefront. The Ramanujan Quiz being set up with the Rajiv Gandhi Science Centre as well as consideration of a PhD scholarship in Maths are in themselves very laudable.

Congratulations also to the University for organizing this second edition of the Ramanujan Contest, two years after its first edition.

It is commendable because it is an opportunity for us to pay tribute to a Mathematical giant who, had he lived longer, would have opened up new horizons in this field.

It is also commendable because it allows students in secondary schools as well as at the University to apply their minds to think through issues and have fun in the process.

After all, as Richard J. Trudeau, author of *Dots and Lines*,” and “*The Non-Euclidean Revolution*,” put it,

“*Pure mathematics is the world's best game. It can be played anywhere - Archimedes did it in a bathtub.*”

So keep the flame alive.

Finally, my heartiest congratulations to the Gold Medalist and the two runner ups. You certainly deserve the kudos that are coming your way.

***I thank you all for your kind attention.***