



**S.P.V.V.S.S**  
**G.P.PORWAL ARTS COMMERCE AND V V**  
**SALIMATH SCIENCE COLLEGE SINDAGI –**  
**586128**


Dist: Vijaypura

State: Karnataka

**DEPARTMENT OF MATHEMATICS**


Project work

This is to certify that students of B. Sc III SEM participated in Mathematics **Project work** on Mathematics Day 2022-23. Model on Ramanujan's Magic Square satisfactorily completed their work under my supervision at our college under Rani Chennamma University Belagavi.

  
**HEAD OF THE DEPARTMENT**  
Dept. of Mathematics  
G.P. Porwal Arts, Commerce & V.V. Salimath  
College, SINDAGI-586128.

**Participated Students**

- 1) Farooq Nadaf
- 2) Hithaishi Desai

  
**Coordinator IQAC**  
G. P. PORWAL ARTS, COM &  
V. V. SALIMATH Sc. College,  
SINDGI-586128.

  
**Principal,**  
G. P. Porwal Arts, Comm &  
- V. V. Salimath Sc. College  
SINDGI-586128. College Code: 523

# Ramanujan's Magic Square.

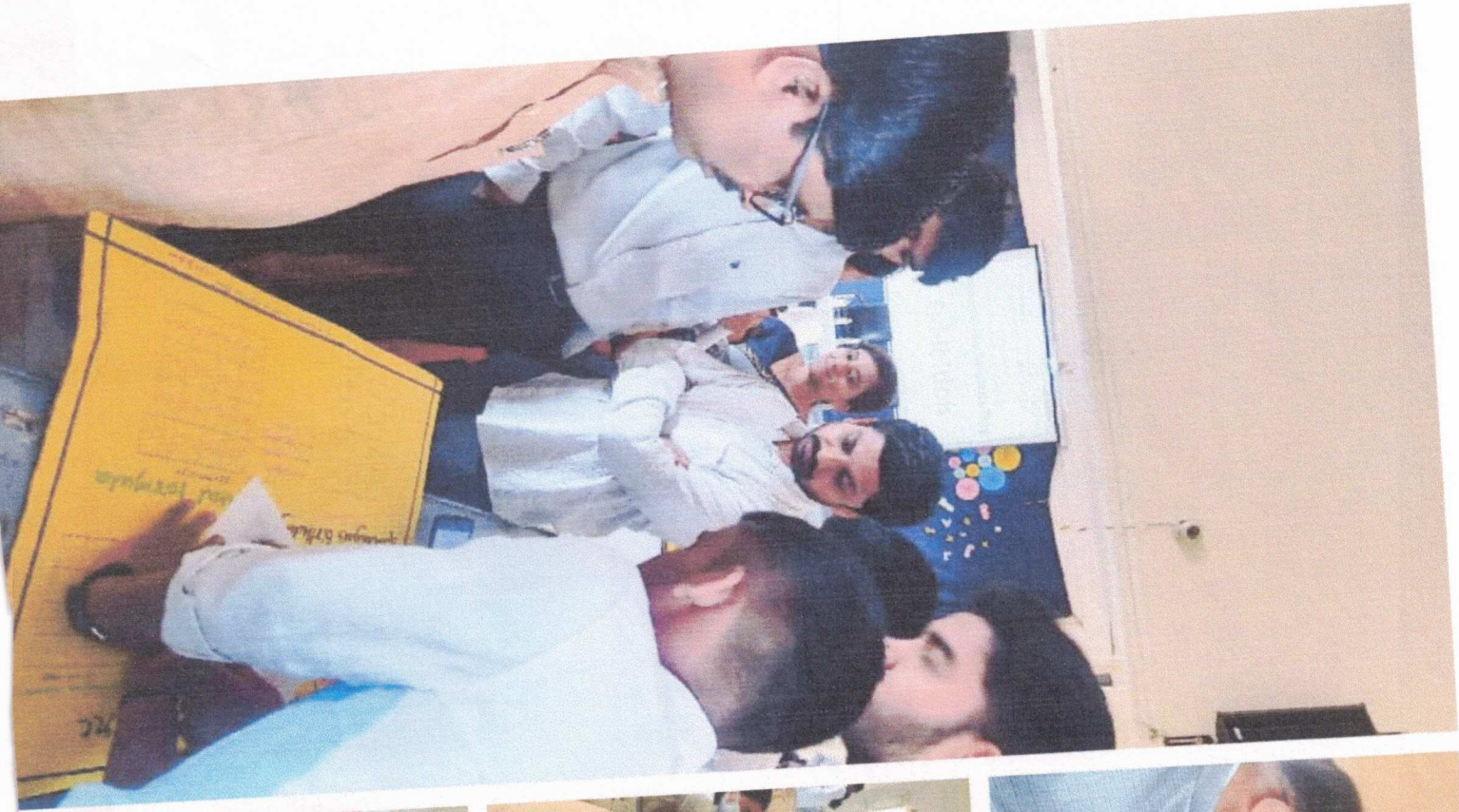
A magic square is an  $n \times n$  matrix in which every row, column, and diagonal add up to the same number. Srinivas Ramanujan was an Indian mathematician. He had almost no formal training in pure mathematics, but made extraordinary contributions to mathematical Analysis, number theory, infinite series, and continued fractions. When he was 12 year old, someone gave him a trigonometry book, and he taught himself.

At 16 year old, a friend of his family gave him a math encyclopedia with over 6,000 theorems. That was all the math training he had. At age 23, he generated a formula that would calculate all primes up to 100,000,000.

He then was invited to move to Cambridge and there he proved over 3,000 results, including the best algorithms we have to this day for generating the digit of  $\pi$ .

Ramanujan created a super magic square because not only do the rows, columns, and diagonals add up to the same number, but the four corners, the four middle squares (17, 9, 24, 89), the first and last rows two middle numbers (28, 10, 25, 16) all add up to the sum of 139. Seeing his magic square made me interested into making my own birthday magic square.

# RAMANUJAN'S MAGIC SQUARE



*SSM*

**Coordinator IQAT**  
G. P. PORWAL ARTS, COMM &  
V. V. SALIMATH Sc. College,  
SINDGI-586128.

*Prof*  
**Head**

**Dept. of Mathematics**  
G.P.P. Arts, Comm. & V.V.S. Science  
College, SINDGI-586128.

*[Signature]*

**Principal,**  
G.P. Porwal Arts, Comm. &  
Salimath Sc. College,  
SINDGI-586128. College Code: 5234