Frontier
Vol. 44, No. 39, April 8-14, 2012

NOTE

Remembering Ramanujan

Sisir K Majumdar writes :

2012 IS DECLARED AS THE 'National Mathematics Year' by the Government of India to commemorate the 125th birth anniversary of the legendary Indian mathematician Srinivasan Ramanujan (1887-1920). It followed the instance of 'National Science Day' (February 28) as declared in 1987 in order to honour the path-breaking invention (Raman Effect) of Chandrasekhar Venkata Raman (1888-1970), which was published on February 28, 1928, and for which Raman–then a professor in the University of Calcutta, was awarded the Nobel Prize in Physics in 1930—the first Nobel Prize in Physics in the Afro-Asian continent and the second Nobel Laureate of India, after poet-philosopher Rabindranath Tagore (1861-1941), who was awarded the Nobel Prize in Literature in 1913.

In 1911 Ramanujan published the first of his papers in the Journal of the Indian Mathematical Society.

A prodigy. He studied 6000 theorems in the book of George Shoobridge Carr's 'Synopsis of Elementary Results in Pure and Applied Mathematics'–Two volumes (1880-1886) when he was only 15 years old. He went beyond it and developed his own theorems. He first studied in the University of Madras with a scholarship. In 1914 he went to Trinity College, University of Cambridge, England with a special scholarship of Madras University and a grant from the Trinity College to study under Geoffrey Harold Hardy (1877-1947), Sadleirian professor of pure mathematics, University of Cambridge. Ramanujan stayed in Cambridge for 5 years (1914-1919) and co-authored several papers with Hardy. Issac Newton (1642-1727) also studied in Trinity College.

Ramanujan worked out the Riomann series, the elliptic integrals, hyper-geometric series, the functional equations of the zeta function, and his own theory of divergent series. He also developed exceptionally efficient ways of calculating 'pi' that were later incorporated into computer algorithms.

He became the first Indian to be elected to the Royal Society of London in 1918. His papers were published in English and European journals. But a life full of promise was nipped in the bud at the age of 33 in 1920 by the mortal clutches of Tuberculosis (Then an incurable infective disease in the pre-antibiotic era).

Immortal words of William Shakespeare (1564-1616) are aptly applicable to Ramanujan :

''Be not afraid to greatness ; some are born great ; some achieve greatness ; and some have greatness thrust upon them.''

(Twelfth Night, Act-II, Scene-5)

Ramanujan was born great; he still achieved greater even in his short span of life. □□□