

## CERTIFICATE

This is to certify that the thesis entitled “**Studies on Efficiency Measurement through Directional Distance Formulation of Data Envelopment Analysis**” submitted by Mr. Udaya Shetty, Research Scholar, Department of Post Graduate Studies and Research in Statistics, Mangalore University, Mangalagangothri, to Mangalore University for the award of the degree of Doctor of Philosophy in the Faculty of Science, is the research work carried out by him in the Department of Post Graduate Studies and Research in Statistics, Mangalore University, Mangalagangothri under my guidance and supervision.

I further certify that this thesis or part thereof has not previously formed the basis for the award of degree, diploma, associateship, fellowship etc., of any University or Institution.

Place: Mangalagangothri

Date: 27<sup>th</sup> August, 2010



(T.P.M. PAKKALA)