## A STUDY OF SOME COMPUTATIONAL ALGORITHMS FOR SOLVING INITIAL VALUE PROBLEMS

## IYASELE KELVIN EHIZOJIE

MTH/11/0319

A PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE BSC (HONS) DEGREE IN MATHEMATICS TO THE DEPARTMENT OF MATHEMATICS FEDERAL UNIVERSITY OYE-EKITI, EKITI STATE.

## PROF E.A IBIJOLA

SUPERVISOR

## ABSTRACT

This work takes a look at different computational algorithms used in solving initial value problems and how these algorithms are derived from Taylor's series. It also made use of the Euler and Runge-Kutta method to solve initial value problems in order to compare the performance of the two methods