



International University of Africa



Faculty of Pure and Applied Science

Department of Mathematics and computer Sciences

**Solution of The Hypergeometrical Differential
Equation and Some Differential Equation
Related IT**

By:

Ahmed Mohamed Ishag Ahmed

Supervisor

Dr: Mohammed Mustafa Mohammed

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Verse

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى:

{ اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ لَا تَأْخُذُهُ سِنَّةٌ وَلَا نَوْمٌ لَهُ مَا فِي السَّمَاوَاتِ
وَمَا فِي الْأَرْضِ مَنْ ذَا الَّذِي يَشْفَعُ عِنْدَهُ إِلَّا بِإِذْنِهِ يَعْلَمُ مَا بَيْنَ أَيْدِيهِمْ وَمَا
خَلْفَهُمْ وَلَا يُحِيطُونَ بِشَيْءٍ مِّنْ عِلْمِهِ إِلَّا بِمَا شَاءَ وَسِعَ كُرْسِيُّهُ السَّمَاوَاتِ
وَالْأَرْضَ وَلَا يَئُودُهُ حِفْظُهُمَا وَهُوَ الْعَلِيُّ الْعَظِيمُ } {255}

{ صدق الله العظيم } .

{ سورة البقرة: الآية 255 }

Dedication

I dedicate this research to my parents who have given us the help and love and encourage me and supported me in my education we cannot have been made possible.

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First I thank Allah and Second My instructor:

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Abstract

In this research I discussed the hypergeometric Differential Equation and its various properties and how the second order named Ordinary Differential Equations can be obtained from it, such as: Bessel and Legendre Differential Equation.

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