



Integral Equations

Concepts and Solutions

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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

﴿ 255 ﴾ وَهُوَ الْعَلِيُّ الْعَظِيمُ

﴿ 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 ... and also dedicate it to the staff of the faculty and my instructor:

DR: Mohammed mustafa.

Also to my family and friends for their supports, and most of all to the almighty Allah who gives me strength and good health during my research.

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Abstract

In this research I shall study general concepts of integral equations including classifications, some theorems that help in formulating the solutions analytically and numerically, with some applications of integral equations in applied and pure mathematics.

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