

Abstract:-

Integral equations are equations in which the unknown function appears inside a definite integral they are closely related to differential equation. Initial value problems and boundary value problems for ordinary and partial differential equation can often be written as integral equation and some integral equations can be written initial or boundary value problems for differential equation.

This research consists of two chapters, in the first chapter we define the integral equations and types of integral equation with some illustrative examples. The second chapter is concerned with the nonhomogeneous Fredholm Integral Equation of the second kind. We give some methods of solving integral equation, for example, The Direct Computation Method and the Modified Decomposition Method.