Abstract

Riemann - Roch Theorem plays a significant role in the theory of Riemann Surfaces, which gives us certain estimate about number of linearly independent meromorphic functions subject to certain restrictions on their poles. In this dissertation we will understand the prerequisites of Riemann - Roch Theorem and will use the tools of sheaf, cohomology theory to describe it. We will generalize it and try to give a generalised proof of the theorem.