Preface

Bessel functions are indispensable in many branches of mathematics and applied mathematics. Thus, it is important to study their properties in many aspects. Recently, there has been a vivid interest on Bessel and hypergeometric functions from the point of view of geometric function theory and functional inequalities. Although many inequalities and geometric properties of Bessel and hypergeometric functions appear in works of many mathematicians, there is no unified treatment of the topic. I have written this monograph in order to partially fill this gap in the literature. The major part of this monograph is taken from my Ph.D. thesis [54] with the same title as this monograph and that is why most results are due to myself and my coauthors. The literature has grown very quickly during the past few years and everything could not have been covered. I have tried to follow closely the structure of my thesis.

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