

CONTENTS

CHAP.	PAGE
I. BESSEL FUNCTIONS BEFORE 1826	1
II. THE BESSEL COEFFICIENTS	14
III. BESSEL FUNCTIONS	38
IV. DIFFERENTIAL EQUATIONS	85
V. MISCELLANEOUS PROPERTIES OF BESSEL FUNCTIONS	132
VI. INTEGRAL REPRESENTATIONS OF BESSEL FUNCTIONS	160
VII. ASYMPTOTIC EXPANSIONS OF BESSEL FUNCTIONS	194
VIII. BESSEL FUNCTIONS OF LARGE ORDER	225
IX. POLYNOMIALS ASSOCIATED WITH BESSEL FUNCTIONS	271
X. FUNCTIONS ASSOCIATED WITH BESSEL FUNCTIONS	308
XI. ADDITION THEOREMS	358
XII. DEFINITE INTEGRALS	373
XIII. INFINITE INTEGRALS	383
XIV. MULTIPLE INTEGRALS	450
XV. THE ZEROS OF BESSEL FUNCTIONS	477
XVI. NEUMANN SERIES AND LOMMEL'S FUNCTIONS OF TWO VARIABLES	522
XVII. KAPTEYN SERIES	551
XVIII. SERIES OF FOURIER-BESSEL AND DINI	576
XIX. SCHLÖMILCH SERIES	618
XX. THE TABULATION OF BESSEL FUNCTIONS	654
TABLES OF BESSEL FUNCTIONS	665
BIBLIOGRAPHY	753
INDEX OF SYMBOLS	789
LIST OF AUTHORS QUOTED	791
GENERAL INDEX	796