

## Table of Contents

Preface . . . . .	VII
Chapter Seven: Representations and duality of compact groups . . . . .	1
Section 27. Unitary representations of compact groups . . . . .	1
Section 28. More about representations of compact groups . . . . .	60
Section 29. Miscellaneous facts about representations . . . . .	115
Section 30. The TANNAKA-KREĪN duality theorem . . . . .	156
Chapter Eight: Fourier transforms . . . . .	209
Section 31. $\mathfrak{L}_2$ and $\mathfrak{L}_p$ transforms . . . . .	209
Section 32. Positive-definite functions and factorization theorems . . . . .	253
Section 33. BOCHNER's theorem . . . . .	291
Chapter Nine: Analysis on compact groups . . . . .	328
Section 34. Absolutely convergent Fourier series on compact groups . . . . .	328
Section 35. Multipliers over compact groups . . . . .	367
Section 36. More on multipliers over compact groups . . . . .	390
Section 37. Lacunarity for compact groups . . . . .	415
Section 38. Ideal theory for certain convolution algebras on compact groups . . . . .	449
Chapter Ten: Spectral synthesis . . . . .	484
Section 39. Ideals in regular commutative Banach algebras . . . . .	484
Section 40. Preliminaries on spectral sets . . . . .	522
Section 41. Some special sets . . . . .	552
Section 42. The failure of spectral synthesis in $\mathfrak{L}_1(G)$ . . . . .	576
Chapter Eleven: Miscellany . . . . .	606
Section 43. $\mathfrak{L}_p$ transforms and maximal functions . . . . .	606
Section 44. Pointwise summability for Fourier transforms . . . . .	631
Appendix D: Tensor products and von Neumann norms . . . . .	680
Appendix E: Miscellaneous facts from functional analysis . . . . .	710
Addendum to Volume I . . . . .	726
Bibliography . . . . .	729
Index of symbols . . . . .	752
Index of authors and terms . . . . .	756