Title:	A Study of C*-algebras
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Abstract:	C □ -algebras are modelled upon the operator algebra of bounded operators on a Hilbert space, B(H). In this study we try to understand several properties of such objects which will help us explain the generalisation of certain phenomenon from linear algebra to anal- ysis of infinite dimensional linear spaces.We understand the idea of constructing holomor- phic and later continuous functional calculus. We then arrive at characterising commuta- tive unital C □ -algebra as will be seen that such structures are isometrically isomorphic to C(X), the space of all complex valued continuous functions on a compact metric space. With some more associated constructions we will be able to understand the decomposi- tion of Normal operators on Hilbert spaces. Finally, the study of representations of C □ algebras generated by compact operators on Hilbert spaces will yield a structure theorem for finite dimensional algebras which serve as a prototype for new C □ -algebras built by finite dimensional ones.
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