Universal algebra started in the departure of mathematical study of operations on the real number system. In fact, it is the study of finitary operations on a set, and the purpose of research is to find and develop the properties which diverse algebras as groups, rings, lattices, Boolean algebras etc., may have in common.

Although the study of universal algebra may be considered to have originated with Whitehead, A.N., who wrote the book "A Treatise on Universal Algebra", in 1898, the subject did not develop with its versatility until before the period when the papers of Birkhoff, G. on free algebras, homomorphism theorems, congruence lattices, varieties did appear (1935-1950). Later on, the subject emerged with its versatility and nicety.

At present times, universal algebra has developed very significantly and research works are being carried on
in different directions. One very significant step first put independently by Cohn and Rebane is in the direction of the problem of embeddability of universal algebras into specially derived algebras over some known systems like semigroups. The idea of specially derived algebras has been introduced by Cohn [5] and Rebane [10]. They have proved that every universal algebra $G$ has a special faithful representation into a semigroup $P$, that is $G$ is monomorphic to some specially derived algebra over $P$.

The problem of embeddability of (1) a universal algebra into a specially derived algebra over some group (2) a partially ordered universal algebra into a specially derived po algebra over some po group (3) a fully ordered universal algebra into a specially derived fully ordered algebra over some f.o. semigroup remained open and we have solved these problems in this thesis.

The problem solved in Chapter I, is a generalisation
of the theorem of Cohn and Reščević. It has been solved that every universal algebra $G$ has a special faithful representation in some group $P$.

In Chapter II we have solved the problem of embeddability of a po universal algebra into a specially derived po algebra over some po group.

In Chapter III, we have proved that every f.o. (fully ordered) universal algebra $G$ has a special faithful representation in some f.o. semigroup $P$.

Although it is felt that a little different title would have been more befitting the thesis, but due to some technical difficulties, the present title has to be retained.

Terminologies which we use in this thesis have been defined in their proper places.