Summary

Aim of the work

The aim of the present work is to develop analytical methods (potentiometric and spectrophotometric methods) for study and quantitative determinations of some anti-histaminic drugs [hydroxyzine hydrochloride (HYZ), meclozine hydrochloride (MOZ) and cinnarizine (CIZ)].

The present thesis comprises of three chapters:

Chapter (1)

Contains two parts:

The first part includes general introduction concerning theoretical bases of the general properties of different types of ion selective electrodes and great attention was given to the applications of ion selective electrodes in pharmaceutical analysis. Also include basic spectrophotometry, theory, concepts and applications.

The second part gives a literature survey of the previous studies for the analysis of the studied drugs including spectrophotometric, potentiometric, chromatographic, and electrophoresis methods.

Chapter (2)

Contains two parts:

The first part is experimental part for ion selective electrode which dealing with the materials, reagents and instruments used as well as the experimental techniques applied. Full details are given for the preparation of the electrodes, construction of the calibration graphs and investigation of the effect of response time, and pH on the performance characteristics of the electrodes, also methods for evaluation of the electrode selectivity and determination of the studied drug in pure solutions and in its pharmaceutical formulations.

The second part deals with experimental part for spectrophotometric technique which includes apparatus used for measurements and procedures for preparation