Objectives of the present work:

Several difficulties are faced in designing controlled release systems for better absorption and enhanced bioavailability. One of such difficulties is the inability to confine the dosage form in the desired area of the gastrointestinal tract. Drug absorption from the gastrointestinal tract is a complex procedure and is subject to many variables. It is widely acknowledged that the extent of gastrointestinal tract drug absorption is related to contact time with the small intestinal mucosa. Thus, small intestinal transit time is an important parameter for drugs that are incompletely absorbed.

Many drugs having absorption window in upper part of GIT have problem of incomplete absorption and some drugs are unstable or having low solubility at intestinal conditions affects bioavailability of drug.

Hence present investigation is an attempt to design the floating drug delivery systems which can remain in the gastric region for several hours and hence significantly prolong the gastric residence time of drugs. Prolonged gastric retention improves bioavailability, reduces drug waste, and improves solubility for drugs that are less soluble in a high pH environment. Also it is an attempt to develop sustained release drug delivery system for improved patient compliance and more effective delivery of model drug.