OBJECTIVES OF THE STUDY:

In the present work, studies will be carried on the design and in vitro evaluation of suppositories of Aceclofenac and atenolol by fusion method. Among the Non-Steroidal Anti-inflammatory Drugs (NSAIDS) Aceclofenac is a new generation NSAID widely used in the long term treatment therapy of various rheumatic disorders. But similar to other NSAIDS, the drug has been associated with a few adverse effects, i.e., gastro intestinal disorders (gastric irritation and ulceration), which can be prevented by administering Aceclofenac rectally in form of suppository.

Atenolol is an antihypertensive used in the management of hypertension and angina pectoris and in emergency treatment of cardiac arrhythmias. But its oral bioavailability is only 50% because of its poor absorption from gastrointestinal tract. Ampicillin and antacid further decreases the bioavailability of atenolol. On the other hand, the drug has a few gastrointestinal side effects such as nausea, vomiting and diarrhea. These side effects of the drug can be overcome by administering the as suppository for rectal use.

With a view to avoid potential adverse effects of the acelofenac and atenolol such as gastric irritation leading to bleeding and ulceration, improving bioavailability and patient compliance, rectal drug delivery system is designed for administering such drug.