

**DEVELOPMENT, CHARACTERIZATION AND EVALUATION  
OF MESALAMINE LOADED PROBIOTIC BASED  
MICROCARRIERS FOR THE MANAGEMENT OF  
ULCERATIVE COLITIS**

A  
THESIS  
SUBMITTED TO



**MAHARAJA RANJIT SINGH PUNJAB TECHNICAL  
UNIVERSITY BATHINDA (PUNJAB)**

IN FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

**DOCTOR OF PHILOSOPHY**

IN

**PHARMACEUTICAL SCIENCES**

By

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