

**A STUDY OF A CHI-SQUARE  
DISTRIBUTION WITH APPLICATIONS  
TO STATISTICAL INFERENCE**

A DISSERTATION SUBMITTED  
IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF

**MASTER OF PHILOSOPHY  
IN  
STATISTICS**

BY  
**SHRIHARI B. BIDWE**

GUIDE  
**Dr. M. S. PRASAD**  
PROFESSOR AND HEAD  
DEPARTMENT OF STATISTICS

**DEPARTMENT OF STATISTICS  
SHIVAJI UNIVERSITY  
KOLHAPUR-416004**

**MAY, 1988**