## CERTIFICATE

This is to certify that Shri S.A. Deshpande has carried out the work presented in this thesis under my supervision for a period as per the requirements of the M.Phil. programme of this University and the work is original in nature.

(S.R. Sawant)

Guide

Kolhapur Date: 1/6/87 Lecturer, Deptt. of Physics, Shivaji University, Kolhapur