## CERTIFICATE

This is to certify that Mr. J.M. Barot, a candidate for the award of degree of Doctor of Philosophy of M.S. University of Baroda, has worked under my supervision for the period required by the University and that the accompanying thesis which he is submitting, is his own work.

Prof. Y.K. Agrawal

Date: 25) 5/95

M Sc, Ph D , D Sc , D Sc, FNASc, FRIC, FCS, FS, FIC