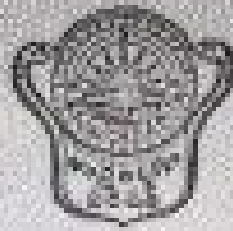


ANDHRA UNIVERSITY



FACULTY OF SCIENCE

This is to certify that

Chaturanga Rangaiah Rao

has been duly admitted to the

Degree of Doctor of Philosophy

in this University, he having been declared to be

qualified to receive the same in 1988.

Given under the Seal of the University