

**CENTRE OF ADVANCED STUDY IN EDUCATION
FACULTY OF EDUCATION AND PSYCHOLOGY
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA-390 002**



CERTIFICATE

This is to certify that the work contained in this thesis titled, '**Development and Implementation of ICT Aided Constructivist Learning Approach for the Professional Development of Pre-Service Teachers**' being submitted by **Mrs. Ganiger Bharati** to The Maharaja Sayajirao University of Baroda, Vadodara, Gujarat State, India for the degree of Doctor of Philosophy in Education, is a record of bonafide research work conducted by her under my guidance. The results embodied in the same have not been submitted elsewhere for the award of any degree or diploma. It is further stated that the doctoral research work was conducted fulfilling the requisite attendance criteria as per O. Ph.D.: 3 of The M. S. University of Baroda, Vadodara.

Date: 19th June, 2014

Place: Vadodara

Prof. D.R.Goel

Guide