DEPARTMENT OF MATHEMATICS,

SHIVAJI UNIVERSITY KOLHAPUR,

(MAHARASHTRA) INDIA.

C E R T I F I C A T E

This is to certify that the dissertation entitled "DIFFERENTIAL FORMS IN EINSTEIN-CARTAN THEORY OF GRAVITATION", submitted by Miss. Nayana Arvind Salunkhe for the award of the degree of Master of Philosophy in Mathematics of Shivaji University, Kolhapur is duly completed under my supervision and guidance and embodies the work entirely done by her.

Place: Kolhapur

Date: /06/07

(Dr. L. N. Katkar)

Guide

Department of Mathematics

Shivaji University,

Kolhapur-416004