



DEPARTMENT OF GEOGRAPHY
(opp. Prof. C.C. Mehta Auditorium)
FACULTY OF SCIENCE
The Maharaja Sayajirao University of Baroda
VADODARA 390002 (Gujarat)

CERTIFICATE

This is to certify that the thesis entitled

**“ARIMA Based Trend Prediction and Modelling of Rainfall and
Temperature- A Spatio-Temporal Analysis of Gujarat, India”**

Submitted by
Lakhan Jain

*In partial fulfilment of the requirements for the award of the degree of
Doctor of Philosophy (Ph.D.)*

IN

GEOGRAPHY

*To The Maharaja Sayajirao University of Baroda has been carried out under
my supervision and guidance. The research embodied in this thesis has not been
submitted previously for the award of any other degree, diploma, or fellowship.*

Guide

*Prof. Bindu Bhatt
Department of Geography
Faculty of Science
The M. S. University of Baroda*

Offg. Head

*Dr. Ami Rawal
Department of Geography
Faculty of Science
The M. S. University of Baroda*

Dean

*Prof. Haribhai R. Kataria
Faculty of Science
The M. S. University of Baroda*

DECLARATION

I hereby declare that the thesis entitled “**ARIMA Based Trend Prediction and Modelling of Rainfall and Temperature: A Spatio-Temporal Analysis of Gujarat, India**” is my own research work conducted under the supervision of *Prof. Bindu Bhatt* in the Department of Geography, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara. This research has been carried out and presented in accordance with the academic rules and ethical standards of the University. To the best of my knowledge, no part of this thesis has been submitted for any degree or diploma to this or any other University or Institute. Any omission or error that might have occurred is regretted.

Date:

Place:

PhD Research Scholar

Lakhan Jain

Guide

Prof. Bindu Bhatt

Offg. Head

Dr. Ami Rawal