## VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM KARNATAKA, INDIA



This is to certify that

K Srinivasa Rao

has been conferred the Degree of

Portor of Philosophy

in

Faculty of Applied Sciences (Mathematics)

for the thesis entitled

Some Contributions to the study of Graph Coloring & Critical Graphs

in recognition of the fulfillment of requirements for the said degree

PH 000780

Given under the seal of the University

USN: 1DA09PGN04

BELGAUM

DATE

: January 09, 2018

VICE CHANCELLOR .