

2021-2022.

**Tuljaram Chaturchand college,**

Baramati – 413102 (Pune)

DEPARTMENT OF CHEMISTRY



## CERTIFICATE

Roll No. 16471

Exam No.

This is to certify that, Mr. Ware Prajwal Hindurao. (M.Sc. II Analytical Chemistry) has successfully work on, the project entitled “**synthesis of Dyes and Pigments Of Phthalocynine Ligand With Various Metals**” in department of chemistry under the guidance of Prof. Gadadare R. T. during academic year 2021-2022 partial fulfillment for award of Master of Science in Analytical Chemistry.

Prof. R.S. Bhondave

PG Co-ordinator

Prof. Gadadare R. T.

Project In-charge

Department of Chemistry

External Examiner

Prof. Kale S.R

Head  
DEPARTMENT OF CHEMISTRY  
Tuljaram Chaturchand College  
Baramati (Dist.Pune)

Anekant Education Society's  
Tuljaram Chaturchand College, Baramati



A

**PROJECT REPORT**

**ON**

**"SYNTHESIS OF DYES & PIGMENT OF  
PHTHAIOCYNINE LIGAND WITH VARIOUS  
METALS"**

At

TULJARAM CHATURCHAND COLLEGE BARAMATI

Submitted to

DEPARTMENT OF CHEMISTRY

For

M.SC.II Analytical CHEMISTRY

By

Mr. Ware Prajwal Hindurao.

Under the Guidance of

Prof. R.T. Gadadare