## PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI - 620 023.



## **CERTIFICATE**

This is to certify that the project work entitled "ONLINE HOSPITAL CAMP PORTAL ", submitted in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 affiliated to Bharathidasan University is a bonafide record of the work done by N.PAVITHRA (Register. No: 20PCS23) during the even semester of the academic year 2021 - 2022.

Signature of the Guide 1.6. 22

துறைத் தலைவா,

கணின் அறிவியல் துறை, Viviar-அடுக்கொளுள்ளன்ற நிழுந்து project work held on <u>02-06-202</u>

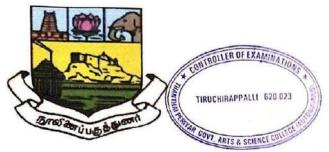
அறிவியல் கல்லூரி (தன்னாட்சி), திருச்சிராப்பள்ளி-620 023.

Internal Examine

xternal Examiner

## P.G. & RESEARCH DEPARTMENT OF COMPUTER SCIENCE

## THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI-23.



#### CERTIFICATE

This is to certify that the project work entitled "MY TUBE", submittedin partial fulfillment of the requirements for the award of the degree of Master of Science in Computer Science to Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirapalli-23 affiliated to Bharathidasan University is a bonafide record of the Project work done by M. NAGALAKSHMI (Register No: 20PCS22) during the even semester of the academic year 2021-2022.

Head of the Department

துறைத் தன்களை, கணிவி அசிசிடம் துறை, தந்தை பெரியம் அரசு கலை மற்றும்

அறிவியல் கல்லூர் (தன்னாட்சி). அறிவியல் கல்லூர் (தன்னாட்சி). Viva Voce examination held on 02/9 6 22

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Prol leh External Examiner 02/66

Signature

#### PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE

## THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous)

TIRUCHIRAPPALLI - 620 023





#### **CERTIFICATE**

This is to certify that the project work entitled "College Admission System", submitted in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli – 23 affiliated to Bharathidasan University is a bonafide record of the work done by M. LAVANYA (Reg. No: 20PCS21) during the even semester of the academic year 2021 – 2022:

By Sange Small Head of the Department Sange,

தக்கை பெரியார் அரசு கவை மற்றும்

அறிவியம் கல்லூரி (தன்னர் அ) Viva- vgce examination for this project work held on \_\_\_\_\_ 9. Amelin Signature of the Guilde 122

02/06/22

Internal Examiner

## PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous)

TIRUCHIRAPPALLI - 620 023



### **CERTIFICATE**

This is to certify that the project work entitled "CLIENT SERVER BASED LIVE MEETING", submitted in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCEto ThanthaiPeriyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 affiliated to Bharathidasan University is a bonafide record of the work done by G.ELAKKIYAVALLI(Reg. No: 20PCS20) during the even semester of the academic year 2021 - 2022.

Signature of the Guide

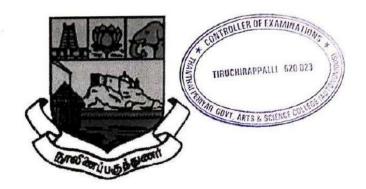
Head of the Department துறைத் தலைவர், கணினி அறிவியல் துறை,

<u>கிருச்சிராப்பன்</u> :

Internal Examiner

## PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous)

TIRUCHIRAPPALLI - 620 023



## **CERTIFICATE**

This is to certify that the project work entitled "Online seat allocation in food courts using vscode", submitted in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 affiliated to Bharathidasan University is a bonafide record of the work done by S.BIRUNDHA (Reg. No: 20PCS18) during the even semester of the academic year 2021 - 2022.

Signature of the

Head of the Department

கணினி அறிவியல் துறை, **தந்தை பெ**ரியார் அரசு கலை ம<mark>ற்றும்</mark>

8 3 TEST 22 Signature of the Guide

# PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous), TIRUCHIRAPPALLI – 620 024



#### **CERTIFICATE**

This is to certify that the project work entitled "VIRTUAL TAMIL KEYBOARD", submitted in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli – 24, affiliated to Bharathidasan University is a bonafide record of the work done by B.ARUNA (Reg. No: 20PCS17) during the even semester for the academic year 2021 - 2022.

Signature of the 31)05/22

Signature of the Guide

Head of the Department துறைத் தலைவர், கணினி அறிவியல் துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (ஒன்னாட்சி),

Viva-voce examination 987 this project work is held on 02.06.9099.

Internal Examiner

External Examiner

## P.G. and RESEARCH DEPARTMENT OF COMPUTER SCIENCE

## THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous)

TIRUCHIRAPPALLI - 620 023





## **CERTIFICATE**

This is to certify that the project work entitled "ONLINE BOOK REVIEW MANAGEMENT SYSTEM USING JSP AOL APP", submitted in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli – 23 affiliated to Bharathidasan University is a bonafide record of the work done by T.ABIRAMI(Reg. No: 20PCS16) during the even semester of the academic year 2021 - 2022.

Head of the Department of pa

m. Vm 31/5/22 Signature of the Guide

கணினி அறிவியல் துறை, கந்தை பெ<sup>ெ</sup>ாச் அரசு கலை மற்று**ம்** 

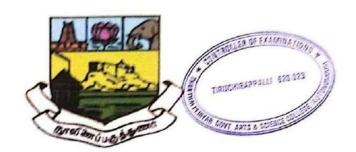
Wava-voce examination) for this project work held on 02-04.2012

Internal Examiner 22

D. Rows library Coffee External Examiner

#### P.G. & RESEARCH DEPARTMENT OF COMPUTER SCIENCE

THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI-23.



Signature

#### CERTIFICATE

This is to certify that the project work entitled "COMPUTERIZATION OF ELECTRICAL VECHILES CHARGING STATION", submitted in partial fulfillment of the requirements for the award of the degree of Master of Science in Computer Science to Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirapalli-23 affiliated to Bharathidasan University is a bonafide record of the Project work done by VIGNESH A (Register No: 20PCS13) during the even semester of the academic year 2021-2022.

Head of the Department V 06/22 giompo gonovari, worthort probable of giong,

සැන්සේ උල්රමයක් ලැකුතු. නුදිකනු සිංජිසත් උල්ද සහන සද්ලුත් ආල්ල්මයන් සේලාක් (දැන්නෙස්වේ),

Viva-Voce examination held on....

12/06/22

Internal transper

D. Ruel lib Lib External Examiner 02/16/22

## PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous)

TIRUCHIRAPPALLI - 620 023



## **CERTIFICATE**

This is to certify that the project work entitled "ONLINE AGRICULTURE SHOP", submitted in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23

affiliated to Bharathidasan University is a bonafide record of the work done by S.VASANTHAKUMAR (Reg. No: 20PCS12) during the even semester of the academic year 2021 - 2022.

Head of the Departine of the தந்தை பெரியார் அரசு கலை மற்றும்

அறிவியல் கல்லூரி (தன்னாட்சி), திருச்சிராப்பள்ளி-620 023-

Viva-voice examination for this project work held on

02/06/22

External Examiner

## **CERTIFICATE**

This is to certify that the project work entitled "ONLINE EXAMINATON SYSTEM", submitted in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli — 23 affiliated to Bharathidasan University is a bonafide record of the project work done by SATHISHKUMAR.R (Reg. No: 20PCS10) during the even semester of the academic year 2021 - 2022.

Signature of the Guide &

Head of the Department

கணினி அறிலியல் துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (துன்னாட்சி), திருச்சிராப்பள்ளி-520 023.

Viva-voce examination for this project work held on 00,06, 2032

Internal Examiner

External Examiner



Research Supervisor

Dr.R.Senthilkumar M.Sc., M.Phil., Ph.D., PGDCA Associate Professor and Head Department of Biochemistry Thanthai Periyar Government Arts And Science College(A) Tiruchirappalli - 620 023.

#### **CERTIFICATE**

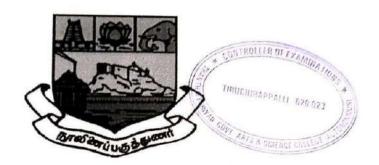
This is to certify that the dissertation entiled "ANTI-CANCER ACTIVITY OF SYNTHESIZED SILVER NANOPARTICLES USING LEAVES OF BREYNIA RETUSA ON BREAST CANCER CELL LINES" is a bonafide record of work done by I.KARPAGAM (Reg.No:18PBC11) in the PG DEPARTMENT of Biochemistry Thanthai Periyar Government Arts And Science College.(Autonomous), Tiruchi-6200023. In partial fullfilment of the requirements for the award of the degree of MASTER OF SCIENCE BIO-CHEMISTRY during the academic period 2020-2022 in the Department of Bio-Chemistry under my guidance and supervision and the project work has not previously formed the basis for the award of any degree, diploma, associate ship of any other similar title..

Congs 51n Head of the Department Head Of the Department, Department of Biochemistry, Thanthai Periyar Government Arts and Science College (Autonomous), EXAMINERS Ni - 620 023.

Signature of the Guide Dr. R. SENTHILKUMAR, Assistant Professor & Head, Department of Biochemistry, Thanthai Periyar Govt. Arts & Science College (A), Tiruchirappalli - 620 023.

## P.G. & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI-23.

#### CERTIFICATE



This is to certify that the project work entitled "ACADEMIC PERFORMANCE IMPROVEMENT USING CANDIDATE GENERATION ALGORITHM", submitted in partial fulfilment of the requirements for the award of the degree of Master of Science in Computer Science to Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirapalli-23 affiliated to Bharathidasan University is a bonafide record of the work done by K. RAMKUMAR (Register No.: 20PCS09) during the even semester of the academic year 2021-2022.

கணினி அறிவியல் துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி),

.திருச்சிராப்பள்ளி-620 023.

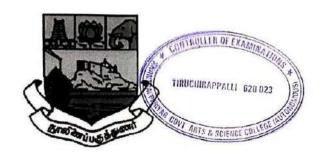
Dr. T. N. RAVI, M.Sc., M.Phil., Ph.D., (Maths), B.Ed. (Maths), PGDCA., M.Sc. (YHE) ssistant Professor of Computer Science Thanthal Perlyar Government
Arts and Science College (Autonom

Internal Examiner

#### PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE

THANTHAI PERIYAR GOVERNMENT ARTS and SCIENCE COLLEGE (Autonomous),

#### TIRUCHIRAPPALLI - 620 023



## **CERTIFICATE**

This is to certify that the project work entitled "FINGERPRINT MATCHING", submitted in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli - 23, affiliated to Bharathidasan University is a bonafide record of the work done by R.MAHENDHIRAN (Reg.No:20PCS07) during the even semester of the academic year 2021 - 2022.

Head of the Department

துறைத் தலைவர்,

கணினி அறிவியல் துறை, தந்தை பெரியார் அரசு கலை மற்றும்

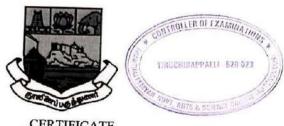
அறிவியல் கல்லூரி (தன்னாட்சி),

Viva Voce examination of this project work is held on 02 . 6 - 2022

External Examiner

## P.G. AND RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (Autonomous)

## TIRUCHIRAPPALLI – 620 023



This is to certify that the project work entitled "Build a online MCQ web App with Javascript (QWAPP)", submitted in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 affiliated to Bharathidasan University is a bonafide record of the work done by S.HARIHARAN (Reg. No: 20PCS06) during the even semester of the academic year 2021 - 2022.

Signature of the

Head of the Department துறைத் தலைவர்,

கணினி அறிவியல் துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி),

ருச்சிராப்பள்ளி-629 023 voce examination for this project work held on

Signature of the Guide

## PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous)

## TIRUCHIRAPPALLI - 620 023



#### CERTIFICATE

This is to certify that the project work entitled "PET PARADISE", submitted in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 affiliated to Bharathidasan University is a bonafide record of the work done by V.DHARMA (Reg. No: 20PCS05) during the even semester of the academic year 2021 - 2022.

Head of the Department

தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி),

திருச்சிராப்பள்ளி-620 023. Internal Examiner

## PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE

## THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS),TIRUCHIRAPPALLI - 620 023.





#### CERTIFICATE

This is to certify that the project-work entitled "LOAN MANAGEMENT SYSTEM", submitted in partial fulfilment of the requirements for the award of the degree of MASTER OF COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 affiliated to Bharathidasan University is a bonafide record of the project work done by M.DANIEL VINCENT(Reg. No: 20PCS04) during the even semester of the academic year 2021 - 2022.

Head of the Department

Signature of

துறைத் தலைவர், கணினி அறிவியல் துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி), திருச்சிராப்பள்ளி-620 023.

Viva- voce examination of this project work held on 12/06/202

O. Royl lel Dexternal Examiner 02/06/22

#### PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE

(Autonomous)

TIRUCHIRAPPALLI - 629 023



#### **CERTIFICATE**

This is to certify that the project work entitled "ONLINE STUDENTS INFORMATION SYSTEM", submitted in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 affiliated to Bharathidasan University is a bonafide record of the work done by G.CHIDAMBARAKANNAN (Reg. No: 20PCS03) during the even semester of the academic year 2021 - 2022.

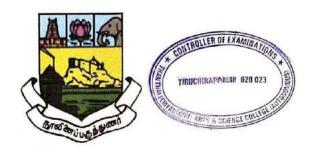
Signature of the Head of the Departmentalit,

கணினி அநிவியல் துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி), திருச்சிராப்பள்ளி-620 023.

Viva-voice examination for this project work held on 02-06-2022

## PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous)

TIRUCHIRAPPALLI - 620 023



#### CERTIFICATE

This is to certify that the project work entitled "Online Train Ticket Booking System Through Web Application", submitted in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 affiliated to Bharathidasan University is a bonafide record of the work done by G.BHAGIYARAJ (Reg. No: 20PCS02) during the even semester of the academic year 2021 - 2022.

Head of the Department ,

கணினி அறிவியல் துறை,

தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி),

திருச்சிராப்பள்ளி-620 023. Viva- voce examination for this project work held on 🔻 🤊 🗸 - 0 6 - 2022

Internal Examiner

D. Roel : leh ) External Examiner 02/06/22

Signature of the Guide

## PG & RESEARCH DEPARTMENT OF COMPUTER SCIENCE THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE

(Autonomous)

TIRUCHIRAPPALLI - 620 023



#### CERTIFICATE

This is to certify that the project work entitled "RTO OFFICE ADMINISTRATION AND VEHICLE NUMBER PLATE DETECTION USING OTP", submitted in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN COMPUTER SCIENCE to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 affiliated to Bharathidasan University is a bonafide record of the project work done by N. ARAVIND (Reg. No: 20PCS01) during the even semester of the academic year 2021 - 2022.



துறைத் தலைவர், கணினி அநிலியல் துறை,

Head of the Department திருச்சிராப்பள்ளி-620 023.

Viva-voce examination of this project work held on 02/05/2022

Dr. K. ANGAMMAL, M. Com., M.Phil., M.B.A., Ph.D.,

Head & Associate Professor,

PG & Research Department of Commerce,

Thanthai Periyar Government Arts & science college, (Autonomous)

Tiruchirappalli - 23

#### CERTIFICATE

That is certify that the dissertation entitled "A STUDY ON CONSUMAR ATTITUDE TOWARDS GOLD LOAN OFFERED BY CANARA BANK WITH REFERENCE TO ERIYODU BRANCH IN DINDIGUL DISTRICT" submitted by Mr. P.NEELAN ( Reg. No: 20PCO10) in partial fulfillment of the requirement for the award of the Degree of Master of Commerce is a bonafied record of the work carried out by himself during the year 2021-22 under my guidance and supervision. It is certify that this dissertation has not been submitted elsewhere for the award of any other Degree, Diploma, and Associateship, Fellowship or any other similar titles

Place: Trichy-23

Date:

Signature of the HOD Head of the Department

P.G. and Research Dept. of Commerce

Thanhai Periyar Govt.

Arta & Science College (Autonomous)
TIRUCHIRAPPALLI-620 023.

Arts & Science College (Autonomous) TIRUCHIRAPPALLI-620 023.

Signature

Signature of the Guide Head of the Department

P.G. and Research Dept. of Commerce

Thanthai Periyar Govt.

Dr. R.RAMJI, M.Com., M.Phil., Ph.D.,

ASSISTANT PROFESSOR,

PG AND RESEARCHN DEPARTMENT OF COMMERCE.

THANTHAI PERIYAR GOVRENMENT ARTS AND SCIENCE

COLLEGE (AUTONOMOUS),

TIRUCHIRAPPALLI-620 023.

#### **CERTIFICATE**

That is certify that the project work entitled A STUDY ON CONSUMEWR PREFERENCES TOWARDS NEWSPAPER IN TIRUCHIRAPALLI DISTRICT submitted by K. SUSHMITHA in partial fulfillment of the requirement for the award of the Degree of Master of Commerce is a benefited record of work carried out by himself during the year 2020-2022 under my guidance and supervision. It is certificate that this dissertation has not been submitted elsewhere for the award of any other Degree, Diploma, and Associateship, Fellowship or any other similar titles.

Date: 31/5/2022

Place: Trichy-23

OLLER OF EXAMINATION TIRUCHIRAPPALLI 620 023

Head of the Department P.G. and Research Dept. of Commerce Thanthai Periyar Govt.

Arts & Science College (Autonomous) TIRUCHIRAPPALLI-620 023.

SIGNATURE OF THE GUIDE

Dr. R.RAMJI, M.Com., M.Phil., Ph.D., Asst. Professor & Research Advisor P.G. & Research Dept. of Commerce Periyar EVR College (Autonomous) Trichirappalli-620 023.

SIGNATURE OF THE EXTERNAL EXAMINAR

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This is to certify that the dissertation entitle "ANTI - INFLAMMATORY ACTIVITY OF ETHANOL EXTRACT OF PTEROCARPUS INDICUS FLOWER" is a bonafide record of work done by D.DHARANI (Reg.No 20PBC10) In the PG AND RESEARCH DEPARTMNT OF BIOCHEMISTRY THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE(Autonomous), Trichy-6200023. In partial fulfillment of the requirements for the award of the degree of MASTEROF SCIENCE IN BIOCHEMISTRY during the academic period 2020-2022 in the Department of Biochemistry under my guidance and supervision and the project work has not previously formed the basis for the award of any degree, diploma associate ship fellowship of any other similar title

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EXAMINERS

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This is certify that project work entitled "A STUDY ON CONSUMER TASTE AND PREFERENCE TOWARDS ARUN ICE CREAM IN THIRUCHIRAPALLI" is a bonafide record of work done by A.SRIMATHI (REGISTER NUMBER 20PCO28) in partial fulfillment of the requirements for the award of the degree of Master of Commerce of the Thanthai periyar Arts & Science College (Autonomous), Thiruchirappalli - 620 023 is the original work of the candidate.



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That is certify that the dissertation entitled "A STUDY ON CUSTOMER SATISFACTION OF REDMI PHONES IN TIRUCHIRAPPALLI DISTRICT" submitted by Ms. M. SOBIYA MARY ( Reg No; 20PCO27) in partial fulfilment of the requirement for the award of the Degree of Master of Commerce in commerce is a benefited record of the work carried out by himself during the year 2021-22 under my guidance and supervision. It is certificate that this dissertation has not been submitted elsewhere for the award of any other Degree, Diploma, and Associate ship, Fellowship or any other similar titles

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This is to certify that the project work entitled "A STUDY ON CUSTOMER SATISFACTION TOWARDS ONLINE SHOPPING IN TRICHY CITY " is a bonafied record of work done by S.MALATHI (Reg .20PCO25) in partial fulfillment of the requirements for the award of the Degree of MASTER OF COMMERCE during 2021 - 2022 at PG & Research Department Of Commerce, Thanthai Periyar Government Arts and Science College,

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This is to certify that the dissertation entitled "WASTE MANAGEMENT SYSTEM IN MULTI SPECIALITY WITH SPECIAL REFERENCE IN TRICHY DISTRICT "submitted by Miss. S. KEERTHANA in partial fulfillment of the requirements for the award of the Degree of Master of Commerce in commerce is a bonafide record of work carried out by herself during the year 2020 -2022 under my guidance and supervision. It is certified that this dissertation has not been submitted else where for the award of any other degree, diploma, associate ship, fellowship or any other similar titles.

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This is certify that the project work entitled "A STUDY ON QUALITY WORK LIFE OF THE EMPLOYEES OF PLA NISSON, TIRUCHIRAPPALLI " Submitted by S ARUL PRADEEPA MARY, Reg.No.20PCO18, in partial fulfilment of the requirement for the award of the degree of MASTER OF COMMERCE, during the year 2021- 2022 at PG & Research Department of Commerce, Thanthai Periyar Govt. (Autonomous) Arts College and Science

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This is to certify that the dissertation entitled "A STUDY ON CONSUMERS BEHAVIOUR TOWARDS ROYAL ENFIELD BIKES IN TIRUCHIRAPPALLI TOWN" done under my guidance and submitted to the Thanthai Periyar Government Arts and Science College (Autonomous), affiliated to the Bharathidasan University in partial fulfillment of the requirements for the award of the Degree of MASTER OF COMMERCE is a bonafide record of the work done by K. ABITHA (Reg.No:20PC017) in the Post Graduate & Research Department of Commerce, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli – 23 during the year 2021 – 2022.

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Dr. P. SUGUNALAKSHMI.

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That is certify that the project work entitled A STUDY ON EMPLOYEES JOB SATISFACTION TOWARDS HONDA MOTORS COMPANY LTD WITH SPECIAL REFERENCE TO TRICHY TOWN submitted by E.SAMPATH in partial fulfillment of the requirement for the award of the Degree of Master of Commerce is a benefited record of work carried out by himself during the year 2020-2022 under my guidance and supervision. It is certificate that this dissertation has not been submitted elsewhere for the award of any other Degree, Diploma, and Associateship, Fellowship or any other similar titles.

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Date: 31.05.2022

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This is to certify that the Project work entitled A STUDY ON AWARNESS AND LEVEL OF SATISFACTION OF MONEY ACCESS CARD HOLDERS IN KARUR TOWN INTERVIEW SCHEDULE" is a bonafied record or work done by V. SAMBATHRAJ (Reg. No. 20PCO13) in partial fulfilment of the requirements for the award of the Degree of MASTER OF COMMERCE during 2020- 2022at PG & Research Department of Commerce, Thanthai Periyar Arts and Science College (Autonomous), Tiruchirappalli. NTROLLER OF EXAMINATION

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anber Syndicate, Bharathidasan University
Truchirappalli - 620 002

# Dr. R. KANNAPPPA, M.com.M.B.A.M.Phil.Ph.D.,

Assistant Professor

PG & Research Department of Commerce

Thanthai Periyar Government Arts and Science Coffege (Autonomous) Tiruchirapalli-620 023.

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## CERTIFICATE

This is to certify that the Project work entitled "PERCEPTION OF POST GRADUATE STUDENTS TOWARDS ENTREPRENEURSHIP - A REPORT" is a bonafied record or work done by P. NITHISH (Reg. No. 20PCOII) in partial fulfillment of the requirements for the award of the Degree of MASTER OF COMMERCE during 2020-2022at PG & Research Department of Commerce, Thanthai Proventing Arts and Science College (Autonomous), Tiruchirappalli.

Head of the Department

P.G. and Research Dept. of Commerce

Thanthai Periyar Govt.

Arts & Science College (Autonomous TIRUCHIRAPPALLI-620 023.

Signature of the Guide R.KANHAPPA, M.Zom, M.S.A., Mahin, Fil.

Assistant Professor

PG & Research Dept.of Comp.

12 Periyar EVR College (Autr

Signature of the External Examiner

Dr. P. SUGUNALAKSHMI,
M.Com.,M.Phil., PGDARP.,PGDCA, Ph.D.
Associate Professe & Research Advisor
PG & Research Dept. of Commerce
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Dr. B. KANNAN, M. Com., M. Phil., Ph.D., M.B.A., Assistant Professor, PG & Research Department of Commerce, Thanthai Periyar Govt. Arts and Science College (Autonomous) Tiruchirappalli - 620 023.

# CERTIFICATE

This is certify that the project work entitled "A STUDY ON **CUSTOMER PERCEPTION ABOUT TWO WHEELER** "Submitted by A.MADHAN, Reg.No.20PCO09] in partial fulfillment of the requirement for the award of the degree of MASTER OF COMMERCE, during the year 2021- 2022 at PG & Research Department of Commerce, Thanthai Periyar Govt. Arts and Science College (Autonomous) Tiruchirappalli.

SIGNATURE OF HOD

Head of the Department

P.G. and Research Dept. of Common

Assistant Periode College (Autonomals)

TIRUCHIRAPPALLI 620 023.

Date: 31.05.2022

SIGNATURE OF GUIDE

CONTROLLER OF EXAM B. KANNAN, Ph.D., Assistant Diessor & Research Supervisor PG & Research Department of Commerce

Periyar E.V.R. College Tiruchirappalli - 620 023

EXTERNAL EXAMINER

ARTS & SCIENCE COLLEGE

Dr. P. SUGUNALAKSHMI, M.Com., M. Phil., PGDAOR., PGDCA, Ph.I. Associate Professi & Research Advisor PG & Research Dept. of Commerce Seethelakshmi Ramaswami College Member Syndicate, Bharathidasan University Tiruchirappalli - 620 002. Dr. R. KANNAPPPA, M.Com., MBA., M.Phil., Ph.D.,

Assistant Professor
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Tiruchirapalli-620 023.

Date: 31.05.2022

## CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON EMPLOYEES SATISFACTION TOWARDS THEIR JOB IN TATA MOTORS FINANCE LTD." is a bonafied record or work done by S.KRISHNAKUMAR (Reg. No. 20PCO08) in partial fulfilment of the requirements for the award of the Degree of MASTER OF COMMERCE during 2021–2022at PG & Research Department of Commerce, Thanthai Periyar Arts and Science College (Autonomous), Tiruchirappalli

Signature of the H.O.D

Head of the Department P.G. and Research Dept. of Commerce Thanthai Periyar Govt. Arls & Science College (Autonomous) TIRUCHIRAPPALLI-620 023. Signature of the Guide

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R.KANNAPPA, M.Com. M.S.A. Jan.
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Periyar EVR College (Autonomous).
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Signature of the External Examiner

Dr. P. SUGUNALAKSHMI, M.Com,M.Phill.PGDADR.PGDCA,Ph.D. Associate Professr & Research Advisor PG & Research Dept. of Commerce Seethalakshmi Ramaswami College Member Syndicate, Bharathidasan University "ruchirappalli - 620 Dr. C. AIYAVU Assistant Professor PG & Research Department of Biochemistry Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli-23.



## CERTIFICATE

This is to certify that the dissertation entitled "Phytochemical analysis, Anti-microbial and Anti-oxidant activity of Origanum vulgare (Karpuravalli) polar extracts" is a record of project work done by BABY DIVYA. K (Reg. No. 20PBC08) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other University or Institution for the award of any degree or diploma.

K. Baby Divyo. Candidate Signature

Guide Signature

Signature of Head of the Department

Head Of the Department, Department of Biochemistry, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli - 620 023.

Dr.R.SUDHA,M.Com.,M.Phil.,Ph.D.,

Assistant Professor PG & Research Department of Commerce, Thanthai Periyar government arts & science College (Autonomous), Tiruchirappalli – 620 023.

Date: 31.05 - 2012

## CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON CONSUMER PREFERENCE TOWARDS CONSUMPTION OF SOFT DRINKS IN TIRUCHIRAPALLI TOWN" is a bonafied record of work done by K.KAVIYARASAN (Reg. No. 20PCO07) in partial fulfilment of the requirements for the award of the Degree of MASTER OF COMMERCE during 2021 – 2022 at PG & Research Department of Commerce, Thanthai Periyar government arts & science College (Autonomous), Tiruchirappalli.

TIRUCHIRAPPALLI 522 023

Signature of the H.O.D Head of the Department P.G. and Research Dept. of Commerce Thanthai Periyar Govt. Arts & Science College (Autonomous) TIRUCHIRAPPALLI-620 023.

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Associate Professor in Commerce Thanthai Periyar Government Arts and Science College (Autonomous) Tiruchirappalli - 620 023.

Date: 31-5-2022

#### CERTIFICATE

This is to certify that the Project work entitled "CONSUMER PREFERENCE TOWARDS ZOMATO IN TIRUCHIRAPPALLI TOWN" is a bonafied record or work done by M. DHARMARAJ (Reg. No. 20PCO05) in partial fulfillment of the requirements for the award of the Degree of MASTER OF COMMERCE during 2021 - 2022 at PG & Research Department of Commerce, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous) TIRUCHIAPPALLI-620 023.

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> 31.52022 Date

## CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON CUSTOMER SATISFACTION **TOWARDS PULSAR** (BAJAJ) WITH REFERENCE TO TRICHY TOWN" is a bonafied record or work done by N. BALAMURUGAN (Reg. No. 20PCO02) in partial fulfillment of the requirements for the award of the Degree of MASTER OF COMMERCE during 2021 - 2022 at PG & Research Department of Commerce, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous) TIRUCHIAPPALLI-620 023.

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#### CERTIFICATE

This is to certify that the Project work entitled "A SYUDY ON GST REVENUE COLLECTION" is bonafide record or work done by S. ABINRAJ (Reg. No. 20PCO01) in partial fulfillment of the requirements for the award of the Degree of MASTER OF COMMERCE during 2020-2022at PG & Research Department of Commerce, Thanthai Periyar Arts and ScienceCollege (Autonomous), Tiruchirappalli.

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M.Sc., M.Phil., Ph.D.,

Assistant Professor PG & Research Department of Chemistry, Thanthai Periyar Govt Arts & Science College (A), Affiliated to Bharathidasan University, Tiruchirappalli-620 023, Tamil Nadu, India. E-mail: pargathish46@gmail.com



#### CERTIFICATE

This is to certify that the dissertation entitled "Synthesis and Characterization of Chitosan/Ag Nanocomposite for the Reduction of Aromatic Nitrocompound " submitted to the Post Graduate and Research Department of Chemistry, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of MASTER OF SCIENCE IN CHEMISTRY INTROLLER OF EXAM for the academic year 2021-2022 is a bondfide record of the work done by

Ms. K. VANITHA (20PCH25) under my sundance.

TIRUCHIRAPPALLI 620 023

ARTS & SCIENCE COLLEG

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சி. தங்கவேலு Head of the Departments நுறைத்தனைவர்

வேதியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தவ்வரியி) நிருச்சிராப்பள்ளி - 620 023

**Examiners** 

FL.D. MISTE, FICS.

Arment of Chamistry he Rajah's College (Autonomous) og & Research Depl Pudukkottai-622 091 Tamii Nadu

Research Supervisor

Dr. C. PRAGATHISWARAN Assistant Professor of Chemistry Thanthai Periyar Government Arts & Science College Tiruchirappalli - 620023

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Affiliated to Bharathidasan University, Tiruchirappalli-620 023,

Tamil Nadu, India.



#### CERTIFICATE

This is to certify that the dissertation entitled "SYNTHESIS AND CHARACTERISATION OF CHITOSAN-TiO2 NANOCOMPOSITE FOR REDUCTION OF NITROBENZENE" submitted to the PG and Research Department of Chemistry, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous). Tiruchirappalli, in partial fulfillment of the requirements for the award of MASTER OF SCIENCE IN CHEMISTRY for the award of the by MS. S. SELVA AMANTHI (20PCH24) under my guidance.

Head of the Department

PG & RESEARCH COPT OF CHEMISTRY

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Dr.T.VIMALARANI, M.Sc., M.Phil., B.Ed., Ph.D

Assistant Professor

PG & Research Department of Chemistry

Thanthai Periyar Government Arts and Science College (Autonomous)

TIRUCHIRAPPALLI - 620 023

Date:

#### CERTIFICATE

This is to certify that the Project work was done under my guidance entitled "GREEN SYNTHESIS, CHARACTERIZATION AND ANTIBACTERIAL ACTIVITY OF SODIUM ALGINATE DOPED TIN DIOXIDE NANOPARTICLES. submitted by Miss.R.RAJARAJESWARI (Reg.No.: 20PCH23) in partial fulfillment of the requirements of the MASTER OF SCIENCE MEDICAL Quinty the period SMS-2812 is the original work of the candida TIRUCHIRAPPALLI \$25 \$23 PRESERVE SEARCH DEP Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli - 620 623 سنبرا الوشاه فسقطوه غد Viva Voce Examination held on ......

#### Dr. P. PANDIAN, M.Sc., M.Phil., Ph.D.

ASSOCIATE PROFESSOR OF CHEMISTRY THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous) TIRUCHIRAPPALLI - 620 023



## CERTIFICATE

30/5/22

This is to certify that the Dissertation entitled "REMOVAL OF MALACHITE GREEN DYE ONTO ACTIVATED PHOENIX DACTYLIFERA SEEDS" is submitted by V.P.JOY PRICILLA (Reg. No: 20PCH22) in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN CHEMISTRY to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI - 620 023 is the parties work done by her under my guidance

during the period of study 202

2022. TIRUCHIRAPPALLI 620 023

SIGNATURE OF THE CANDIDATE PARTS & SCIENCE COLLEGE STONA PARELOW, WHEE, GINAD Ph.D.

**Associate Professor** 

PG and Research Copt. of Chemistry

Thanthai Periya: Covernment

rts and Science College (Autonomous) Tiruchirappalli - 620 023.

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வேதியியல் துறை

தந்தை பெரியார் அரசு கலை

மற்றும் அறிவியல் கல்லூரி (குள்ளாரும்) இ. Submitted for the Viva – Voce Examination held on அத்தி.

External Examiner

Research Supervisor

Dr. A. FARITHA, M.Sc., M.Phil., B.Ed., Ph.D., Associate Professor, Department of Chemistry, Thanthai Periyar Govt. Arts & Science College (Autonomous), Tiruchirappalli-620 023.

#### CERTIFICATE

This is to certify that the dissertation entitled "BIOCIDAL PROPERTIES OF TIN DIOXIDE NANOPARTICLES PREPARED BY GREEN SYNTHESIS" submitted by K. JANANI(20PCH21) in patial fulfillment of the requirements of the MASTER OF SCIENCE IN CHEMISTRY during the OPEXHAMIATORS is the original work of the candidate.

TIRUCHIRAPPALLE 620 023

Signature of the Guide

Signature of flead of the Department

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2 Signature of the External Examiner

- 530f Department of Chemistry Periyar E. V. R. College (Autonomous)

Tiruchirappalli - 620 023.

M.Sc.M.Pt

Assistant Professor PG & Research Department of Chemistry .H The Rejair's College Multiston busi

Pudukketta-622 001 Tamil Nadu

Dr.T.VIMALARANI, M.Sc., M.Phil., B.Ed., Ph.D

PG and Research Department of Chemistry Thanthai Periyar Government Arts and Science College (Autonomous)

Date:

## CERTIFICATE

This is to certify that the Project work was done under my guidance entitled "STRUCTURAL, MORPHOLOGICAL, OPTICAL AND ANTIBACTERIAL ACTIVITY OF CHITOSAN DOPED TIN DIOXIDE NANOPARTICLES " submitted by Miss.R.ISHWARIYA (Reg.No.: 20PCH20) in partial fulfillment of the requirements of the MASTER OF SCIENCE INCHEMISTRY during the period 2020-2022 is the original work of the candidate.

WAR GOVE ARTS &

PG Research Supervisor DEPT. DF

Thanthai Periyas Government Arts & Science College (Autonomous) Tiruchirappalli - 620 023

Viva Voce Examination held on

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**திரு**ச்சிரால்மன்னர் - 620 023

EXTERNAL EXAMINER

DER.PAGUTHANYALAM. M.Sc.M.Pon Ph.D. MISTE FICS.

Assistant Professor og & Research Department of Chemistry \_H The Rojah's College (Autonomous)

Pupukkottai-622 001 Tamil Hadu

Dr. C. AIYAVU Assistant Professor PG & Research Department of Biochemistry Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli-23.



#### CERTIFICATE

This is to certify that the dissertation entitled "Collection and Identification of Oscillatoria sp based on 16srRNA molecular markers"is a record of project work done by Anandhajothi. N (Reg. No: 20PBC07) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other University or Institution for the award of any degree or diploma.

Candidate Signature

Guide Signature

Signature of Head of the Department

Head Of the Department, Department of Biochemistry, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli - 620 023.

Examiner



## THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous) TIRUCHIRAPPALLI - 620 023

Dr. N. KUMARAGURU, Ph.D., **Assistant Professor** 

DEPARTMENT OF CHEMISTRY

Phone: 0431 - 2420079 Mobile: 94863 43166

e-mail: nkguru@gmail.com

Date: 31.05.2022

#### CERTIFICATE

This is to certify that the project entitled "Synthesis of a green inhibitor and its inhibition behavior on AZ 91D Magnesium alloy" the bonafide Record of the original project was the original by Miss. T. CHITHRA (Reg. No. 20PCH19) under my supervision and that it has not formed the basis for the award of any degree, diplatha or fellowship, 20 023

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கணைப்போசிரியர் & துறைத்தலைவர்

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**தந்தை பெரியார் அ**ரசு கலை

**மற்றும் அறிவியல்** கல்லூரி (தன்னாட்சி)

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Viva-Voce Examination held on

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Signature of the Examiners

## Dr. P. PANDIAN, M.Sc., M.Phil., Ph.D.

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## CERTIFICATE

30-5-2022

This is to certify that the Dissertation entitled "ADSORPTION OF METHYLENE BLUE DYE BY PHOENIX DACTYLIFERA" is submitted by M.R. SUBHASH (Reg. No: 20PCH17) in partial fulfillment of the requirements for the award of degree of MASTER OF SCIENCE IN CHEMISTRY to the THANTHAI PERIYAR GOVERNMENT SCIENCE COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI - 620 023 is a bonafide record of work done by him under my guidance during the period of study 2021 52022.

TIRUCHIRAPPALLI 620 023

SIGNATURE OF THE CANDIDATE

GOVY ARTS & SCHISIGNATURE OF THE GUIDE

Dr. P. PANDIAN, M.Sc., M.Phil., Ph.D.

Associate Professor

PG and Research Dept. of Chemistry

Thanthai Periyar Government

THE HOD Arts and Science College (Autonomous) Tiruchirappalli - 620 023.

Gລາ**ຼສົນໃນເ**ລ່າ <u>ສູ</u>ເລເງງ

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ம்ற்றும் அறிவியல் கல்லூரி (தன்னாட்சி)

Internal Examiner

External Examiner

Dr. C. THANGAVELU M.Sc., M. Phil., Ph.D., ASSISTANT PROFESSOR OF CHEMISTRY PG & RESEARCH DEPARTMENT OF CHEMISTRY THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620023

Date: Da. Db. 2022

## CERTIFICATE

This is to certify that the project work was done under my guidance entitled "Determination of the Relationship between surface tension and contact angle using ecofriendly green materials-A low cost approach" submitted by SEENU.P with Reg.No.20PCH16 in partial fulfillment of the requirements of the MASTER OF SCIENCE IN CHEMISTRY during the period of 2021 AND IS the work of the candidate.

TIRUCHIRAPPALLI 620 023

epartment

தந்தை வெரியார் அரசு கலை ம்ற்றும் அறிவியல் நக்குரர் (நன்னாம்) Viva Voce Examination held on

Project Glide Dimpson தந்தை பெரியார் அரசு கலை

மற்றும் அறிவியல் கல்லூரி (கள்வ திருச்சிறா**ப்ப**ள்ளி - 620 023

02,06.22. **External Examiners** 

Internal Examiners

Dr.C.THANGAVELU, M.Sc., M.Phil., Ph.D., Associate Professer & HOD Post Graduate & Research Department of Chemistry Thanthai Periyar Govt. Arts and Science College (Autonomous) Affiliated to Bharathidasan University Tiruchirappalli-620 023, Tamil Nadu.



## CERTIFICATE

This is to certify that the dissertation entitled "STUDY OF CONTACT ANGLE, DETERMINATION FROM SURFACE TENSION MEASUREMENTS BY LOW COST EQUIPMENTS USING GREEN MATERIALS" submitted to the Post Graduate and Research Department of Chemistry, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of MASTER OF SCIENCE IN CHEMISTRY for the academic year 2021-2022 is a bonefide record of the work done by Mr. A. SAHAYA RAMESH BABU (20PCH15) under my guidance.

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Submitted for the Viva Voce Examination held on \_\_\_\_\_\_\_02/06/22

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Best dynamical 620 020

Internal Examiner

Dr. K. THANIKASALAM, M.Sc., Ph.D. Assistant Professor, PG and Research Department of Chemistry, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous)Tiruchirappalli... 620 023



#### CERTIFICATE

This is to certify that project work entitled"A STUDY ON BINDING ENERGY CALCULATIONS OF HEPTYLACETATE AND CIS-ALPHA-BERGAMOTENE WITH 6M0J PROTEIN" is the bonafide record of the original project work carried out by R. RANJITH KUMAR(20PCH14) under my supervision and that it has not formed the basis for the award of any degree, diploma or THRUCHBARPALLI 520 273 fellowship.

Periyar E.V.

of the Department

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PAGUTH M.Sc. M. Phil. Ph.D. MISTE, FICS. Assistant Professor

96 & Retearch Department of Chomistry na Rajah's College (Autonomous) Pudukkotta-622 901

Tamal Nadu

Department of enemiatry

Periyar E.V.R. College [Autonomous] Tiruchirappalli - 620 023.

Tiruchirappalli - 620 023.

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Dr. B. R.VENKATRAMAN M.Sc., Ph.D.,

Associate Professor

PG & Research Department of Chemistry

Thanthai Periyar Government Arts and Science College (Autonomous)

Tiruchirappalli - 620 023.

Date: 31-5-22

#### CERTIFICATE

This is to certify that the Project work was done under my guidance entitled \*SYNTHESIS, CHARACTERIZATION AND ANTIBACTERIAL PROPERTIES OF CHITOSAN DOPED TITANIUM DIOXIDE NANOPARTICLES PREPARED VIA GREEN METHOD" submitted by Mr.A.RAMAN (Reg.No.: 20PCH13) in partial fulfillment of the requirements of the MASTER TERRETENED CHEMISTRY during the period 2020-2022 is the original work of the candidate. TIBUCHIBAPPALLI 628 023

M.S. FILD, PODIMIN, DTM. AMINSA, FICCE, FACT, FISCA, FICS, FARA.

Associate Professor. P.G. & Research Department of Chemistry.

Phanthal Periyer Government Arts and Science College (Autonomous), Trachinappall - 620 023.

Viva Voce Examination held on ... 2 - 6 ... 22

Head of the Department of Chemistry

முன்னவர் சி. தங்கவேலு தைவப்போசிரியர் & துறைத்தலைவர்

வேதியியல் துறை

தந்தை வரியார் அரசு கலை

**, மற்றும் அறிவியல் க**ல்லூரி (தன்னாட்சி) ສໍເຫຼອ່ອໃຫກບັນລ່າລາໃ - 620 023

INTERNAL EXAMINER

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Research Supervisor

Dr. A. FARITHA, M.Sc., M.Phil., Ph.D., B.Ed., Associate Professor, Department of Chemistry, Thanthai Periyar Govt, Arts & Science College (Autonomous), Tiruchirappalli-620 023.

#### CERTIFICATE

This is to certify that the project report entitled "BIOCIDAL PROPERTIES OF SODIUM ALGINATE DOPED TITANIUM DIOXIDE NANOPARTICLES PREPARED BY GREEN SYNTHESIS" submitted by Continery APPAN (20PCH12) in patial fulfillment of the requirements of the MASTER OF SCIENCE IN CHEMISTRY during the period 2020-2022 is the original work of the candidate pratti 620 023

Signature of the Guide

Confirmation of many

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Viva-vice Examination held on 02,95, 2022 Signature of the External Examiner

Dr.T.ASGKAN,M.Sg. M.EduM.Phil. Ph.D. Assistant Professor in Chemistry

Government Arts College Trichy - 620 022

Dr. P. SUBRAMANI M.Sc., Ph.D.,

Assistant Professor PG and Research Department of Chemistry THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE. (Autonomous) Affiliated to Bharathidasan University Tiruchirappalli-620 023, Tamil Nadu, India.



#### CERTIFICATE

This is to certify that the dissertation entitled SYNTHESIS AND CHARACTERIZATION OF CHITOSAN-ZaSO, NANOCOMPOSITE FOR REDUCTION OF NITROBENZENE submitted to the PG and Research Department of Chemistry, THANTHAL PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of MASTER OF SCIENCE IN CHEMISTRY for the academic year 2020-2022 is a bonafide record of the work by MOHAMEDASHIK, J (20PCH11) under my guidance

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FRITZF FUN

Research supervisor

Capt. Dr. P. AROCKIA SAHAYARAJ, M.Sc., Ph.D., M.A., PGDCSA.,

ASSISTANT PROFESSOR / PG & RESEARCH DEPARTMENT OF CHEMISTRY,

THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A), TIRUCHIRAPPALLI -620 023.

### CERTIFICATE

This is to certify that the project work entitled "SYNTHESIS AND CHARACTERIZATION OF NANOPARTICLE OF Bi2MoO6 By SOL- GEL METHOD" submitted to the Department of Chemistry, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A), TIRUCHIRAPPALLI, in partial fullfilment of the recruitment for the award of MASTER OF SCIENCE IN CHEMISTRY for the award of MASTER OF SCIENCE IN CHEMISTRY for the award of MASTER OF SCIENCE IN CHEMISTRY 2021-2022 is a bonafide record of original work done by N.MADAN (20PCHI Wanter TIRUCHIRAPPALLI 620 023 my guidance.

Capt. Dr.P.AROCKIA SAHAYARAJ. M.Sc., M.A., PGDCSA., Ph.D. ASSISTANT PROFESSOR & RESEARCH ADVISOR

DEPARTMENT OF CHEMISTRY THANTHAI PERIYAR GOVE ARTS & SCIENCE COLLF

TRICHY - 620 07

Signature of Head of the Department

GOVT. ARTS & SCIENC

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The Viva Voce Examination held on. 2. 6 : 2012

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Signature of the External Examiner

Research supervisor

Dr.H.BENITA SHERINE., M.Sc., M.Phil., Ph.D

ASSISTANT PROFESSOR, DEPARTMENT OF CHEMISTRY,

THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A), TIRUCHIRAPPALLI -620 023.

#### CERTIFICATE

This is to certify that the project work entitled "ACALYPHA INDICA LEAF EXTRACT AS CORROSION INHIBITOR FOR MILD STEEL IN ACID MEDIUM" submitted to the Department of Chemistry, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A), TIRUCHIRAPPALLI, in partial fulfilment of the requirements for the award of MASTER OF SCIENCE for the academic year 2020-2022 is a bonafide record of original work done by M.MANIKANDAN under my guidance.

PG & RESEARCH DEPT. OF CHEMISTRY

Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli - 620 023

The Viva-Voce Examination held on

முனைவர் சி. தங்கவேவு

குவைப்பேராசிரியர் & துறைத்தலைவர் வேதியியல் துறை

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Assistant provided Cherifers Signature of the External Examiner

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Dr.R.SENTHILKUMAR, MSc., M.Phil., Ph.D., PGDCA Head and Assistant Professor PG & Research Department of Biochemistry Thanthai Periyar Govt.Arts and Science College (A)

Thiruchirappalli-23



#### CERTIFICATE

This is to certify that the dissertation entitled "EFFECT OF POLYHERBAL FORMULATION ON THE EXPRESSION OF GTFB AND BRPA BIOFLIM GENES IN streptococcus oralis" is a record of project work done by SATHISH.R (Reg. No: 20PBC05) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at THANTHAI PERIYAR GOVT. ATRS AND SCIENCE COLLEGE (Autonomous), Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other University or Institution for the award of any degree or diploma.

Candidate Signature

Signature of Head of the Department

Head Of the Department, Department of Biochemistry, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli - 620 023. Guide Signature
Dr. R. SENTHILKUMAR,
Assistant Professor & Hood

Assistant Professor & Head, Department of Biochemistry, Thanthai Periyar Govt. Arts & Science College (A), Tiruchirappalli - 620 023.

**EXAMINERS** 

1. Argematein 2.6.2022

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Dr. B. R.VENKATRAMAN M.Sc., Ph.D.,

Associate Professor

PG and Research Department of Chemistry

Thanthai Periyar Government Arts and Science (Autonomous)

Tiruchirappalli - 620 023.

Date 21 05 2522

#### CERTIFICATE

This is to certify that the Project work was done under my guidance entitled "SYNTHESIS, CHARACTERIZATION AND ANTIBACTERIAL PROPERTIES OF TITANIUM DIOXIDE NANOPARTICLES PREPARED VIA GREEN METHOD submitted by Mr.P.KAVIYARASAN (Reg.No.: 20PC.H08) in partial fulfillacent of the requirements of the MASTER OF SCIENCE TO SEE MISTRY during the period 2020-2022 is the original work of the candida

THRUCHHRAPPALLI 620 623

Research Supervison(ATRAMAN,

MS. PLO PETRAL DTM., AMNISA, FEDE., FACT, FASOL, FICS., FHRM...

Associate Professor, the I flow earth Department of Chemistry. and Science Callege (Autonomous). Head of the Department of Chemisto

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Viva Voce Examination held on 02.06. 2022 Designic Surject and address to be a survey of நிருக்கொள்ளி - வகப் பக்க

EXTERNAL EXAMINER 21

Research supervisor

Capt. Dr. P. AROCKIA SAHAYARAJ, M.Sc., Ph.D., M.A., PGDCSA.,

ASSISTANT PROFESSOR / PG AND RESEARCH DEPARTMENT OF CHEMISTRY, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A), TIRUCHIRAPPALLI -620 023

#### CERTIFICATE

This is to certify that the project work entitled "SYNTHESIS AND CHARACTERIZATION OF NANOPARTICLE OF rGO/Bi<sub>2</sub>M<sub>0</sub>O<sub>4</sub> by 5OL- GEL METHOD" submitted to the Department of chemistry, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A), TIRUCHIRAPPALLI, in partial fullfilment of the recruitment for the award of MASTER OF SCIENCE for the academic year 2020-2022 is a bonafide record of original work done by JAISANKAR M SALESCHE DI LELWING under my guidance.

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Research Supervision

Capt. Dr.P.AROCKIA SAHAYARAJ,

ASSISTANT PROFESSOR I RESUMBLE OFFICE DEPARTMENT OF CHEMISTRY THANTHAI PERMAR COVERNMENT ARTS & SCIENCE COLLEGE (AUTOMONOUS) THICHY - 820 001 TANKS MACKS

The Viva Voce Examination held on D2.05 2022

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Department of Chemistry Perlyar E. V.E. Cubege (Autonomona) Thruchtrappelit - 020 023.

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# THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous) TIRUCHIRAPPALLI - 620 023

Dr. N. KUMARAGURU, Ph.D., Assistant Professor

# DEPARTMENT OF CHEMISTRY

Phone: 0431 - 2420079 Mobile: 94863 43166 e-mail: nkgurungmail.com

Date: 31.05.2022

# CERTIFICATE

This is to certify that the project entailed "Enhancing the corrosion resistance of magnesium alloy AZ 91D in NaCl'solution' the bonafide record of the original project work carried out by Mr. K. GOPINATH (Reg. No. 20PCH06) under my supervision and that it has not formed the basis for the award of any degree, diploma or fellowship.

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Signature of the Guide

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Viva-Voce Examination held on 12. VL. 12.

Signature of the Examiners

Dr. A. SHAJUDHA BEGUM M.Sc., M. Phil., Ph.D.,

ASSISTANT PROFESSOR OF CHEMISTRY PG & RESEARCH DEPARTMENT OF CHEMISTRY THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620023

Dates

#### CERTIFICATE

This is to certify that the project work was done under my guidance entitled "Green Corrosion inhibition of Mild steel in HCI medium using plant Leaves extract" submitted by GANESH K with Reg.No.20PCH05 in partial fulfillment of the requirements of the MASTER OF SCIENCE IN CHEMISTRY during the period of 2021-2022 is the original work of the candidate.

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**தாதை பெரியார் அரசு கலை** 

woviva voce Examination held on **திருச்சிராப்பள்ளி** 620 023

Project Guide

PG & RESEARCH DEPT. OF CHEMISTRY

Thanthal Periyas Coversment Arts & Science College (Autonomous) Thruchirappalli - 620 023

External Examiners

Asat.Professor Department of Chemistry Perlyar E.V.R. College (Autonomous)

Tiruchireppalli - 620 023.

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formal Leave

Dr. K. SELVARANI. M.Sc., Ph.D. Assistant Professor PG & Research Department of Chemistry, Thanthai Periyar Government Arts & Science College (A), Affiliated to Bharathidasan University, Tiruchirappalli-620 023, Tamil Nadu, India. E-mail: kselvarani1972@gmail.com



## CERTIFICATE

This is to certify that the dissertation entitled "Synthesis and Characterization of Chitosan/Fe<sub>2</sub>O<sub>3</sub> Nanocomposite for the Reduction of Aromatic Nitrocompound" submitted to the PG and Research Department of Chemistry, Thanthai Periyar Government Arts & Science College (A), Tiruchirappalli, in partial fulfillment of the requirements for the award of MASTER OF SCIENCE IN CHEMISTRY for the academic year

2021-2022 is a bonafide record of the work done by

Mr.K.DHAMOTHARAN (20PCH04) under my guidance.

क्षा अल्ला के कि முனைவர் சிறனங்கவேலு Head of the Department மக்கலைவர் வேச்சர்கள் துறை

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Examiners

Department of Chemistry Periyar E.V.R. College (Autonomous) Tiruchirappalli - 620 023.

Research Supervisor

Dr. K. SELVARANI, M.Sc., Ph.D. Assistant Professor

PG & Research Department of Chemistry Thanthai Penyar Government Arts and Science College (Autonomous) Tiruchirappalli - 620 023

Assistant Professor 26 & Research Department of Chemistry the Republic College (Autonounces). Rudukkoff: 527 001

Tama Nadu



Dr. A. JOHN AMALRAJ, M.Sc., B.Ed., Ph.D., Assistant Professor of Chemistry PG and Research Department of Chemistry PERIYAR GOVERNMENT THANTHAI ARTS AND SCIENCE COLLEGE. (Autonomous) Tiruchirappalli-620 023,



### CERTIFICATE

This is to certify that the dissertation work entitled CORROSION INHIBITION BY POLYACRYLIC ACID - Zn2+ SYSTEM the bonafied record of the original dissertation work carried out by C. BALAMURUGAN (Reg.No. 20PCH03) under my supervision and that it has not formed the basis for the award of any degree, diploma or fellowship.

the Department றக்கலைவர் வேதியியல் துறை

தந்தை பெரியார் அரசு கவல

மற்றும் அறிவீயல் கல்லூரி (தன்னாட்சி)

Submitted for the viva voce Examination held on ......

Examiners

FICS\_

M.Sc.,M.Phil.,Ph.D.,MISTE Assistant Professor

oG & Research Department of Chemistry .H The Rajah's College (Autonomous)

Pudukkottai-622 001 Tamii Nadu

1.

earch Supervisor

Dr. K. SELVARANI. M.Sc., Ph.D Assistant Professor PG & Research Department of Chemistry Thanthai Periyar Govi, Aris & Science College (A) Affiliated to Bharathidasan University Tiruchirappalli-620 023, Tamil Nacia, India. E-mail: kselvarani1972@gmail.com



### CERTIFICATE

This is to certify that the dissertation entitled "Synthesis and Characterization of Chitosan/ MnO2 Nanocomposite for Reduction of Aromatic Nitrocompound" submitted to the PG and Research Department of Chemistry, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of MASTER OF SCIENCE IN CHEMISTRY for the academic year 2021-2022 is a bonafide record of the work done by Mr. C. ARUNKUMAR

(20PCH02) under my guidances

TIRUCHIRAPPALLI 520 023

OVT. ARTS & SCIENC

enarthiento Garan ராசிரியர் & துறைத்தலைவர் வேதியியல் துறை

**தந்தை பெ**ரியார் அரசு கலை **புற்று**ம் அறிவியல் கல்லூரி (தவ்வாட்சி) Examilier funducial - 620 023

Department of Chemistry Periyar E.V.R. College (Autonomous) Tiruchirappalli - 620 023.

PG & Research Department of Thanthai Periyar Govern Science Collège (Autonome. Tiruchirappail - 620 023

Dr.R.PAGUTHARWALAN.

M.Sc. M.Phil. Ph.D. MISTE FICS. Assistant Professor

PG & Research Department of Chemistry .H The Rajah's College (Autonomicus) Pudukkettai-522 091 Tamil Nadu



Research supervisor

Rev. Dr. (Mrs). J. RUBY PRISKILLA, M.Sc., M.Phil., Ph.D., MCA., M.Phil., B.C.S.

ASSISTANT PROFESSOR,

PG AND RESEARCH DEPARTMENT OF BOTANY,

THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A),

TIRUCHIRAPPALLI -620 023.

### CERTIFICATE

This is to certify that the project work entitled "PHYTOCHEMICAL ANALYSIS OF ETHANOLIC EXTRACT OF FLOWER OF TABERNAEMONTANA DIVARICATA L. THROUGH GC-MS" submitted to the Department of Botany, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI, in partial fulfilment of the recruitment for the award of MASTER OF SCIENCE for the academic year 2020-2022 is a Bonafide record of original work done by S. SELVAKUMARI under my guidance.

Ruby Psuiskilla Research Supervisor

Signature of Head of the Department

Dr.F.SHANTHA MARQARET,

M.Sc., M.Phil., Ph.B.;

Head & Associate Professor

PG & Research Department of Bulany

Thanthai Peripar Government

Ans & Segues College (Automations)

Traching College (Automations)

TIRUCHISAPPARAN SAN GAS

ARTS & SCIENCE ED

The Viva Voce Examination held on.....

Signature of the External Examiner

Dr. R. SARALA, M.Sc., Ph.D

Associate Professor P.G and Research Department of Botany Thanthai Periyar Govt. Arts And Science College (A) (Re-Accredited with 'A' Grade by NAAC Tiruchirappalli 620 023

#### CERTIFICATE

This is to certify that the project work entitled 'ETHNOBOTANICAL SURVEY OF MEDICINAL PLANTS IN MANGATHEVANPATTI, KULATHUR TALUK PUDUKKOTTAI DISTRICT' submitted by M.PRAVEENA (Reg. No. 20PBO14) was carried out for the partial fulfillment of the requirements for the award of Master of Science degree in Botany during the period 2021-2022 in Department of Botany, Thanthai Periyar Govt.Arts And Science College Autonomous), Trichy.

I further certify that no part of the thesis has been submitted anywhere for the award of any Degree, Diploma, Associateship, Fellowship or any other similar title to any candidate.

Project Guide 30

Dr. R.SARALA, M.Sc., Ph.D., Associate Professor
PO and Research Department of Botany
Thanthai Periyar Government
Arts & Science College (Autonomous)
Tiruchirappalli-620 023. Tamilnadu, India.

Examine

1.

00 A. SHAJAHAN, M.Sc., M.Phil., Ph.D.

Dean of Research and Consultancy opposes, Truchinggory, 620 020. Co. ege Scheme & Assessite Professor of Bolany,

Dr. F. SHANTHA MARGARET, M. Sc., M. Phil., Ph. D., Head & Associate Professor PG & Research Department of Botany Thunthal Periyar Government Arta & Science College (Autonomous) Tinichirappalli-620 023. Tamihadu, Iudia.



# THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

(Nationally Re-Accredited with 'A' Grade by NAAC) (Affiliated to Bharathidasan University, Tiruchirappalli) TRICHIRAPPALLI-620023.

# DEPARTMENT OF ZOOLOGY CERTIFICATE

The project work embodied in this dissertation entitled "STUDY OF "POLY CYSTIC OVARIAN DISEASE" (PCOD) AMONG THE GIRL STUDENTS OF THYANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE, TRICHIRAPALLI" has been carried out by Ms. VIMALA. P (Reg.No:20PZO23)in the PG and Research Department of Zoology, ThanthaiPeriyar Government Arts and Science College (Autonomous), Trichirappalli-620 023 affiliated to BHARATHIDASAN UNIVERSITY, TRICHIRAPALLI. The work is original and has not been submitted in part or full to any other degree or diploma of any university.

Signature of the HOD.

Dr.S. UMAMAHESWARI, M.Sc.,M.Ph.I.,Ph.D., Associate Professor and Head, Department of Zoology Thanthai Perfyar Government Arts & Science College (Autonomous) TIRUCHIRAPPALLI-620 023.

held submitted the evaluation Dissertation ThanthaiPeriyarGovernment Arts and Science College (Autonomous), Trichirappalli-620 023 on 02.06.2022.

Date:02.06.2022Examiners:

Dr T. JOSEPHA. JER

Associate Professor & Head Department of Zoology

Jamai Mohamed College (Autonomous)

Tiruchirappalli - 620 020 Tamil Nadu 2.

Associate Ptofessor,
Department of Zoology,
Thanthai Periyar Government
Arts & Science College (Autonomous)

Signature of the Guide.

Dr. M. RAMESH, M.Sc., B.Ed., M.Phil., Ph.D., Associate Professor.

Department of Zoology,
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### Dr. MIRIAM CECILIA VASSOU, M.Sc., Ph. D.,

Assistant Professor

Department of Zoology

Thanthai Periyar Government Arts And Science College (Autonomous)

Tiruchirapalli-620 023

Date: 30,05,2022

### CERTIFICATE

This is to certify that the dissertation entitled "VERTEBRATE FAUNAL SURVEY IN KOVILPATTI, THIRUCHIRAPPALLI, TAMILNADU, INDIA" is a bonafide record of research work done by VANAJA S., Reg.No.20PZO22, submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN ZOOLOGY during the year 2020-2022 in the Department of Zoology, under my guidance and supervision. The dissertation has not previously formed the basis for the award to the candidate of any Degree, Diploma, Associateship, Fellowship or any other similar titles.

Signature of the HOD

Dr.S. UMAMAHESWARI, M.Sc.,M.Phil.,Ph.D., Associate Professor and Head, Department of Zoology Thanthai Perivar Government Arts & Science College (Autonomous) TIRUCHIRAPPALLI-620 023.

Dr. P. NEELANARAYANAN, PhD

02 06

Associate Professor and Head
PG & Research Department of Zoology Nehru Me + via! College (Autonomo

Putha Dt., INDIA mail.com

30/51 Dr. MIRIAM CECILIA VASSOU, Ph.D., Assistant Professor

Signature of the Sinjervisor
Thanthai Party ar Government
Arts & Science College (Autonomous)
Tiruchirappalli-620 023, Tamilnadu India

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Dr. MIRIAM CECILIA VASSOU, Ph.D., Assistant Professor, Department of Zoology. Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli-620 023, Tamilnadu, India





Dr. K. Prabhakaran., M.Se., M.Phil., Ph.D. Assistant Professor P.G and Research Department of Zoology, Thauthai Periyar Govt Arts And Science College (Autonomous),

Date:

#### CERTIFICATE

This is to certify that the dessertation entitled Mitochondrial DNA 9bp deletion diversity and hypertension in eight Tribal Population of South India is a bonafide record of research work done by Mr C.SUGANYA (Reg No: 20PZO21), submitted to Thanthai Periyar Govt Arts And Science College (Autonomous), Tiruchirappalli, in partail fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN ZOOLOGY during the year 2020 to 2022 in the Department of Zoology, under my guidance and supervision. The dessertation has not previously formed for the basis for the award to any candidate for any Degree, Diploma, Associateship, fellowship or any other similar titles.

Signature of the HOD

INTROLLER OF EXAM

TIRUCHIRAPPALLI 620 023

(Dr. S.UMAMAHESWARI)
Dr.S. UMAMAHESWARI, M.S. M.Phil., Ph.D.,
ASSOCIATE Professor and Head,
Department of Zoology
Thankin Perivar Government
Arts & Science College (Autonomous)
TIRUCHRAPPALLI-620 023.

Signature of the Guide (Dr. K. PRABHAKARAN)

Examiners

Dr. S. UMAMAHESWARI M.Sc., PGDBI., M.Phil., Ph.D., ASSOCIATE PROFESSER IN ZOOLOGY,

DEPARTMENT OF ZOOLOGY, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS) THIRUCHIRAPPALLI - 620 023.





# **CERTIFICATE**

This is to certify that this project work entitled "Comparision of FTIR spectra of Bacterial cellulose produced by Bacillus licheniformis using different carbon sources" submitted to Thanthai Periyar Government Arts and Science College (Autonomous) by Miss. S. Poornima ( Reg.No: 20PZO20 ) in partial fulfillment of the requirements for the award of the degree of Master of Science by the BHARATHIDASAN UNIVERSITY, Thiruchirapalli. This is a bonafide work carried out by her under my supervision and guidance during the academic year 2020 - 2022.

Signature of the H.O.D.

Dr.S. UMAMAHESWARI, M.Sc., M.Ph.D., Ph.D., Associate Professor and Head,
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Signature of the Guide

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Timber in Karak



# DR. A.BALASUNDARAM

Assitant Professor
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### CERTIFICATE

This is to certify that the dissertation entitled "EFFECTS OF PROBIOTIC CONSORTIUM ON THE GROWTH PARAMETERS AND BIOCHEMICAL CONTENT OF OREOCHROMIS MOSSAMBICUS" submitted by Ms. A. PARVATHI, BSc., B.Ed., in partial fulfillment of the requirements for Post Graduate Degree in Zoology, is her original work, based on the observations carried out independently by her during the period of study under my guidance and supervision. This is also to certify that the above dissertation has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title.

Tiruchirappalli 31.05.2022 DR. A.BALASUNDARAM

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#### DR. V.MASILAMANI

Assitant Professor Supervisor and Guide P.G.& Research Department of Zoology Thanthai periyar government arts and science college Tamilnadu, India.

#### CERTIFICATE

This is to certify that the dissertation entitled "EFFECTS OF SPIRULINA ON THE GROWTH PARAMETERS AND BIOCHEMICAL CONTENT OF OREOCHROMIS MOSSAMBICUS" submitted by Ms. A. JANAPRIYANKA, BSc., in partial fulfillment of the requirements for Post Graduate Degree in Zoology, is her original work, based on the observations carried out independently by her during the period of study under my guidance and supervision. This is also to certify that the above dissertation has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title.

Tiruchirappalli 3 | .05.2022

V. Me le

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# CERTIFICATE

This is to certify that the dissertation entitled "A study on Distribution of Grasshoppers in Grassland and Agriculture felids of Kovilpatti Village Tiruchirappalli District, Tamil nadu".submitted by (GAYATHRI.S 20PZO17) in partial fulfillment of the requirements for Post Graduate Degree in Zoology is his original work, based on the observations carried out independently by him during the period of study under my guidance and supervision. This is also to certify that the above dissertation has not previously formed the basis for the award of any degree, diploma, associate ship, fellowship or other similar title.

Tiruchirappalli-23

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Dr.S. UMAMAHESWARI, M.Sc. M.Phd. P. Associate Professor and Head. Department of Zoology Thanthai Perivar Government

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Dr. K. Prabhakaran., M.Sc., M.Phil., Ph.D. Assistant Professor P.G and Research Department of Zoology, Thanthai Periyar Govt Arts And Science College (Autonomous), Tiruchirannalli.

Date:

#### CERTIFICATE

This is to certify that the dessertation entitled "Influence of mtDNA 9bp deletion polymorphisms on Diabetes in eight Tribal populations of south India" is a bonafide record of research work done by Mr. A.Arockiyasheeba (Reg No: 20PZO15), submitted to Thanthai Periyar Govt Arts And Science College (Autonomous), Tiruchirappalli, in partail fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN ZOOLOGY during the year 2020 to 2022 in the Department of Zoology, under my guidance and supervision. The dessertation has not previously formed for the basis for the award to any candidate for any Degree, Diploma, Associateship, fellowship or any other similar titles.

Signature of the HOD (Dr. S.UMAMAHESWARI) Signature of the Guide (Dr. K. PRABHAKARAN)

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Examiners

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Dr. K. Prabhakaran., M.Sc., M.Phil., Ph.D. **Assistant Professor** P.G and Research Department of Zoology, Thanthai Periyar Govt Arts and Science College (Autonomous), Tiruchirappalli.

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#### CERTIFICATE

This is to certify that the dessertation entitled mtDNA 9bp deletion and its impact on the Tobacco users in Eight Dravidian Tribal populations of south India is a bonafide record of research work done by Mr. P.Yuvaraj (Reg No: 20PZO14), submitted to Periyar EVR College (Autonomous), Tiruchirappalli, in partail fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN ZOOLOGY during the year 2020 to 2022 in the Department of Zoology, under my guidance and supervision. The dessertation has not previously formed for the basis for the award to any candidate for any Degree, Diploma, Associateship, fellowship or any other similar titles.

Signature of the HOD (Dr. S.UMAMAHESWARI)

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Dr.(Mr)P.THERIAPPAN M.Sc., Ph.D.,

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### CERTIFICATE

This is to certify that the project work entitled "PHYTOCHEMICAL ANALYSIS OF ETHANOLIC EXTRACT OF LEAF OF TABERNAEMONTANA divaricata L. THROUGH GC-MS" submitted to the Department of Botany, THANTHAI PERIYAR GOVERNMENT ARTS SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI, in partial fulfilment of the recruitment for the award of MASTER OF SCIENCE for the academic year2020-2022is a Bonafide record of original work done by M KEERTHI under myguidance.

Research Supervisor P.THE RIAPPAN.

PG and Research Department of Balany
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Signature of Head of the Department

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### CERTIFICATE

This is to certify that the dissertation entitled "Collection and Identification of Hindakia tetrachotoma based on 18srRNA molecular markers" is a record of project work done by M. Vimalraj (Reg. No: 20PBC04) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other University or Institution for the award of any degree or diploma.

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### THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

(Nationally Re-Accredited with 'A' Grade by NAAC) (Affiliated to Bharathidasan University, Tiruchirappalli) TRICHIRAPPALLI-620023.

## DEPARTMENT OF ZOOLOGY CERTIFICATE

The project work embodied in this dissertation entitled "BIODEGRADATION OF PAPER MILL TREATED EFFLUENT USING INDIGENOUS EARTHWORM "LAMPITO MAURITIF" has been carried out by Mr. SRIRAM.S (Reg.No:20PZO13) in the PG and Research Department of Zoology, Thanthai Periyar Government Arts and Science College (Autonomous), Trichirappalli-620 023 affiliated to BHARATHIDASAN UNIVERSITY, TRICHIRAPALLI. The work is original and has not been submitted in part or full to any other degree or diploma of any university.

Signature of the HOD. 28/

Dr.S. UMAMAHESWARI, M.Sc. M.Phil.Ph.D. Associate Professor and Head.

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#### DR. V.MASILAMANI

Assitant Professor Supervisor and Guide P.G.& Research Department of Zoology Thanthai periyar government arts and science college Tamilnadu, India.

#### CERTIFICATE

This is to certify that the dissertation entitled "EFFECTS OF SPIRULINA ON THE GROWTH PARAMETERS AND BIOCHEMICAL CONTENT OF OREOCHROMIS MOSSAMBICUS" submitted by Mr. S.RISHIKARAN, BSc., in partial fulfillment of the requirements for Post Graduate Degree in Zoology, is her original work, based on the observations carried out independently by her during the period of study under my guidance and supervision. This is also to certify that the above dissertation has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title.

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Assitant Professor Supervisor and Guide P.G.& Research Department of Zoology Thanthai periyar government arts and science college Tamilnadu, India.

#### CERTIFICATE

This is to certify that the dissertation entitled "IMPACT OF PROBIOTIC COSORTIUM AQUALACT ON LIVER AND KIDNEY MARKERS OF OREOCHROMIS MOSSAMBICUS" submitted by Mr.R.PRADEEP BSc., in partial fulfillment of the requirements for Post Graduate Degree in Zoology, is her original work, based on the observations carried out independently by her during the period of study under my guidance and supervision. This is also to certify that the above dissertation has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar title.

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Tamilnadu, India.



#### CERTIFICATE

This is to certify that the dissertation entitled "A Preliminary Qualitative Analysis of Planktonic Diversity on Singalandapuram Lake, Trichirappalli, Tamil Nadu" submitted by PIRUTHIVIRAJAN S (Reg. No. 20PZO09) in partial fulfillment of the requirements for Post Graduate Degree in Zoology is his original work, based on the observations carried out independently by him during the period of study under my guidance and supervision. This is also to certify that the above dissertation has not previously formed the basis for the award of any degree, diploma, associate ship, fellowship or other similar title.

Tiruchirappalli-23

Date: 01 | 06/ 2022

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Supervisor and Guide

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Dr. K. RAJA, M.Sc., M.Phil., Ph.D., Assistant Professor P.G. and Research Department of Zoology Periyar E.V.R. College (Autonomous & Accredited)

Tiruchirappalli - 620 023 Tamilnadu, India.



#### CERTIFICATE

This is to certify that the dissertation entitled " Observations on Population ecology and foraging behavior of bonnet macaque (Macaca radiata) from the tourist destination Of Mukkombu, Trichirappalli, Tamilnadu" submitted by Mr. P. NAVEEN (Reg. No. 20PZO08) in partial fulfillment of the requirements for Post Graduate Degree in Zoology is his original work, based on the observations carried out independently by him during the period of study under my guidance and supervision. This is also to certify that the above dissertation has not previously formed the basis for the award of any degree, diploma, associate ship, fellowship or other similar title.

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Head of the Department

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### **CERTIFICATE**

This is to certify that this project work entitled "FTIR Characterization of Cellulose produced by Bacillus subtilis bacteria using different carbon source" submitted to Thanthai Periyar Government Arts and Science College (Autonomous) by P. Madheshwaran (Reg.No: 20PZO20) in partial fulfillment of the requirements for the award of the degree of Master of Science by the BHARATHIDASAN UNIVERSITY, Thiruchirapalli. This is a bonafide work carried out by him under my supervision and guidance during the academic year 2020 – 2022.

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#### CERTIFICATE

This is to certify that the dissertation entitled "Study on Water Quality Parameters of Gomukhi Dam in Kallakurichi District of Tamil Nadu, India" submitted by Mr. K.MADHANKUMAR (Reg. No. 20PZO06)in partial fulfillment of the requirements for Post Graduate Degree in Zoologyis his original work, based on the observations carried out independently by him during the period of study under my guidance and supervision. This is also to certify that the above dissertation has not previously formed the basis for the award of any degree, diploma, associate ship, fellowship or other similar title.

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# Department of Zoology

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Tiruchirappalli - 620 023.



### **CERTIFICATE**

This to certify that the dissertation entitled "BUTTERFLY BIODIVERSITY IN THIYAGADURGAM HILLS FROM KALLAKURICHI DISTRICT, TAMIL NADU, INDIA" is the bonafide research work carried out by M.KOMATEESWARAN (Register No:20PZO05) in partial fulfillment of the requirement for the award of degree of MASTER OF SCIENCE IN ZOOLOGY during the year 2021-2022. Is this his him original research work, based on the observation carried out independently by her during the period of study under my guidance and supervision. It is also certified that the above dissertation has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or any other similar tile.

Head of the Department Is jum

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29.05.20 Research Supervisor & Guide

Dr. P. MOHIDEEN ASKAR NAWAS. Ph.D.,

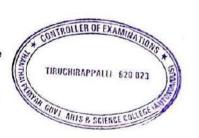
Assistant Professor PG & Research Department of Zoology Periyar E.V.R. College (Autonomous) Tiruchirappalli - 620 023.

Date: 27.05.2022

Place: Tiruchirappalli.

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# **CERTIFICATE**

This is to certify that this project work entitled "Study on Bacterial cellulose produed by Bacillus subtilis bacteria before and after cold storage" submitted to Thanthai Periyar Government Arts and Science College (Autonomous) by V. Gunasekar (Reg.No: 20PZO04) is in partial fulfillment of the requirements for the award of the degree of Master of Science by the BHARATHIDASAN UNIVERSITY, Thiruchirapalli. This is a bonafide work carried out by him under my supervision and guidance during the academic year 2020 - 2022.

Signature of the H.O.D.

Dr.S. UMAMAHESWARI, M.Sc., M.Phil., Ph.D. Associate Professor and Head. Associate Professor and Head,
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### CERTIFICATE

This is to certify that the dissertation entitled " Analysis Of Water Quality Parameters Of Ponnaniyar Dam In Karur District Of Tamilnadu" India submitted by Mr. B. DILIP (Reg. No. 20PZO02) in partial fulfillment of the requirements for Post Graduate Degree in Zoology is his original work, based on the observations carried out independently by him during the period of study under my guidance and supervision. This is also to certify that the above dissertation has not previously formed the basis for the award of any degree, diploma, associate ship, fellowship or other similar title.

Tiruchirappalli-23

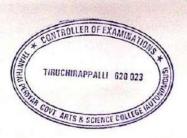
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Tiruchirappalli – 23

#### CERTIFICATE

This is to certify that the dissertation entitled "COMPARATIVE PHARMACOGNOSTIC STUDIES OF GENUINE AND COMMERCIAL. submitted to Thanthai SAMPLES OF INDIGOFERA TINCTORIA L." Periyar Government Arts and Science College (Autonomous), Tiruchirappalli in partial fulfillment of requirements for the award of Degree MASTER OF SCIENCE IN BOTANY is a Bonafide work of S. JAYABHARATHI (Reg. No. 20PBO12) who carried out this work under my guidance in the Thanthai Periyar Government Arts and Science College (Autonomous), during the academic year (2020-2022). This dissertation has been prepared in his original work and it has not been submitted for any other Degree.

Place: Tiruchirappalli

Date:

Signature of the Guide

Ur. M. MANUKANII HAM, M.Sc., M.Phil., Ph.D. PG and Research Department of Botany Periyar E.V.R. College (Autonomous) Kejametai Nagar Tiruchirappalli - 620 023.

SHANTHA MARGARET, M.Sc. M. Phil., Ph.D., Head & Associate Professor Research Department of Botany nent of Botany

Examiner

06

Dr. A. SHAJAHAN, M.Sc., M.Phil., Ph.D. Doon of Research and Consultancy

Coordinator of DBT Star College Scheme & Associate Professor of Botany, Jamai Mohamed College (Autenomous), Tiruchirappalli- 620 020.

TIRUCI

Dr. MIRIAM CECILIA VASSOU, M.Sc., Ph. D.,

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Date: 30.05 2022

#### CERTIFICATE

This is to certify that the dissertation entitled "SURVEY OF AVIAN FAUNA IN MANIVILUNDHAN, SALEM, TAMILNADU, INDIA" is a bonafide record of research work done by ARUN M., Reg.No.20PZO01, submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN ZOOLOGY during the year 2020-2022 in the Department of Zoology, under my guidance and supervision. The dissertation has not previously formed the basis for the award to the candidate of any Degree, Diploma, Associateship, Fellowship or any other

similar titles.

Signature of the HODriment of Zoology Thanthai Peritar Government

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2.

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Dr. P. NEELANARAYANAN, Pho Associate Professor and Head PG & Research Department of Zoology Nehru Memorial College (Autonomous) Puthanamant i-62° 507, Trichy-Dt., INDIA O:944376586/ & ☑:dr.pnn31@gmail.com

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THIS IS TO CERTIFY THAT THE RECORD WORK ON DISSERTATION / PORTFOLIO SUBJECT CODE: 18PVC4PW

### PHOTOGRAPHY -PHOTO STORY

IS AN ORIGINAL EFFORT OF A RECORD OF WORK DONE BY

> MR.KAVINRAJ R **REG. 20PVC02**

OF THE DEPARTMENT OF VISUAL COMMUNICATION, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE, TRICHY - 23 DURING THE PERIOD OF STUDY IN THE YEAR 2021 - 2022

> ead & Assistant Professor rch Department of Visual Com hanthai Periyar Government Arts & Science Co.

PROJECT GUIDE,

ASSISTANT PROFESSOR & HEAD OF THE DEPARTMENT PG AND RESEARCH DEPARTMENT OF VISUAL COMMUNICATION THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE, TRICHY - 23.

PLACE: TRICHY

DATE: APRIL 2022

This is to Certify that the Record Work on Dissertation / Portfolio Subject code: 18PVC4PW

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Is an Original Effort of a Record of Work Done By Ms. T.SULOCHANA Reg. 20PVC13

of the Department of Visual Communication,
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During the Period of Study in the Year
2021 - 2022

1.6.

Dr.M. BLESSY M.A.M. SYAL

PG & Research Department of Visual Cot. nai Periyar Government Arts & Science Co. Tr. Inhirappalli - 620 023.

Dr.M.BLESSY,

Project Guide,

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Government Arts and Science College, Trichy - 23.

EXTERNAL EXAMINER

Place: Trichy

Date: April 2022

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Dr.M.BLESSY, Project Guide,

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Government Arts and Science College, Trichy - 23.

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> Head & Assistant search Department of Wheel hanthal Peripar Government Arts & Science ( 1) Tirochirappath 620 023.

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EXTERNAL EXAMINER

PLACE: TRICHY

DATE: APRIL 2022



# THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous) Tiruchirappalli-620023

#### CERTIFICATE

This is to certify that the project work entitled "Dictotherapy for Peptic ulcer - A Brief Review submitted by R.DEEPA (Reg. No. 20PBO11) was carried out for the partial fulfilment of the requirements for the award of Master of Science degree in Botany during the period 2021-2022 in Department of Botany, Thanthai Periyar Govt. Arts and Science College (Autonomous), Trichy.

I further certify that no part of the thesis has been submitted anywhere for the award of any Degree, Diploma, Associateship, Fellowship or any other similar title to any candidate.

Project Guide

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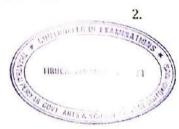
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Dr. A. SHAJAHAN, M.Sc., M.Phil., Ph.D. Dean of Research and Consultancy Combrator of SRT Ser Compr. Science & Associate Professor of Bolany, Januar Mariang College, Universities, Encouragean 1920 020 **Examiners** 



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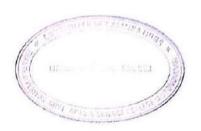
DR.M.BLESSY, PROJECT GUIDE,

ASSISTANT PROFESSOR & HEAD OF THE DEPARTMENT
PG AND RESEARCH DEPARTMENT OF VISUAL COMMUNICATION
THANTHAI PERIYAR
GOVERNMENT ARTS AND SCIENCE COLLEGE, TRICHY - 23.

EXTERNAL EXAMINER

PLACE: TRICHY DATE: APRIL 2022

முனைவர் வ.நாராயண**ன்** நம்பி இணைப்பேராசிரியர் & தமிழ்த்துறை த**ந்தைபெ**ரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி), திருச்சிராப்பள்ளி — 620 023



# "பட்டுக்கோட்டை கல்யாணசுந்தரம் பாடல்களில் மனித உரிமைகள்"

என்னும் தலைப்பில் திருமதி.காயத்ரி (பதிவுஎண்: 18PTL19 அளித்துள்ள இத்திட்டக்கட்டுரை பயன்றதன் முதுகலை நிறைவாகவும் பாடத்தித்தின் பகுதியாகும். ஒரு அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூயில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்தில் என் மேற்பார்வையில் உருவானது என்றும் வேறெந்த தேர்வின் பொருட்டும் இத்திட்டக்கட்டு**ரை** தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

துறைத்தலைவர் கையொப்பம்

தமிழாய்வுக்கும் ரத் தகைகள் தத்தை வெய்யர் சிரசு கலை ஹீறும் அரிவியர் கள்னும் (தன்னாச்சி) திருச்சீரார்பள்வி - 620 020 2), BONMM Quial Grißwrait 3015

முனைவர்: நாராயணன் நம்பி

முனைவர். ம. நூர்ஜஹான், உதவிப்பேராசிரியர், தமிழாய்வுத்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி), திருச்சிராப்பள்ளி-23.

க. சமுத்திரத்தின் "வாடாமல்லி" நாவலில் திருநங்கைகளின் வாழ்வியல் கூறுகள்" என்னும் தலைப்பில் ஐ. விஜயலட்சுமி (பதிவு எண் : 20PTL27) தந்துள்ள இத்திட்டக்கட்டுரை முதுகலை பயின்றதன் நிறைவாகவும், பாடத்தின் ஒரு பகுதியாகவும், அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி, முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து என் மேற்பார்வையில் உருவானது என்றும் வேறு எந்தத் தேர்வின் பொருட்டும் இத்திட்டக் கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கின்றேன்.

முனைவர் ம. தூர்ஐஹான்

நெறியாளர் ஒப்பம்

தமிழாய்வுத்துறைத் தலைவர் தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தவ்வாட்சி) ருச்சிராப்பள்ளி - 620 023



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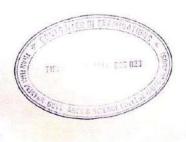
முனைவர் ம. நூர்ஜஹான் நாள் : 31, 05, 4012 எம்.ஏ., எம்ஃபில்., .பி.எட்., பி.எச்.டி., உதவிப்பேராசிரியர், தமிழாய்வுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி – 620 023.

பெருமாள்முருகனின் பூக்குழி நாவல் கலப்பு மணம் - ஓர் ஆய்வு எனும் தலைப்பில் ஆய்வாளர் ப.சுபாஷினி (பதிவு எண்: 20PTL26) அளித்துள்ள இத்திட்டக்கட்டுரை, முதுகலைத் தமிழ் பயின்றதன் நிறைவாகவும் பாடத் திட்டத்தின் பகுதியாகவும் 95 திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து என் மேற்பார்வையில் உருவானது என்றும் வேறெந்தத் தேர்வின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

(முனைவர் கா.வாசுதேவன்)

துறைத்தலைவர் ஒப்பம்

தமிழாய்வத்துறைத் தலைவர் தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தவ்வாட்சி) \_\_\_\_\_\_\_\_த்குச்சிராப்பள்ளி - 620 023 (முனைவர் ம. நூர்ஜஹான்) Br. M. NOBRIAHAN, M.A. MPHIL BLE PA நேறியாளர் ஒப்பு இத்தை DEPT. OF TAMIL E.V.R. COLLEGE (A) TRICHY-23



முனைவர் இரா. குணசேகரன் உதவிப்பேராசியர், தமிழாய்வுத்துறை, தந்தை பெரியார் கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023

втей: 31.05.2022 Дер: 25-23

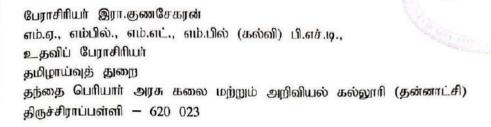
"கி.ரா.வின் பெண்கதைகள்" என்னும் தலைப்பில் க. சத்யபிரியா (பதிவுஎண்: 20PTL25) அளித்துள்ள இத்திட்டக் கட்டுரை முதுகலைப் பயின்றதன் நிறைவாகவும், திட்டத்தின் ஒரு பகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் பயின்ற காலத்து என் மேற்பார்வையில் உருவானது என்றும், இதற்கு தேர்வின் பொருட்டும் இவ்ஆய்வேடு வேறெந்தத் (முன் அளிக்கப்பெறவில்லை என்றும் சான்றளிக்கிறேன்.

முனைவர் கர். வாசுதேவன் துறைத் தலைவர் ஒப்பம்

முனைவர் இரா. குணசேகரன்

மூடுக்கிய இரர். இய்படுக்கும் உதவிப்பேராகிரியர் தமிழாய்வுத்துறை பெரியார் ஈ.வெ.ரா. கல்லூரி (தன்னாட்சி) தீருச்சிராப்பள்ளி - 620 02....





''பெண்களின் ஒத்தைப்பனை" வாழ்வியல் சிக்கல்களை உணர்த்தும் தலைப்பில் என்னும் 20PTL24) அளித்துள்ள ர.ரவினா (பதிவு नळां. இவ்வாய்வேடு முதுகலைப் பயின்றதன் நிறைவாகவும், பாடத்திட்டத்தின் பகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் பயின்ற காலத்து என் மேற்பார்வையில் உருவானது என்றும், இதற்கு முன் வேறெந்தத் தேர்வின் பொருட்டும் இவ்வாய்வேடு அளிக்கப் பெறவில்லை என்றும் சான்றளிக்கிறேன்.

முனைவர் க்/ி வாசுதேவன்

துறைத்தலைவர் ஒப்பம் தமிழாய்வுக்குறைக் கணைர் தந்தை வமியார் அரசு கலை **மற்று**ம் அறிவீயல் கல்லூரி (நன்னமட்கீ)

**Egish**minsint - 620 023

இடம் : திருச்சிராப்பள்ளி

முனைவர்.இரா.குணசேகரன்

நெறியாளர் ஒப்பம் முனைவர், இரா.குணசேகரன் உதவிப்பேராசிரியர் தமிழாய்வுத்**துறை** பெரியார் ச.வெ.ரா. கல்லூரி (தன் தீருச்சிராப்பள்ளி - 620 023.

Dt. 30.05. 2022

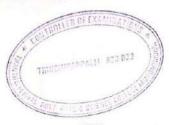
முனைவர்.பொ.இ.ரமேஷ் உதவிப் பேராசிரியர் தமிழாய்வுத்துறை திருச்சிராப்பள்ளி - 620023

சு.தமிழ்ச்செல்வியின் கீதாரி நாவல் ஒர் ஆய்வு என்னும் தலைப்பில் மாணவி ரா.ரஞ்சனா (பதிவு எண்: 20PTL23) செய்துள்ள இந்த ஆய்வேடு பெரியார் ஈ.வெ.ரா கல்லூரி தமிழ்த்துறையில் முதுகலை (2020-2022) பட்டத்திற்காக அவர் தம் சொந்த முயற்சியில் எனது மேற்பார்வையின் கீழ் வேறெந்தப் பட்டத்திற்கும் இத்திட்டக் மேற்கொள்ளப்பட்டது என்றும், கட்டுரைத் தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

துறைத்தலைவர் கையொப்பம் தமிழாய்கும் நுன்ற ந் தனைவர்

தந்தை வரியம் அரசு தவை நீத்தும் அர்கியம் கக்கூரி (கங்காட்சி) தீஷ் நோம்பங்கி 620 023 நெறியாளார் கையொப்ப்ம்

முனைவர் பொ. இரமேஷ் எம்.ஏ..எம்.ஏ.(தெழியம்)...எம்.விக். விக்க்.க. உதவிப் பேராசிரியர் கே ஆய்வு நெடுவானர் தமிழாய்வுற்றுறை பெரியார் கடுவ. நா. கன்னூர் (தன்னாட்சி) நிருச்சிதாப்பன்னி - 620 023.



முனைவர். பொ. இரமேஷ்

உதவிப்பேராசிரியர்-தமிழாய்வுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி-620023

"நா. பார்த்தசாரதியின் துளசி மாடம் புதினத்தில் சமுதாய சிந்*தனை*கள்" 20PTL22) என்னும் தலைப்பில் திருமதி. வி.பிரித்தி (பதிவு नळंत्र. அளித்துள்ள இத்திட்டக் கட்டுரை, முதுகலை பயின்றதின் நிறைவாகவும், பாடத்திட்டத்தின் ஒரு பகுதியாகவும், அவர் திருச்சிராப்பள்ளி தந்தை பேரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழிலக்கியம் மேற்பார்வையில் உருவானது என்றும் பயின்ற காலத்து எனது வேறுந்த தோவின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை என்றும் சான்றிளிக்கிறேன்.

துறைத்தலைவர் ஒப்பம் தமிழாய்வுத்துறைத் தவைவர் தந்தை பெரியார் அரசு கலை மற்றும் அற்கியல் கல்லூர் (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023

நெறியாளர் ஒப்பம் / வ ஊன் பொ. இரமேஷ் ஸ்.ந.,ஸ்.ர.(த்தழியற்)..எம்ஃமீக்..மீக்.டி.. தவிப் பேராகீள்ளர் உருய்வு நெறியாளர் தமிழாய்பத்துறை பெரியார் ஈ.பெ.ரா. எற்றுக் (தன்னாட்கி) இருக்கோப்பள்ளி - 620 023.

முனைவர். தா.பிரியா

உதவிப்பேராசிரியர்-தமிழாய்வுத்துறை தந்தை பெரியார் அரசுக் கலை மற்றும் அறிவியல் கல்லூரி

திருச்சிராப்பள்ளி-620023

(தன்னாட்சி)

"தண்ணீரும் கண்ணீரும்" சிறுகதைத் தொகுப்பு முன்வைக்கும் ஈழமக்களின் வாழ்வியல் நிலை என்னும் தலைப்பில் இ.பூங்கோதை(பதிவு எண். 20PTL21) அளித்துள்ள இத்திட்டக் கட்டுரை, முதுகலை பயின்றதின் நிறைவாகவும், பாடத்திட்டத்தின் ஒரு பகுதியாகவும், அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழிலக்கியம் வேறெந்த பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும் தரப்படவில்லை என்றும் பொருட்டும் இத்திட்டக்கட்டுரை தோவின் சான்றிளிக்கிறேன்.

முனைவர்.கா.வாசுதேவன்

துறைத்தலைவர் ஒப்பம்

தமிழுவிலுக்கும் றக் களைவர் தந்தை வரியர் ஊர் கலை Home was an I sais not to hame A) 250 050 Janionial State

( los 31.00 2012.

முனைவர்.நா.பிரியா

நெறியாளர் ஒப்பம்

முனைவர் நா. பிரியா, எம்.ஏ., எம்.ஃபில்., பிஎச்.டி. உதவிப்பேராசிரியர், தமிழாய்வுத்துறை, பெரியார் ஈ.வெ.நா. கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023

### ஆய்வு நெறியாளர் சான்றிதழ்

முனைவர் நா.பிரியா உதவிப்பேராசிரியர், தமிழாய்வுத்துறை, தந்தை பெரியார் அரசு சபை(ம) அறிவியல் கல்லூரி திருச்சிராப்பள்ளி - 620 023.



**"குறள் நூல்களில் சுட்டும் சமுதாயம்"** என்னும் தலைப்பில் மாணவி **நா.பிரியா (பதிவு எண்: 20PTL20)** செய்துள்ள இந்த ஆய்வேடு தந்தை பெரியார் அரசு சபை (ம) அறிவியல் கல்லூரி தமிழ்த்துறையில் முதுகலைப் 2020 – 2022 பட்டத்திற்காக அவர் தம் சொந்த முயற்சியில் எனது மேற்பார்வையின்கீழ் மேற்கொள்ளப்பட்டது என்றும், வேறெந்த தேர்வின் பொருட்டும் இத்திட்டக் கட்டுரைத் தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

முனைவர் கா.வாசுதேவன்

துறைத்தலைவர்

மற்றும் அறிக்கர் கூர்கும் (குள்ளாக்க) 200 Faminish at , 520 023

Not 3105.2022 முனைவர் நா.பிரியா

**தெறியாளர்**நா. பிரியா, எம்.ஏ.. எம்../பில்., பிஎச்.டி., உதலிப்போள்பா. தம், நாய்வுத்துறை, பெரியார் எ.்.வ. நா. கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி – 620 023

நாள்: 31/5/2022

இடம்: திருச்சிராப்பள்ளி

# Department of Botany Thanthai Periyar Government Arts and Science College (Autonomous) Tiruchirappalli- 620 023

# VIVA - VOCE EXAMINATION

The M.Sc (BOTANY) project work entitled "Prevalence of major diseases in *Millettia pinnata* (L.) Panigrahi. observed in Tiruchirappalli District" submitted by Ms. P. DEEBA (Reg. No. 20PBO10) has been subjected to VIVA VOCE examination on <u>02-06-2022</u>. The candidate presented the core ideas defending the queries raised.

L. Qc 200 2022 Internal Examiner

External Examiner

Dr. A. SHAJAHAN, M.Sc., M.Phil., Ph.D.
Deon of Research and Consultancy
Coordinate of CR1 Ser Guerge Screen & Associate Polessor of Sideny,
Jena Moranes College (Automotious), Tructureposity 600,000

திருச்சி - 23.

நாள்: 31.05. 2022

முனைவர் இரா. மேயரிஸ் ஜாய், எம்.ஏ., பிஎச்.டி. உதவிப்பேராசிரியர், தமிழ்த்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (த), திருச்சிராப்பள்ளி - 620 023.

"சூழல் பின்புல வெவீப்பாட்டின்வழி தீருநானைப்போவாரின் **பக்தீத் திறன்**" என்னும் தலைப்பில் செல்வி **ச.மாலதி** (ப**திவு எ**ண்: 20MPTL19) அளித்துள்ள இத் திட்டக்கட்டுரை, தமிழ் முதுகலைத் பாடத்திட்டத்தின் ஒரு பகுதியாக, அவர் திருச்சிராப்பள்ளி, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் பயின்ற காலத்து என் மேற்பார்வையில் உருவானது என்றும் வேறெந்தத் இத்திட்டக்கட்டுரை பொருட்டும் வழங்கப்படவில்லை என்றும் சான்றளிக்கிறேன்.

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ஆய்வு நெறியாளர்

முகை வர் திரா.மோரிஸ்ஞாய் எம்.ஏ., பிஎச்.ம உதவிப் பேராசிரியர் த**மிழாய்**வுத்துறை பெரியார் ஈ.வெ. நா. கல்லூ? தீருக்கிராப்பள்ளி - 620 023

திருச்சி - 23.

நாள்: 31.05.2022

முனைவர் இரா. மேயரிஸ் ஜயய், எம்.ஏ., பிஎச்.டி.

உதவிப்பேராசிரியர், தமிழ்த்துறை,

தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (த),

திருச்சிராப்பள்ளி - 620 023.

"சூழல் பீன்புல வெனிப்பாட்டின்வழி கண்ணப்ப நாயனாரின் பக்தீத் தீறன்" என்னும் தலைப்பில் செல்வி மு.மகாலெட்சுமி (பதிவு எண்: 20PTL18) அளித்துள்ள இத் திட்டக்கட்டுரை, தமிழ் முதுகலைத் பாடத்திட்டத்தின் ஒரு பகுதியாக, அவர் திருச்சிராப்பள்ளி, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் பயின்ற காலத்தில் என் மேற்பார்வையில் உருவானது

என்றும் வேறெந்தத் தேர்வின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை

என்றும் சான்றளிக்கிறேன்.

துறைத் தலைவர்

தமிழாப்வுக்குறைக் என்னத்தி தந்தை வெள்ளம் அறசு கவ்வ மற்றும் அறிகியல் கல்னும் (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023 ஆய்வு நெறியாளர்

முகனமர் கிறா.மோரிஸ்னாய் எம்.ஏ.. பிஎச்.டி. உதவிப் பேராகீரியர் தமிழாய்வுத்துகற பெரியார் ஈ.வெ.றா.கல்லூரி தீருச்சிராப்பன்னி - 620 023



முனைவர் ரேணுகா

உதவிப்பேராசிரியர் - தமிழாய்வுத்துறை பெரியார் ஈ.வெ.ரா. கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி -- 620023



கவிஞர் வைரமுத்துவின் "கருவாச்சி காவியத்தில் சமுதாயச் சிந்தனைகள்" என்னும் தலைப்பில் செல்வி சி.மகாலட்சுமி (பதிவு எண் : 20PTL17) அளித்துள்ள இத்திட்டக் கட்டுரை, அவர் முதுகலைப் பயின்றதன் நிறைவாகவும் பாடத்திட்டத்தின் ஒரு பகுதியாவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் ஈ.வெ.ரா.கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும் வேறெந்த தேர்வின் பொருட்டும் இத்திட்டக் கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

துறைத்தலைவர் ஒப்பம்

Buig rustissans gasasi sibens, and har i with none (demonica) ingelies significant ingels And fariushed - 620 023

முனைவர். ச. பேணுகா உதவிப் பேராகிரியர். தமிழ்த்துறை பெரியார் ஈ.வெ.ரா. கல்லூரி (த) தீருச்சிராப்பள்ளி - 620 023

முனைவர்.ச.ரேணுகா, எம்.ஏ.,எம்.ஏ.,எம்..்.பில்.,எம்..்.பில்.,பிஎச்.டி., உதவிப் பேராசிரியர் - தமிழாய்வுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023.

"கி. ராஜநாராயணனின் கிடை நாவல்" -ஆய்வு என்னும் தலைப்பில் **மு.கீர்த்தனா** (பதிவு எண்: 20PTL16) அளித்துள்ள இத்திட்டக் கட்டுரை முதுகலை தமிழ் பயின்றதன் நிறைவாகவும், பாடத்திட்டத்தின் ஒரு பகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலை தமிழ் இலக்கியம் பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும், வேறெந்தத் தேர்வின் இத்திட்டக்கட்டுரைத் தரப்படவில்லை என்றும் சான்றுளிக்கிறேன்.

THRUCHRESPALM 525 623

நாள்: 31 - 05-2022

முனைவர்.கா.வாசுதேவன்

துறைத்தலைவர் ஒப்பம்

தமிழாம்வந்துறைத் தனைவர் தந்தை வரியார் அரசு கலக (hammisk) ingels sucklye dugget < photogramma - 620 023

முனைவர்.ச.ரேணுகா

நெறியாளர் ஒப்பம்

முனைவர். ச. ரேணுகா 50 LONG BERT &! OF BOOK

நாள் : 31.05. 2022 முனைவர் ப. பெண்ணரசி, உதவிப்பேராசிரியர், தமிழாய்வுத்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி(தன்னாட்சி) திருச்சிராப்பள்ளி - 620023.

"கா**னகன்** புதினத்தில் இயற்கை – மானுடப் போராட்டம்" என்னும் கீர்த்தனா (பதிவு எண். 20PTL15) தந்துள்ள தலைப்பில் செல்வி ஆ. பயின்றதன் நிறைவாகவும், இத்திட்டக் கட்டுரை, முதுகலைப் பகுதியாகவும் அவர் திருச்சிராப்பள்ளி, பாடத்திட்டத்தின் ஒரு பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும், பொருட்டும் இத்திட்டக்கட்டுரைத் தரப்படவில்ல<u>ை</u> வேறெந்த தேர்வின் என்றும் சான்றளிக்கிறேன்.

(முனைவர் கூட் வாசுதேவன்)

துறைத்தலைவர் ஒப்பம்

தம்முரும்வுக்குரைத் த<del>வைவர்</del> தந்தை வமியார் அரசு கவன மற்றும் அறிக்யல் கக்குமர் (கன்னாம்டி) தீருச்சியாள்ளி - 620 023 /

U. neignyod (முனைவர் ப. பெண்ணரசி)

நெறியாளர் ஒப்பம்

முனைவர். ப. பெண்ணரசி, எம்.ஏ., எம்.ஃபில்., பிஎச்.டி., உதவிப்பேராசிரியர். தமிழாய்வத்துறை. பெரியார் ஈ.வெ.ரா. கல்லூரி (தன்னாட்சி) திருச்சிராப்பன்ளி – 620 023

முனைவர் ப. பெண்ணரசி உதவிப்பேராசிரியர், தமிழாய்வுத்துறை, பெரியார் தந்தை அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023

"சுடுமணல் நாவலின் சமுதாயச் சிந்தனைகள்" என்னும் தலைப்பில் வெ. ஐஸ்வாயா (பதிவு எண். 20PTL14) அளித்துள்ள இத்திட்டக் கட்டுரை அவர் முதுகலைப் பயின்றதன் நிறைவாகவும் பாடத்திட்டதின் ஒரு பகுதியாகவும் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழிலக்கியம் பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும், தோவின் பொருட்டும் இத்திட்டக் கட்டுரைத் தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.



முனைவர் கா. வாசுதேவன் தமிழாய்வுத்துறைத் தனைக் தந்தை செரியார் அரசு கலை மற்றும் அழகியும் கல்லூர் (தன்னாட்சி) நிருப்சிறாய்கள்கள் - 620 023

நெறியாளர் 'ஒப்பம்

முனைவர் ப. பெண்ணரசி

முனைவர். ப. பெண்ணாசி, எம்.ஏ., எம்.ஃபில்., பிஎச்.டி., உதவிப்பேராசிரியர், தமிழாய்வுத்துறை, பெரியார் ஈ.வெ.ரா. கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023



நாள்: 31.5.இவி முனைவர் ப. கிருஷ்ணன், எம். ஏ, எம். ஏ, எம் ஃபில், பி. எச். டி. உதவிப் பேராசிரியர், தமிழாய்வுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி ( தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023.

கி. ரா. வின் சிறுகதைகளின் கரிசல் மக்களின் வாழ்வியல் – ஓர் ஆய்வு என்னும் தலைப்பில் ஆய்வாளர்பா. கங்கா ( பதிவு எண்: 20PTL13) அளித்துள்ள இத் திட்டக்கட்டுரை, முதுகலைத் தமிழ் பயின்றதன் நினைவாகவும் பாடத் திட்டத்தின் ஒரு பகுதியாக அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்தில் என் மேற்பார்வையில் உருவானது என்றும் வேறெந்தத் தேர்வின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

(முனைவர் கர். வாசுதேவன்)

துறைத்தலைவர் ஒப்பம்

தமிருளிவத்துவறத் தலைவி தர்வது வமியார் அரசு கலை மற்றும் அறிக்கும் கக்குரர் (நன்னா**ட்கி)** Ly i famininal - 620 023

(முனைவர் ப். கிருஷ்ணன்)

நெறியாளர் ஒப்பம்

Dr. P. KRISHNAN,
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TIRUCHIRAPPALLI - 620 023.

முனைவர்.ப.கிருஷ்ணன் எம்.ஏ.,எம்.ஏ.,பி.எச்.டி உதவிப் பேராசிரியர் தமிழாய்வுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி திருச்சிராப்பள்ளி-620 023.

**''செல்லாத பணம்**" நாவலில் சமூகச் சித்திரிப்பு என்னும் தலைப்பில் ஆ.தீபா (பதிவு எண்:20PTL12) அளித்துள்ள இத்திட்டக்கட்டுரை, முதுகலைத் தமிழ் பயின்றதன் நிறைவாகவும் பாடத் திட்டத்தின் ஒரு பகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அறிவியல் ம்றுற்வ அரசு கலை கல்லூரியில் இலக்கியம் முதுகலைத் தமிழ் பயின்ற காலத்து नळा மேற்பார்வையில் உருவானது என்றும் வேறெந்தத் தோவின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை என்னும் சான்றளிக்கிறேன்.

(முனைவர்.கர்.வாசுதேவன்)

துறைத் தலைவர் ஒப்பம்

தமிழாய்வுக்குகளுக் கலைவர் தந்தை வமியார் அரசு கலை **மற்று**ம் அறிகியம் கக்கூரி (கன்னாட்சி) தீருச்சிராப்பள்ளி - 620 023

(முனைஷ்ர் ப. ப.கிருஷ்ணன்)

நெறியாளர் ஒப்பம்

PAPPALL) 628 623

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TIRUCHIRAPPALLI - 620 023.



முனைவா்: அ. பிறைமதி உதவி பேராசிரியர் – தமிழாய்வுத்துறை HRUENDAPPALL CTO 873 தந்தை பெரியார் அரசு கலை அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி – 620 023

பெண் எழுத்தாளா் ஆா்.சூடாமணி என்னும் தலைப்பில் செல்வி கு. அருள்செல்வி (பதிவு எண்.20PTL11) அளித்துள்ள இத்திட்டக் கட்டுரை முதுகலைப் பயின்றதன் நிறைவாகவும் பாடத்திட்டத்தின் ஒரு பகுதியாகவும், அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் கல்லூரியில் முதுகலை தமிழ் இலக்கியம் பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும் வேறெந்த தேர்வின் பொருட்டும் இத்திட்டக் கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

முனைவர் காட்வாசுதேவன்

துறைத்தலைவர் ஒப்பம்

தமிழாய்வுக்குறைத் தலைவர் தந்தை பெரியார் அரசு கலை **ம**ற்றும் அறிவியல் கல்லூரி (தவ்வா**ட்சி)** திருச்சிராய்பள்ளி - 620 023

அ. பிறைமதி 27/5/2022 முனைவர் அ. பிறைமதி

நெறியாளர் ஒப்பம்

முவவள். இ. பின்றமத், எம்.ஏ.. எம்.ஃபில். பிஎச்.டி, உதலிப்போகிரியா் தமிழாயவுக்குறை, டெரியார் உயராயக், லம்யம், பெரியார் சு.வெ.ரா. கல்லூர் (தன்காட்சி) தீருச்சிறாப்பள்ளி - 620 023

முனைவர். அ. பிறைமதி

உதவிப்பேராசிரியர் – தமிழாய்வுத்துறை தந்தை பெரியார் அரசு மற்றும் கலை அறிவியல் கல்லூரி திருச்சிராப்பள்ளி — 620023



பட்டுகோட்டை பிரபாகர் சிறுகதைத் தொகுப்பில் வாழ்வியல் சிந்தனைகள் என்னும் தலைப்பில் செல்வி செ.அனுசியா (பதிவு எண் : 20PTL10) அளித்துள்ள இத்திட்டக் கட்டுரை, முதுகலைப் பயின்றதன் நிறைவாகவும், பாடத் திட்டத்தின் ஒரு பகுதியாகவும், அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அிறவியல் கல்லூரியில் முதுகலை தமிழ் இலக்கியம் பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும், வேறெந்த தேர்வின் பொருட்டும் இத்திட்டக் கட்டுரைத் தரப்படவில்லை என்றும் சான்றளின்கிறேன்.

முனைவர். கூ. வாசுதேவன்

துறைத்தலைவர் ஒப்பம் தமிழாய்வுத்துறைத் தலைவர் தந்தை பெரியார் அரசு கவை மற்றும் அறிவியல் கல்லூரி (தவ்வாடிரி) திருச்சிராப்பள்ளி - 620 023 அ. *பிறைம் த* 27/5/2022 முனைவர். ஆ. பிறைமதி

நெறியாளர் ஒப்பம்

முனைவர். இ...பி.இருப்பதி. எம்.ஏ. எம்.கம்ல. பி.எச்.டி. உதவிப்பேறாள்ளியா கும்முயவருக்கூற், பெள்பார் உருந்தை வக்கம் பெள்பார் கண்ண கண்ணி (அன்னாட்சி) தருச்சிராப்பள்ளி 620 023 Dr. M. MANORANJITHAM, M.Sc., M.Phil., Ph.D.

Assistant Professor

PG & Research Department of Botany

Thanthai Periyar Government Arts and Science College (A)

Tiruchirappalli - 23

#### CERTIFICATE

This is to certify that the dissertation entitled "ANTI FUNGAL ACTIVITY OF LEAF EXTRACTS OF AZADIRACHTA INDICA" submitted to Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli in partial fulfillment of requirements for the award of Degree MASTER OF SCIENCE IN BOTANY is a Bonafide work of V. ARULSAKTHI (Reg. No. 20PBO09) who carried out this work under my guidance in the Thanthai Periyar Government Arts and Science College (Autonomous), during the academic year (2020-2022). This dissertation has been prepared in his original work and it has not been submitted for any other Degree.

MTROLLER OF EXAMIN

Place: Tiruchirappalli

Date:

Signature of the Guide

UT. NI. WAN CAMPUL TRAIN, M.S.C. M. Phil., Ph.D. Assistant Professor PG and Research Department of Botany

Periyar E.V.R. College (Autonomous) Kajamalai Nagar Tiruchirappalli - 620 023

Head of the Department

ARET.

Examiner

Dro.A. SHAUAHAN, M.Sc., M.Phil., Ph.D. Dean of Research and Consultancy

Coordinator of DBT Star College Scheme & Associate Professor of Bolany, Jama Moralmed College (Autonomous), Truchirappell- 620 020.

முனைவர் கி.மைதிலி

rьпен: 30 · 5 · 22

இணைப்பேராசிரியர், தமிழாய்வுத்துறை,

தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி, திருச்சிராப்பள்ளி — 620023.

"கல்விச் சிந்தனைகள் - ஒர் ஆய்வு" என்னும் தலைப்பில் மாணவன் கோ. சண்முகம் (பதிவுஎண்: 20PTL09) அளித்துள்ள இத்திட்டக் கட்டுரை, முதுகலைப் பயின்றதன் நிறைவாகவும், பாடத் திட்டத்தின் ஒருபகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும், வேறெந்தத் தேர்வின் பொருட்டும் இத்திட்டக்கட்டுரைத் தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

துறைத்தலைவர் ஒப்பம்,

தம்ழாவ்வுக்குறைக் தணைவர் Commission begins on the design of the design of the contract த்ருச்சிராப்பன்னி - 620 023

முனைவர் கி.மைதிலி

நெறியாளர் ஒப்பம்

முனைவர் கீ. பைதிலி, எப்.ஏ. எம்.ஃபில், எம்.எட்.பிசச்டி. உதவிப் பேராசிரியர் தமிழாய்வுத்துறை பெரியார் ஈ.வெ.நா. கல்னூரி (தன்னாட்சி) ் திருச்சிராப்பள்ளி–23.

முனைவர் கி. மைதிலி., நாள்: 30-05-2022 எம்.ஏ., எம்ஃபில்., எம்.எட்., பி.எச்.டி., உதவிப்பேராசிரியர், தமிழாய்வுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி – 620 023.

இனியவை நாற்பது அமைப்பும் பொருளும் - ஓர் ஆய்வு எனும் தலைப்பில் ஆய்வாளர் சா. சத்தியன் (பதிவு எண்: 20PTL08) அளித்துள்ள இத்திட்டக்கட்டுரை, முதுகலைத் தமிழ் பயின்றதன் நிறைவாகவும் பாடத் திட்டத்தின் ஒரு பகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து என் மேற்பார்வையில் உருவானது என்றும் வேறெந்தத் தேர்வின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

(முனைவர் கர்.வாசுதேவன்)

துறைத்தலைவர் ஒப்பம் தமிழாய்குந்துவரி, நகைவி achain su funt min muco இறும் காரிவியிருக்காரி (கன்னமாகி) இருர்நோள்ளின் 620 023

(முனைவர் கி. மைதிலி)

நெறியாளர் ஒப்பம் முனைக் மைநீலி, ஸ்.ரு.ஸ்.மில் வக்கு, உதனிப் பேராசிரியர் தமிழாய்வுத்துறை பெரியார் ஈ.வெ.ரா. கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி–23.



முனைவர் க. காசிமாரியப்பன்

рпен: 31 05 2022

இணைப்பேராசிரியர், தமிழ்த்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி(த), திருச்சிராப்பள்ளி - 620 023

"**சஞ்சீவி பர்வதந்தின் சாரல் – ஓர் ஆப்வு**" என்னும் தலைப்பில் செல்வன் ச. சசிநாதன் (பதிவு எண்: 20PTL07) அளித்துள்ள இத்திட்டகட்டுரை முதுகலை பயின்றதன் நிறைவாகவும் பாடத்திட்டத்தின் ஒரு பகுதியாகும். திருச்சிராப்பள்ளி அவர் தந்தை பெரியார் கலை மற்றும் அறிவியல் கல்லூரியில் தமிழிலக்கியம் முதுகலைத் பயின்ற மேற்பார்வையில் உருவானது என்றும் வேறெந்தத் தேர்வின் பொருட்டும் இத்திட்டக் கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

ஆய்வு நெறியாளர்

முனைவர் க. காசிமாரியப்பன்

தமிழாய்வுத்துறைத் தலைவர்

க. காசி மாரியப்பள் பிளச்.டி., தமிழ் இணைப் பேராசிரியர், பெரியார் ஈ.வெ.ரா. கல்னூரி திருச்சிராப்பள்ளி - 620 023

(முனைவர் கா. வாசுதேவன்)

தமிழகப்அக்குமைக் கணைவர் stars aufuri mas sara வற்றும் அம்கம் கல்துர் (கல்லாம்) \_ க்ருர் (நாய்யல்வி - 620 023 ∕



முணைவர் வ. நாராயணநம்பி,எம்.ஏ,பி.எச்டி.,

BIT 630.05, 22.

இணைப்பேராசிரியர் – தமிழாய்வுத்துறை,

தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023.

தலைப்பில் "பன்(முக நோக்கில் **"**கழுதைப்பாதை" என்னும் இரா.ரெங்கராஜ் (பதிவு எண்: 20PTL06) அளித்துள்ள இத்திட்டக் கட்டுரை, முதுகலைப் பயின்றதன் நிறைவாகவும், பாடத்திட்டத்தின் ஒரு பகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் முதுகலைத் கல்லூரியில் த**மிழிலக்கியம்** பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும், வேறெந்த தேர்வின் பொருட்டும் இத்திட்டக் கட்டுரைத் தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

துறைத்தனல்வர் ஒப்பம்

தமிழுய்வுத்துறைத் தலைவர் தந்தை வார்யார் அரசு கலை ழ்த்தாகங்கர் நடித்த மக்கும் பெற்றும் < #33\*\*Hadumbell - 420 023

நெறியாளர் ஒப்பம் Dr V. Narayana Nambi Associate Professor PG. & Research Capt of Tam?! Thanthai Fergar Govt. Arts And Science College, (Autonomi Trichy-620 023.

நாள் : 🕽 ५ - ५ - 🎾

முனைவர் மு. அருணாசலம்., எம்.ஏ., எம்.. பில்., பிஎச்.டி., இணைப்பேராசிரியா், தமிழாய்வுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (த) திருச்சிராப்பள்ளி - 620 023.

"ஆண்டாள் பிரியதர்ஷினியின் தகனம் நாவல் ஓர் ஆய்வ்

என்னும் தலைப்பில் இரா. மணிகண்டன் (பதிவு எண் : 20PTL05) தந்துள்ள இத்திட்டக்கட்டுரை, முதுகலைத் தமிழ் பயின்றதன் நிறைவாகவும் பாடத் திட்டத்தின் ஒரு பகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து என் மேற்பார்வையில் உருவானது என்றும் வேறெந்தத் தேர்வின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

(முனைவர் கர். வாசுதேவன்)

துறைத் தலைவர் ஒப்பம் தமிழாயீவத்துறைத் தலைவர் தந்தை பெரியார் அரசு கவல இத்தும் அழிவியல் கல்லூர் (தவ்வாட்சி) நிருச்சிராப்பள்ளி - 620 023 (முனைவர் மு. அருணாசலம்)

> நெறியாளர் ஒப்பம் Dr. M. ARUNACHALAM, M.A., M. Phil., Ph.D., M. ARUNACHALAM, M.A., M.

வெ.சங்கரநாராயணன் M.A., M.phil.,ph.D

இணைப்பேராசிரியர் தமிழாய்வுத்துறை

தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் சுல்லூரி (தன்னாட்சி)

திருச்சிராபபள்ளி -620023

'செம்மொழித் தமிழ் நூல்கள் " என்னும் தலைப்பில் ஆய்வாளர் திரு ந.கிருஷ்ணமூர்த்தி

(பதிவு எண்: 20PTL04) ஆய்வுமேற்கொண்டு முதுகலைத் தமிழிலக்கியப் பட்டத்திற்காகத் திருச்சிராபபள்ள பாரதிதாசன் பல்கலைக்கழகத்திற்கு அளிக்கும் இத்திட்டக்கட்டடுரை அவர் தன் சொந்த முயற்சியில் எனது மேற்பார்வையின் கீழ் மேற்கொள்ளப்பெற்றது என்றும் வேறு எப்பட்டத்திற்கும் இத்திட்டக்கட்டடுரை வழங்கப்பெறவில்லை என்றும் சான்றளிக்கிறேன்.

துறைத்தலைவர் ஒப்பம்

(முனைவர் கர்.வாசுதேவன்)

துபிழாய்வுத்துறைக் தலைவர் தந்தை வமியார் அரசு கவல இரைக்க) கீழத்க க்கிரேக பிழுந்தி - <u>தீருச்சிறாப்பள்ளி - 620 023 /</u>

நெறியாளர் ஒப்பம்

(முனைவர்வெ.சங்கரநாராயண்ன்)

Dr. V. SANKARANARAYANAN

M.A.,T.P.T., M.Phil., Ph.D. ASSOCIATE PROFESSOR OF TAMIL THANTHAI PERIYAR GOVT, ARTS & SCIENCE COLLEGE (A)

TIRUCHIRAPPALLI - 620 023

முனைவர் ப.வெங்கடேசன்...

நாள்: 27/5/22

எம்.ஏ., எம்ஃபில்., எம்.எட்., பி.எச்.டி.,

இணைப்பேராசிரியர், தமிழாய்வுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023.

நாஞ்சில் ஆனந்தனின் 'கடலம்மை' சிறுகதைத்தொகுப்பு - ஓர் ஆய்வு என்னும் தலைப்பில் ஆய்வாளர் செ.கோகுல்ராஜ் (பதிவு எண்: 20PTL03) இத்திட்டக்கட்டுரை, முதுகலைத் தமிழ் பயின்றதன் அளித்துள்ள பகுதியாகவும் அவர் நிறைவாகவும் பாடத் திட்டத்தின் 95 திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து என் மேற்பார்வையில் உருவானது என்றும் வேறெத்தத் தேர்வின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

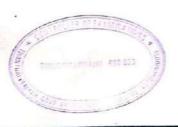
(முனைவர் கர்.வாசுதேவன்)

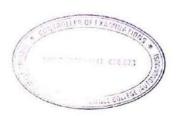
துறைத்தலைவர் ஒப்பம்

தமிழாய்வுக்குறைக் கணைர் தந்தை பெய்யர் அகைகை **மற்று**ய் அற்கபர் கல்லூர் (நன்னாகி) த்குர்சிராய்கள்க் - 620 023

(முனைவர்ம்.வெட்

தெறியானர் ஒப்பம்





முனைவர் கா.வாசுதேவன்.,

நாள் : 28.05.22.

இணைப்பேராசிரியர், தமிழாய்வுத்துறைத் தலைவர் தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி – 620 023.

குழுமாயி அம்மன் திருவிழா - ஓர் ஆய்வு என்னும் தலைப்பில் ஆய்வாளர் அ.அய்யாசாமி (பதிவு எண்: 20PTL02) அளித்துள்ள இத்திட்டக்கட்டுரை, முதுகலைத் தமிழ் பயின்றதன் நிறைவாகவும் பாடத் திட்டத்தின் ஒரு பகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து என் மேற்பார்வையில் உருவானது என்றும் வேறெந்தத் தேர்வின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

முனைவர் கா.வாசுதேவன்)

முனைவா கா.வாசுகதவன்)

துறைத்தலைவர் ஒப்பம் தமிழுய்வத்துறைத் தலைவர் தந்தை வயியார் சுரசு கலை இத்தும் அறிவியல் கல்லுரி (தவ்னாட்சி) திருச்சிராப்பள்ளி - 620 023 (முனைவர் கா.வாசுதேவன்)

நெறியாளர் ஒப்பம்

Or. K. VASUDEVAN Associate Professor & Head PG & Research Department of Tamil Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli - 620 023

BITET : 31 5/24

முனைவர் : ப.வெங்கடேசன்

இணைப்பேராசிரியர், தமிழ்த்துறை

தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (த)

திருச்சிராப்பள்ளி - 620023.

<u>விண்ணும் மண்ணும் சிறுகதைத்தொகுப்பு</u> - ஓர் ஆய்வு என்னும் தலைப்பில் சி.அழகர்ராஜா பதிவு नळंग: **20PTL01** அளித்துள்ள இத்திட்டக்கட்டுரை. முதுகலை பயின்றதன் நிறைவாகவும், பாடத்திட்டத்தின் ஒரு பகுதியாகவும் அவர் திருச்சிராப்பள்ளி தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரியில் முதுகலைத் தமிழ் இலக்கியம் பயின்ற காலத்து எனது மேற்பார்வையில் உருவானது என்றும் வேறெந்தத் தேர்வின் பொருட்டும் இத்திட்டக்கட்டுரை தரப்படவில்லை என்றும் சான்றளிக்கிறேன்.

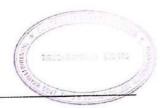
முனைவர் கா.வாசுதேவன்

தமிழ்த் துறைத்தலைவர்

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Dr. S.SASIKALA.M.SC., M.Phil., PGDCA., Ph.D. Assistant Professor P.G.& Research Department of Statistics Thiruchirappalli-620 023



#### CERTIFICATE

This is certify that this thesis work entitled "APPLICATION OF ARIMA MODEL FOR FORECASTING AGRICULTURAL PRODUCTION OF THE RICE IN TAMIL NADU" is submitted to THANTHAI PERIYAR E.V.R. COLLEGE (Autonomous), Thiruchirapalli-23 by T.YOGESHWARI (Reg.No.20PST30). This is a bonafide work carried out by her under my supervision and guidance during the academic year 2021-2022.

Signature of the HOD

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) €6-61-620 023.

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Dr.S.SASIKALA

Assistant Professor
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Thanthai Perryar Govt
Arts & Science College Control
(ICHIRAP)

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PG AND RESEARCH DEPARTMENT OF BOTANY, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620 023

Date:

#### CERTIFICATE

This is to certify that the project work entitle "EFFECT OF COPPER SULPHATE ON SEED GERMINATION SEEDLING GROWTH OF GREEN GRAM ( Vigna radiata (L) Wilczek.) submitted by J. SASI (20PBO08) was carried out under my guidance and supervision in partial fulfillment of Master of Science in Botany during the academic year 2021 - 2022 at P.G. and Research Department of Botany, Thanthai Periyar Government Arts and Science College (Autonmous), Tiruchirappalli.

Head of the Department

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SHAJAHAN, M.Sc., M.Phil., Ph.D. Dean of Research and Consultancy

TIRLICHIRAPE

Coordinator of DET Star Cullege (Justieme & Associate Professor of Bolany, Jamai Motamed College (Autonomous), Truchrappally 620,020.

Dr. M.BALASUBRAMANIAN, M.Sc., M.B.A.(Mktg.), M.B.A.(HRM), M.Phil, Ph.D. Assistant Professor P.G.& Research Department of Statistics Thanthai Periyar Government Arts and Science College (Autonomous), Thiruchirappalli-620 023

#### **CERTIFICATE**

This is certify that this thesis work entitled "A STUDY ON AWARENESS AND BURDEN OF DISEASE AMONG TEXTILE DYING INDUSTRIAL WORKERS IN KARUR CITY" is submitted to THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous), Trichy - 23 affiliated to BHARATHIDASAN UNIVESITY by TAMILTHENDRAL .P. (Reg.No.20PST29). This is a bonafide work carried out by her under my supervision and guidance during the academic year 2021-2022.

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023.

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Dr.M. BALASUBRAMANIAN, Assistant Professor P.G. & Research Dept. of Statistics Thanthai Periyar Govt. Arts & Science College (Autonomous), TIRUCHIRAPPALLI- 620 023.



Dr.S.SASIKALA, M.Sc., M, Phil., PGDCA, Ph.D.,

Assistant Professor

Department of Statistics

Thanthai Periyar Government Arts And Science College (Autonomous)

Tiruchirapalli-620 023

Date:28/05/2022

#### CERTIFICATE

This is to certify that the dissertation entitled "A STATISTICAL ANALYSIS OF ORPHANAGES AROUND IN TIRUCHIRAPPALLI DISTRICT" is a bonafide record of research work done by SOWMIYA N., Reg. No. 20PST28, submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN STATISTICS during the year 2021-2022 in the Department of Statistics, under my guidance and supervision. The dissertation has not previously formed the basis for the award to the candidate of any Degree, Diploma, Associateship, Fellowship or any other

Signature of the HOD

similar titles.

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 v23. Signature of the Supervisor

Dr.S.SASIKALA
Assistant Professor
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Dr. S.BHARATHIDASS ., M.Sc., M.Phil., PCDCA ., Ph.D.,

Assistant Professor

P.G and Research Department of Statistics.

Thanthai Periyar Government Arts And Science College (Autonomous)

Tiruchirapalli - 620 023

#### **CERTIFICATE**

This is to certify that this project work entitled "TIME SERIES ANALYSIS OF STOCK MARKET PRICES AMOUNG THE SELECTED COMPANIES" is submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to BHARATHIDASAN UNIVERSITY, Tiruchirappalli -23 by R.REVATHI (Reg.No.20PST27) in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by her under my supervision and guidance during the academic year 2021-2022.

Signature of the HOD

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023. Signature of the Guide

Dr. S.BHARATHIDASS Assistant Professor & Research Supervisor PG & Research Dept. of Statistics Perlyar E.V.R. College (A) Turuchicappalli - 020 023. Dr.H.(ALEXISSELVARAJ), M.Se., M.Phil., Ph.D., B.Ed., P.G.D.C.A.,

Head of the Department

P.G and Research Department of Statistics.

Thanthai Periyar Government Arts and Science College (Antonomous)

Tiruchirapalli-620 023

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Date:

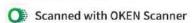
#### CERTIFICATE

This is to certify that this project work entitled "A STUDY OF IMPACTS OF LIKINGS FOR CHOCOLATES AMONG COLLEGE STUDENTS" is submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to BHARATHIDASAN UNIVERSITY, Tiruchirappalli by S. RENUGA DEVI (Reg.No.20PST26) in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by her, under my supervision and guidance during the academic year 2021-2022.

Signature of the HOD

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கலஞாரி (தன்னாமசி) திருச்சி-620 023, M \_ 5/199/20

Signature of the Guide
Dr. H. ALEXIS SELVARAJ
M.Sc.,M.Phil.,Ph.D.,B.L.,P.GDCA
Assistant Professor & Head
P.G. & Research Dept. of Star ands
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Dr. H. ALEXIS SELVARAJ, M.Sc., M. Phil., Ph.D., B.Ed., P.G.D.C.A., Head of the Department,

P.G and Research Department of Statistics,

Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirapalli-620 023.

Date: 31) ゴル

## CERTIFICATE

This is to certify that the project entitled "A STATISTICAL STUDY ON STATISFICATION LEVEL OF HOSTEL STUDENTS IN TIRUCHIRAPPALLI" is a bonafide record of research work done by P.PRIYANGA, (Reg.No:20PST25), submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirapalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN STATISTICS during the year 2021-2022 in the Department of Statistics, under my guidance and supervision. The project has not previously formed the basis for the award to the candidate of any Degree, Diploma, Associateship, Fellowship or any other similar titles.

Signature of the HOD துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023.

Signature of the Supervisor

Dr. H. ALEXIS SELVARAJ

M.Sc. M.Phil. Ph.D. B. Ed. PGDCA

Assistant Professor & Head

P.G. & Research Dept. of Statistics

Thanthai Periyar Govt.

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TIRUCHIRAPPALLI-620 023

## Dr.B.SENTHILKUMAR, M.Sc., M.Phil.Ph.D., PGDCA...

Assistant Professor P.G and Research Department of Statistics. Thanthai Periyar Government Arts And Science College (Autonomous) Tiruchirapalli-620 023

Date:

#### CERTIFICATE

This is to certify that the dissertation entitled "STATISTICAL ANALYSIS ON JOB PREFERENCE AMONG FINAL YEAR ARTS & SCIENCE COLLEGE STUDENTS IN TRICHY CITY" is a bonafide record of research work done by PRIYADHARSHINI B,20PST24., submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirapalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN STATISTICS during the year 2021-2022 in the Department of Statistics, under my guidance and supervision. The dissertation has not previously formed the basis for the award to the candidate of any Degree, Diploma, Associateship, Fellowship or any other

similar titles.

Signature of the HOB

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு ககை மற்றும் அறிவியல் கல்லூரி (தன்னாகி)

திருச்சி-620 023.

Signature of the Supervisor

Dr. S. BHARATHIDASS., M.Sc., M.Phil., PGDCA., Ph.D

Assistant Professor

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#### CERTIFICATE

This is to certify that this project work entitled A COMPARATIVE STUDY ON LIFE EXPECTANCY IN INDIA AND SRILANKA is submitted to THANTHAI PERIYAR GOVT ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to BHARATHIDASAN UNIVERSITY, Tiruchirappalli by M.OVIYA (Reg.No.20PST23) in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by him under my supervision and guidance during the academic year 2021-2022.

Signature of the HOD

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கண்ணி (தன்னாட்சி) திருச்சு-020 023. Signature of the Guide

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Date: 28/05/2022

#### CERTIFICATE

This is to certify that the project entitled "A STATISTICAL ANALYSIS OF EQUIPMENT AND PERSONNEL LOSSES ASSOCIATED WITH RUSSIA INVASION OF UKRAINE IN 2022" is a bonafide record of research work done by KEERTHIGA.B., Reg.No.20PST20, submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN STATISTICS during the year 2021-2022 in the Department of Statistics, under my guidance and supervision.

Signature of the HOD

Signature of the Supervisor

**து**றைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023.

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This is certify that this thesis work entitled "A STATISTICAL STUDY ON BEST TEXTILE SHOPS IN TRICHY CITY" is submitted to THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous), Tiruchirapalli – 23 affiliated to BHARATHIDASAN UNIVERSITY, Tiruchirapalli – 23 by ANUSUYA.A (Reg.No.20PST16). This is a bonafide work carried out by her under my supervision and guidance during the academic year 2021-2022.

Signature of the HOD

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#### CERTIFICATE

This is to certify that this project work entitled "A STATISTICAL STUDY ON PHYCHOLOGICAL IMPACT OF COVID 19 IN THIRUKKALAPPUR" is submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to BHARATHIDASAN UNIVERSITY, Tiruchirappalli by P.DEEPA (Reg. No. 20PST18) in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by her under my supervision and guidance during the academic year 2021-2022.

Signature of the HOD

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023.

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#### CERTIFICATE

This is to certify that the project work entitled "SURVEY OF MEDICINAL PLANTS"IN SUBRAMANIYAPURAM,TIRUCHYPPALLI, submitted to the Department of Botany, THANTHAI PERIYAR GOVERNMENT ARTS SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI, in partial fulfilment of the recruitment for the award of MASTER OF SCIENCE for the academic year2020-2022is a Bonafide record of original work done by S.POOVARASANunder myguidance.

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Research Supervisor

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Dr. A. SHAJAHAN, M.S. M. Phil., Ph.D.

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#### CERTIFICATE

This is to certify that the project entitled "A STATISTICAL ANALYSIS OF AIRLINE PASSENGER FORECASTING USING ARIMA MODEL is a bonafide record of research work done by P.BHUVANESHWARI, Reg.No.20PST17 submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN STATISTICS during the year 2020-2022 in the Department of Statistics, under my guidance and supervision.

Signature of the HOD

Signature of the Supervisor

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023.

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## **CERTIFICATE**

This is certify that this thesis work entitled "A STUDY ON DIGITAL DEVICE ADDICTION AMONG ARTS AND SCIENCE COLLEGE STUDENTS IN TIRUCHIRAPPALLI CITY" is submitted to THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous), Tiruchirapalli - 23 affiliated to BHARATHIDASAN UNIVERSITY, Tiruchirapalli - 23 by ANUSUYA.A (Reg.No.20PST16). This is a bonafide work carried out by her under my supervision and guidance during the academic year 2021-2022.

Signature of the HOD

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This is to certify that project entitled "A STUDY OF HUMAN LEFT BRAIN VS RIGHT BRAIN AMONG COLLEGE STUDENTS AT TIRUCHIRAPALLI DISTRICT" is Submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (AUTONOMOUS), Which is affiliated to Bharathidasan University, Tiruchirapalli by AKSHAYA G.V (Reg No: 20PST15) in partial fulfilment of the award of the MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by her during the academic year 2021 - 2022.

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துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) இருச்சு-620 023.

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This is to certify that this project work entitled A STATISTICAL ANALYSIS ON IMPACT OF COVID-19 IN TRICHIRAPALLI DISTRICT is submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to BHARATHIDASAN UNIVERSITY, Trichirappalli by S.VELMURUGAN (Reg.No.20PST14) in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by him under my supervision and guidance during the academic year 2021-2022.

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This is to certify that this project work entitled "STATISTICAL ANALYSIS ON IMPACT ON VIDEO GAMES ON STUDENT IN TRICHY DISTRICT" is submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to BHARATHIDASAN UNIVERSITY, Tiruchirappalli by S.VARADHARAJ (Reg.No.20PST13) in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by him under my supervision and guidance during the academic year 2021-2022.

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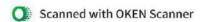
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## CERTIFICATE

This is to certify that this project work entitled "STATISTICAL ANALYSIS ON II STRESS LEVEL OF WOMEN WORKING IN PRIVATE SECTOR IN MANAMADURAI" is submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to BHARATHIDASAN UNIVERSITY, Tiruchirappalli by K.UTHAYA SANKAR (Reg.No.20PST12) in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by him under my supervision and guidance during the academic year 2021-2022.

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மனைவர். சு. புவனேஸ்வரி
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புள்ளியியல் துணை
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This is to certify that this project work entiled STUDY ON AWARENESS OF OVER
THE TOP (OTT) PLATFORM IN TRICHY is submitted to THANTHAI PERIYAR
GOVT ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to
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supervision and guidance during the academic year 2021-2022.

Signature of the HOD

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Date:28/05/2022

#### CERTIFICATE

This is to certify that the dissertation entitled "A STUDY ON FACTORS AFFECTING LAPTOP PRICES IN FLIPKART" is a bonafide record of research work done by SELVARAJ C., Reg.No.20PST10, submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirappalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN STATISTICS during the year 2021-2022 in the Department of Statistics, under my guidance and supervision. The dissertation has not previously formed the basis for the award to the candidate of any Degree, Diploma, Associateship, Fellowship or any other

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Signature of the HOD

துறைத்தலைவர் புள்ளியியல் துறை நந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி)

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This is to certify that this project work entitled "A STATISTICAL STUDY ON HEART DISEASE ANALYSIS" is submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to BHARATHIDASAN UNIVERSITY, Tiruchirappalli by T.RAMKUMAR (Reg.No.20PST09) in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by him, under my supervision and guidance during the academic year 2021-2022.

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This is to certify that this project work entitled STATISTICAL ANALYSIS

OF SHEEP BREEDS IN TAMILNADU is submitted to THANTHAI PERIYAR GOVT

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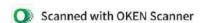
(Reg.No.20PST08) in partial fulfillment of the requirements for the award of the Degree of

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under my supervision and guidance during the academic year 2021-2022.

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் உதவிப்பேராசிரியர்
புள்ளியியல் துறை
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Research supervisor

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This is to certify that the project work entitled "PHYTOCHEMICAL. ANALYSIS OF ETHANOLIC EXTRACT OF KERNEL OF ZEA MAYS L. THROUGH GC-MS" submitted to the Department of Botany, THANTHAI PERIYAR GOVERNMENT ARTS (AUTONOMOUS) SCIENCE COLLEGE TIRUCHIRAPPALLI, in partial fulfilment of the recruitment for the award of MASTER OF SCIENCE for the academic year2020-2022is a Bonafide record of original work done by P. MOGESH KUMAR under my guidance.

Ruby Ruissilh Research Supervisor

Dr.F.SHANTHA MARGARET

M.Sc., M.Phil., Ph.D.;

Head & Assiciate Professor

PG & Research Department of Rolany
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Druchicoppalico20 0.23, Bumbada, India.

The Viva Voce Examination held on.....

Signature of the External Examiner

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Thanthai Periyar Government Arts And Science College (Autonomous),

Tiruchirapalli-620 023.

Date:

## CERTIFICATE

This is to certify that the dissertation entitled "STATISTICAL ANALYSIS ON IMPACT OF TAMIL TV SERIALS ON RURAL WOMENS IN TRICHY DISTRICT" is a bonafide record of research work done by M.MERGIN BLESSED, (Reg.No:20PST07), submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirapalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN STATISTICS during the year 2021-2022 in the Department of Statistics, under my guidance and supervision. The dissertation has not previously formed the basis for the award to the candidate of any Degree, Diploma, Associateship, Fellowship or any other similar titles.

Signature of the HOD

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023.

Signature of the Supervisor

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## **CERTIFICATE**

This is certify that this thesis work entitled STATISTICAL ANALYSIS ON THE MENTAL AND PHYSICAL HEALTH OF TRANSGENDERS IN TIRUCHIRAPPALLI is submitted to THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous), Thiruchirapalli-23 by S. JOSEPH FRANCIS (Reg.No.20PST06). This is a Bonafide work carried out by hem under my supervision and guidance during the academic year 2021-2022.

Signature of the HOD

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023 Signature of the Guide

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TIRUCHIRAPPALLI- 620 023.

## CERTIFICATE

This is to certify that project entitled "INDIAN SUPER LEAGUE PLAYERS POSITION PREDICTION USING MACHINE LEARNING" is submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (AUTONOMOUS), which is affiliated to Bharathidasan University, Tiruchirappalli by JISMON GEORGE (Reg.No.:20PST05) in partial fulfillment of the requirements for the award of the MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by year during the academic year 2021-2022.



The Tollow

Name of the H.O.D

Dr. H. ALEXIS SELVARAJ Asst. Professor and Head

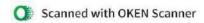
P.G & Research Department of Statistics

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023. Streson Jilb/22 Name of the Guide

Dr. S. BHUVANESWARI Assistant Professor

P.G Research & Department of statistics

முனைவர். சு. புவனேஸ்வரி உதவிப்பேராசிரியர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி ( தன்னாடசி ) தீருச்சிராப்பன்ளி-620 02



Dr. A. KACHI MOHIDEEN, M.Sc., Ph. D.,

Assistant Professor,

P.G and Research Department of Statistics,

Thanthai Periyar Government Arts And Science College (Autonomous),

Tiruchirapalli-620 023.

Date:

#### CERTIFICATE

This is to certify that the dissertation entitled "A STATISTICAL STUDY ON INTERNET BROWSING HABITS AMONG COLLEGE STUDENT IN KARUR CITY" is a bonafide record of research work done by E.DHINESH KUMAR, (Reg.No:20PST03), submitted to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirapalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN STATISTICS during the year 2021-2022 in the Department of Statistics, under my guidance and supervision. The dissertation has not previously formed the basis for the award to the candidate of any Degree, Diploma, Associateship, Fellowship or any other similar titles.

Thomaston Signature of the Supervisor

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சி-620 023.

## Dr.A.KACHI MOHIDEEN, M.Sc., Ph. D.,

Assistant Professor P.G and Research Department of Statistics. Thanthai Periyar Government Arts And Science College (Autonomous) Tiruchirapalli-620 023

Date:

## CERTIFICATE

This is to certify that the dissertation entitled "STATISTICAL ANALYSIS ON IMPACT OF PROFICIENCY ON ACADEMIC PERFORMANCE OF ARTS & SCIENCE STUDENTS IN TRICHY CITY" is a bonafide record of research work done by DEVENDIRAN B, 20PST02 submitted to Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirapalli, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN STATISTICS during the year 2021-2022 in the Department of Statistics, under my guidance and supervision. The dissertation has not previously formed the basis for the award to the candidate of any Degree, Diploma, Associateship, Fellowship or any other similar titles.

Signature of the HOD

துறைத்தலைவர் புள்ளியியல் துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) தித்சி-620 023.

Signature of the Supervisor

Dr. A.KACHI MOHIDEEN., M.Sc., Ph.D., Assistant Professor

P.G and Research Department of Statistics.

Thanthai Periyar Government Arts And Science College (Autonomous)

Tiruchirapalli-620 023

#### CERTIFICATE

This is to certify that this project work entitled "STATISTICAL ANALYSIS OF MENSTRUAL HYGIENIC PRACTICES AMONG THE ADOLESCENT GIRLS IN THIRUCHIRAPPALLI DISTRICT" is submitted to THANTHAI PERIYAR GOVT. ARTS AND SCIENCE COLLEGE (Autonomous), which is affiliated to BHARATHIDASAN UNIVERSITY, Thiruchirappalli by C.BHOOPATHY (Reg.No.20PST01) in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN STATISTICS. This is a bonafide work carried out by him under my supervision and guidance during the academic year 2021-2022.

Signature of the HOD

Signature of the Guide

துறைத்தனலவர் புள்ளிசியல் துறை தந்தை பேரி சுகலை மற்றும் அறிவியம் (தன்னாட்சி) Dr. P. SIVAKUMAR, M.Sc., M. Phil., Ph.D., Associate Professor, PG and Research Department of Physics, Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli- 620 023



THE UCHEAPPART 620 023

Date: 30.05. 22

## CERTIFICATE

This is to certify that this project work entitled 'HYDROTHERMAL SYNTHESIS OF SnS (TIN SULFIDE) NANOCOMPOSITES FOR HIGH ENERGY SYMMETRIC SUPERCAPACITORS' submitted to the Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli, in Partial fulfillment of the MASTER OF SCIENCE IN PHYSICS is a bonafide record of work carried out by M. VIJI [Reg.No: 20PPH25] in the Department of Physics, Thanthai Periyar Government Arts & Science College (Autonomous), under my supervision during the academic 2020-2022.

Signature of the Research Advisor Dr. P. SIVAKUMAR

ASSOCIATE PROFESSOR OF PHYSICS THANTHAI PERIYAR GOVT. ARTS & SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 23



Dr.S.DHEIVAMALAR. M. Sc., B.Ed., M. Phil., PGDCA., Ph. D. Assistant Professor, PG & Research Department of Physics, ThanthaiPeriyar Government Art And Science College (Autonomous and Re-accredited"A") Tiruchirappalli-620 023

## **CERTIFICATE**

This is to certify that the project work entitled QUANTUM CALCULATION ON 7-(D-α-AMINO-α-PHENYLACETAMIDO)-3-ENERGY METHYL-3-CEPHEM-4-CARBOXYLIC ACID MONOHYDRATE COMPOUND USING DENSITY FUNCTIONAL THEORY STUDY" submitted to Thanthai Periyar Government Arts And Science College (Autonomous) affiliated to Bharathidasan university in partial fulfilment for the award of degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by S.VELUNACHIYAR (Reg. No. 20PPH24), under my supervision and guidance.

Head of the Department

Signature, of the guide

(S.DHEIVA MALAR)

HEAD P G & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

TIR -CHIRAPPALLI - 620 023.

Submitted for the Viva-Voice examination held on... al...ab.. 22

Examiner

Dr. A. AUSTEIN M.Sc., M.Phil., Ph.D., Assistant Professor, PG and Research Department of Physics, Thanthai Periyar Government Arts & Science College (Autonomous and Re-Accredited "A"), Tiruchirappalli-620 023.

## CERTIFICATE

This to certify that the project work entitled "VIBRATIONAL SPECTROSCOPIC STUDIES AND NORMAL COORDINATE ANALYSIS OF 3,4-DIMETHOX BENZYL ALCOHOL" submitted to THANTHAI PERIYAR GOVERNMENT ARTS&SCIENCE COLLEGE. (Autonomous and Re Accredited). Affiliated to Bharathidasan University, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by P. SANTHA PRIYA (Reg. No: 20PPH23) under my supervision and guidance.

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Signature of the Guide

P G & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS) TIROCHIRAPPALLI - 620 023.

(A. AUSTEIN)

Submitted for the Viva-Voce examination held on ..

**Examiners** 

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Assistant Professor,
PG and Research Department of Physics,
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Tiruchirappalli-620 023.

## CERTIFICATE

This is to certify that the project work entitled "TITANIUM DIOXIDE NANOPARTICLE INTEGRATED CONCRETE: AN ASSESSMENT OF NANOPARTICLE RELEASE WHEN EXPOSED TO UV RADIATION AND WET WEATHER CONDITIONS" submitted to THANTHAI PERIYAR GOVERNMENT ARTS&SCIENCE COLLEGE, (Autonomous and Re Accredited). Affiliated to Bharathidasan University, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by B.PRIYADHARSHINI (Reg.No:20PPH22) under my

Head of the Department

supervision and guidance.

PG & RESEARCH DEPARTMENT OF PHYSICS
THANTHAI PERIYAR GOVERNMENT
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TIRE-CHIRAPPALLI - 620 023.

Signature of the Guide

ARTS & SCIENCE

(A.SAKTHIVELU)

## PG AND RESEARCH DEPARTMENT OF BOTANY, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620 023

Date: 310522

#### CERTIFICATE

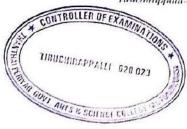
This is to certify that the project work entitle "EFFECT OF SEED GERMINATION SULPHATE ON COPPER SEEDLING GROWTH OF BLACK GRAM (Vigna mungo (L.) Hepper) submitted by K.KANNADASAN (20PBO05) was carried out under my guidance and supervision in partial fulfillment of Master of Science in Botany during the academic year 2021 - 2022 at P.G. and Research Department of Botany Thanthai Periyar Government Arts And Science College (Autonmous), Tiruchirappalli.-620023

Assistant Professor P.G. and Research Department of Botany Thanthai Ferryar Government

Arts & Science College (Autonomous) TIRUCHIRAPPALLI-620 023.

Head of the Department

Dr.F.SHANTHA MARGARET,
M.Sc., M.Phil., Ph.D.,
Head & Assaciate Professor
PG & Person is Department of Victory
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Dr. P. SIVAKUMAR, M.Sc., M. Phil., Ph.D., Associate Professor, PG and Research Department of Physics, Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli- 620 023



Date: 20-05

CERTIFICATE

TIRBEHRAPPALLI 528 023

This is to certify that this project work entitled 'HIGH PERFORMANCE SYMMETRIC SUPERCAPACITOR INVESTIGATION USING HYDROTHERMALLY SYNTHESIZED BIMETALLIC NANOCOMPOSITES' submitted to the Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli, in Partial fulfillment of the MASTER OF SCIENCE IN PHYSICS is a bonafide record of work carried out by T. KOHILA [Reg.No: 20PPH21] in the Department of Physics, Thanthai Periyar Government Arts & Science College (Autonomous), under my supervision during the academic 2020-2022.

Signature of the Research Advisor
Dr. P. SIVAKUMAR
ASSOCIATE PROFESSOR OF PHYSICS
THANTHAI PERIYAR GOVT. ARTS &
SCIENCE COLLEGE (AUTONOMOUS)
TIRUCHIRAPPALLI - 23

Dr. R.JOHN XAVIER, M.Sc., Ph.D.,

Assistant professor,

PG & Research Department of Physics,

Thanthai Periyar Government Arts And Science College

(Autonomous and Reaccredited "A"),

Tiruchirappalli-620 023.

## **CERTIFICATE**

This is to certify that the project work entitled "VIBRATIONAL ANALYSIS, NLO PROPERTIES OF 2,4,6-TRIMETHYL BENZALDEHYDE" submitted to Thanthai Periyar Government Arts And Science College (Autonomous) affiliated to Bharathidasan university in partial fulfilment for the award of degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by Mr. B. GOKILA (Reg. No. 20PPH20), under my supervision and guidance.

G & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT

ARTS AND SCIENCE COLDED ATTEMONTUS)
Head of the Departmentus)

Examiner

Dr. S.RAJALAKSHMI, M.Sc., M.Phil., Ph.D., P.G.D.C.A., Assistant Professor,
PG and Research Department of Physics,
Thanthai Periyar Government Arts & Science College
(Autonomous and Re-Accredited),
Tiruchirappalli-620 023.

#### CERTIFICATE

This is to certify that the project work entitled "PHOTOCATALYSIS USING TiO2 NANOPARTICLES CONTAINING SURFACE METAL SITES" submitted to THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE, (Autonomous and Re Accredited). Affiliated to Bharathidasan University, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by S.DHIVYA (Reg.No:20PPH19) under my supervision and guidance.

Head of the Department

PG & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS) TIRUSCHIRAPPALH - 620 023, Signature of the Guide

(S.RAJALAKSHMI)

**Examiners** 

1 M. The 02.06. 25

2 Mgh / 02 106/2022.

Dr. A. AUSTEIN M.Sc., M.Phil., Ph.D., Assistant Professor, PG and Research Department of Physics, Thanthai Periyar Government Arts & Science College (Autonomous and Re-Accredited), Tiruchirappalli-620 023.

#### CERTIFICATE

This is to certify that the project work entitled OF APPLICATIONS "CHARACTERIZATION AND PHOTOVOLTAIC CELL USING ZnSe FILM" submitted to GOVERNMENT **THANTHAI** PERIYAR COLLEGE, (Autonomous and Re ARTS&SCIENCE Accredited). Affiliated to Bharathidasan University, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a bonafide record of a project work done by J. ANUJA (Reg.No.20PPH18) under my TIRUCHIRAPPALLI 620 023 supervision and guidance.

Head of the Department

P G & RESEARCH DEPARTMENT OF PHYSICS

THANTHAI PERIYAR GOVERNMENT

ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

TIRE-CHIRAPPALLI - 620 023.

Signature of the Guide

(A. AUSTEIN)

Submitted for the Viva-Voce examination held on . 22. 26.: 22

T. ARTS & SCIENCE COLLEG

Examiners

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Dr. S. RAJESWARI. M. Sc., M. Phil., Ph. D,

Associate Professor of Physics,

PG and Research Department of Physics,

THANTHAI PERIYAR GOVERNMENT SCIENCE COLLEGE ARTS AND (AUTONOMOUS AND REACCREDITED),

Tiruchirappalli-620 023.

## **CERTIFICATE**

This is to certify that the project work entitled "NATURAL BOND ORBITAL ANALYSIS AND PARAMAGNETIC PROPERTY OF BENZENE AND BENZOIC ACID" submitted to THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE E.V.R COLLEGE, (Autonomous and ReAccredited). affiliated to Bharathidasan University, Thiruchirappalli-23 in partial fulfillment of the requirement for the award of the degree of "MASTER OF SCIENCE IN PHYSICS", is a bonafide record of a project work done by A.VIJAYAPRATHAP (Reg.No:20PPH17)under my supervisior and guidance.

Head of the Departmen

ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

Examiners APPALLI - 620 023.



Dr. S. DHEIVA MALAR, M. Sc., B.Ed., M.Phil., PGDCA., Ph. D.

Assistant Professor, PG & Research Department of Physics, Thanthai Periyar Government Art And Science College (Autonomous and Re-accredited"A") Tiruchirappalli-620 023

#### **CERTIFICATE**

This is to certify that the project work entitled "SPECTROSCOPIC STUDIES ON ACETAMINOPHEN (PARACETAMOL) COMPOUND USING DENSITY FUNCTIONAL THEORY STUDY" submitted to Thanthai Periyar Government Arts And Science College (Autonomous) affiliated to Bharathidasan university in partial fulfilment for the award of degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by V.SURYA (Reg. No. 20PPH16), under my supervision and guidance.

TIRUCHIRAPPATTI 620 023

HEAD

Signature of the guide

P.G.& RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

TIROCHIRAPPALLI - 620 023.

(S.DHEIVA MALAR)

Submitted for the Viva-Voice examination held on ... DA ... D. . 2022

Examiner

Dr.T. UMA DEVI,
Assitant Professor of Physics,
PG and Research Department of Physics,
Thanthai Periyar Government Arts & Science College
(Autonomous and Re-Accredited),
Tiruchirappalli-620 023.

### CERTIFICATE

This is to certify that the project work entitled "CRYSTAL GROWTH AND CHARACTERIZATION OF L-ASPARAGINE LITHIUM CHLORIDE" submitted to THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE, (Autonomous and Re Accredited). Affiliated to Bharathidasan University, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by A.SURENDAR (Reg.No:20PPH15) under my supervision and guidance.

Head of the Department

P G & RESEARCH DEPARTMENT OF PHYSICS
THANTHAI PERIYAR GOVERNMENT
ARTS AND SCIENCE COLLEGE (AUTONOMOLY)
TRE-CHIRAPPALLI - 620 973,

Signature of the Guide

(T.UMA DEVI)

Submitted for the Viva-Voce examination held on On the Viva-Voce examination held on

Examiners

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THOUGHT OF EXAMINATION OF THE PARTY OF THE P

Prof. G. TAMILSELVI, M. Sc., M. Phil., Associate Professor of Physics, PG and Research Department of Physics, Thanthai Periyar Government Arts & Science College (Autonomous and Re-Accredited), Tiruchirappalli-620023

#### CERTIFICATE

This is to certify that the project work entitled "CRYSTAL GROWTH AND CHARACTERISATION OF GLYCINE LITHIUM CHLORIDE" submitted to THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE, (Autonomous and Re Accredited). Affiliated to Bharathidasan University, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by S.SRINIVAS (Reg.No:20PPH14) under my supervision and guidance

TIRUCHIRAPPALLI 620 023

ARTS & SCIENCE

Head of the Department

Signature of the Guide

(G.TAMILSELVI)

P & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

HEAD

THUCHIRAPPALLI - 620 023.

Submitted for the Viva-Voce examination held on ... 2-6-22

**Examiners** 

02.06.22

J.SENTHIL KUMAR Ph.D., Assitant Professor of Physics, PG and Research Department of Physics, Thanthai Periyar Government Arts & Science College, (Autonomous and Re-Accredited), Tiruchirappalli-23.

#### CERTIFICATE

This is to certify that the project work entitled "THERMAL PROPERTIES OF SODIUM SULFANILATE DIHYDRATE SINGLE CRYSTAL FOR OPTICAL WINDOW APPLICATION" submitted to Thanthai Periyar Government Arts & Science College, (Autonomous and Re Accredited). Affiliated to Bharathidasan University, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by M.SATHIYAMOORTHY (Reg.No.20PPH13) under my supervision and guidance.

HEAD

PG & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

TIR-CHIRAPPALLI - 620 023. Submitted for the Viva-Voce examination held on . 22/.24/. 20.22

**Examiners** 



# THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous)

(Govt. owned & Nationally Re - Accredited by NAAC with 'A' grade)
Affiliated to Bharathidasan University

Race course Road, Khajamalai, Tiruchirappalli - 620 023, India.

Phone: 0431 - 2420079(Off.)

Fax: 0431 - 2332010(Off.)

Dr. T. BALAKRISHNAN M.Sc., M.Phil. B.Ed., Ph.D., Head & Associate Professor of Physics

#### **CERTIFICATE**

This is to certify that the project work entitled "CRYSTAL GROWTH, SPECTROSCOPY, THERMAL AND ETCHING STUDIES OF GLYCINE POTASSIUM TETRAFLUOROBORATE SINGLE CRYSTAL" submitted to THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous) affiliated to Bharathidasan university in partial fulfilment for the award of degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by Mr. J. SANTHOSH (Reg. No.

Head of the Department

HEAD I

P G & RESEARCH DEPARTMENT OF PHYSICS
THANTHAI PERIYAR GOVERNMENT
ARTS AND SCIENCE COLLEGE (AUTONOMOUS)
Examinateappalli - 620 023.

1. 62/6/21

20PPH12), under my-supervision and guidance.

Signature of the guide 3

Dr. T. BALAKRISHNAN

M.Sc.,Be.d.,M.Phil.,Ph.D.,
ASSOCIATE PROFESSOR AND HEAD
PG & RESEARCH DEPARTMENT OF PHYSICS
THANTHAI PERIYAR GOVERNMENT
ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

TIRUCHIRAPPALLI - 620 023.

2.

1/22 = 1/



Dr.K. SASIKUMAR, M.Sc., M.Phil., Ph.D.,

Assistant Professor

P.G & Research Department of Botany

Thanthai Periyar Govt. Arts and Science College (Autonomous)

Trichirappalli - 620 023.

Date: 31, 05, 2022

CERTIFICATE

This is to certify that the project work entitle "ETHNOBOTANICAL HILLS, MAILAM SURVEY OF MEDICINAL PLANTS IN TAMILNADU" submitted by M. GUNASEKARAN Reg.No. 20PBO04 was carried out under my guidance and supervision in partial fulfillment of Master of Science in Botany during the 2021 - 2022 at P.G. and Research Department of Botany, Thanthai Periyar Government Arts and Science College (Autonmous), Tiruchirappalli-620023.

Head of the Department

Dr.F.SHANTHA MARGARET.

Houd & Associate Professor
Pa & Research Department of Botany
Proutlant Proper Gaterianem
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Prof. Dr. S. RAJESWARI. M. Sc., M. Phil., Ph. D,

Associate Professor of Physics,

PG and Research Department of Physics,

Thanthai Periyar Government arts and science College (Autonomous and Re-Accredited),

Tiruchirappalli-620 023,

#### CERTIFICATE

This certify that the project work entitled "EFFECT OF ISOTOPE SUBSTITUENTS IN VIBRATION OF FORMIC ACID – DFT STUDY" submitted to THANTHAI PERIYAR ARTS AND SCIENCE COLLEGE TIRUCHIRAPPALLI-23, (Autonomous and Re-Accredited). Affiliated to Bharathidasan University, in partial fulfillment for the award of the degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by (Reg.No:20PPH11) under my supervision and guidance.

Head of the Department

Signature of the Guide

P G & RESEARCH DEPARTMENT OF PHYSICS
THANTHAI PERIYAR GOVERNMENT
ARTS AND SCIENCE COLLEGE (AUTONOMOUS)
THE CHIRAPPALL - 620 023,

(S. RAJESWARI)

Submitted for the Viva-Voice examination held on .. 12/06/2022.

Examiners

1. N The 08.06.22

2. S. Bajronrus

#### CERTIFICATE

This is to certify that the project work entitled "CRYSTAL GROWTH AND CHARACTERIZATION OF ADIPIC DIHYDRAZIDE WITH 5- NITRO SALICYLALDEHYDE" submitted to THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous) affiliated to Bharathidasan University in partial fulfillment for the award of degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by Mr. K. MUGESHKANNA (Reg. No. 20PPH10), under my supervision and guidance.

Head of the Department HEAD

P G & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT

ARTS AND SCIENCE COLLEGE (AUTOMOMOUS) TIR CHIRAPPALLI - 620 023.

Signature of the gulde

Dr.C.ARUNAGIRI, M.Sc., M.Phil., B.Ed., Ph.D.,

**Assistant Professor** 

PG and Research Department of Physics Thanthai Periyar Government Arts &: Science College ( Autonomous)

Tiruchirappalli-620 023, Tamil Nudu.

Examiner

TIRUCHIMAPPALLI 620 023

Dr.T. UMA DEVI, Assitant Professor of Physics, PG and Research Department of Physics, Thanthai Periyar Government Arts & Science College (Autonomous and Re-Accredited), Tiruchirappalli-620 023.

#### CERTIFICATE

This is to certify that the project work entitled "CRYSTAL GROWTH AND CHARACTERIZATION OF L-ALANINE LITHIUM CHLORIDE" submitted to THANTHAI PERIYAR GOVERNMENT ARTS&SCIENCE COLLEGE, (Autonomous and Re Accredited). Affiliated to Bharathidasan University, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by P.MOHAN (Reg.No:20PPH09) under my supervision and guidance.

Head of the Department

P G & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

TIR CHIRAPPALLI - 620 023.

Signature of the Guide

(T.UMA DEVI)

Submitted for the Viva-Voce examination held on .2.6.2

**Examiners** 

Dr. R.SHANAJ BEGUM. M.SC., M. Phil., PGDCA., Ph.D., Assistant Professor of Physics, PG and Research Department of Physics, Thanthal Perlyar Government Arts and Science College, Tiruchirappalli-620 023.

#### CERTIFICATE

This is to certify that the project work entitled "MOBILE PHONE DETETCTOR" submitted to Thanthai Perlyar Government Arts and Science College, affiliated to Bharathidasan University, in partial fulfillment for the award of the degree of MASTER OF SCIENCE IN PHYSICS is a bonafide record of a project work done by M.MOHAMED HUSSAIN (Reg.No:20PPH08) under my supervision and guidance.

Head of the Department 5.5

(R.SHANAJ BEGUM)

& G & RESEARCH DEPARTMENT OF PHYSICS THE A MALEY BOYAN . DVERHMENT ARTS IND SCIENCE COLITAR (AUTONOMOUS)

Submitted for the Viva-Voice examination held on......

Dr. A. SAKTHIVELU M.Sc., M.Phil., Ph.D., Assistant Professor, PG and Research Department of Physics, Thanthai Periyar Government Arts & Science College (Autonomous and Re-Accredited), Tiruchirappalli-620 023.

#### CERTIFICATE

This is to certify that the project work entitled "SYNTHESIS, OF **CHARACTERIZATION PROCESSING** AND NANOCRYSTALLINE TITANIUM DIOXIDE" submitted to GOVERNMENT PERIYAR THANTHAI COLLEGE, (Autonomous and Re ARTS&SCIENCE Accredited). Affiliated to Bharathidasan University, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by M.MATHIVANAN (Reg. No: 20PPH07) under my supervision and guidance. TRUCHIRAPPALLI 828 823

Head of the Department

P G & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIVAR GOVERNMENT ARTS AND SCIENCE COLLEGE LAUTONOMOUS

TIA GOHURAPPALLE - 620 023.

Signature of the Guide

(A.SAKTHIVELU)

Submitted for the Viva-Voce examination held on .. 2.18.22

Examiners

Dr. R. JOHN XAVIER, M.Sc., Ph.D.,

Assistant Professor PG & Research Department of Physics Thanthai Periyar Government Arts And Science College (Autonomous) Tiruchirappalli-620 023

#### CERTIFICATE

This is to certify that the project work entitled 'ANALYSIS OF MOLECULAR STRUCTURE, VIBRATIONAL SPECTRA AND NLOSTUDIES OF PENTA CHLORO NITROBENZENE' submitted to Thanthai Periyar Government Arts And Science College (Autonomous) affiliated to Bharathidasan university in partial fulfilment for the award of degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by Mr.S. MAHENDIRAN (Reg. No. 20PPH06), under my supervision and guidance.

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THANTHAI PERIYAR GOVERNMENT

ARTS AND SCIENCE COLLEGE (AUTONOMOUS)
Examiner (RAPPALLI - 620 023.

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Signature of the guide 3

TIRUCHIRAPPALLI 620 023

ARTS & SCIENCE COLL

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### CERTIFICATE

This is to certify that the project work entitled 'GROWTH AND CHARACTERISATION OF ISOPHTHALIC DIHYDRAZIDE EITH TRICHOLOROACETIC ACID " submitted to Thanthai Periyar Government Arts And Science College (Autonomous) affiliated to Bharathidasan university in partial fulfillment for the award of degree of MANTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by M.KESAVAN (Reg. No. 20PPH05), under my supervision and guidance.

Hoad of the Department

P G & RESEARCH DEPARTMENT OF PHYSICS
THANTHAI PERIYAR GOVERNMENT
ARTS AND SCIENCE COLLEGE (AUTONOMOUS)
TIRUCHIRAPPALLI - 620 023.

DS. G. Assistant Professor

Assistant Professor
PG and Research Department of Physics
Thanthai Periyar Government Arts and
Science College (Autonomous)
Tiruchirappalli-620 023, Tamil Nadu.

Examiner

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# THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous)

(Govt. owned & Nationally Re - Accredited by NAAC with 'A' grade)
Affiliated to Bharathidasan University
Race course Road, Khajamalai, Tiruchirappalli - 620 023, India.

Phone: 0431 - 2420079(Off.) Fax: 0431 - 2332010(Off.)

Dr. T. BALAKRISHNAN M.Sc., M.Phil. B.Ed., Ph.D., Head & Associate Professor of Physics

# **CERTIFICATE**

This is to certify that the project work entitled "PREPARATION, STRUCTURAL, OPTICAL AND PHOTOLUMINESCECNS PROPERTIES OF Cus thin film" submitted to thanthai periyar GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous) affiliated to Bharathidasan university in partial fulfilment for the award of degree of MASTER OF SCIENCE IN PHYSICS, is a bonafide record of a project work done by Mr. M. KAVIYARASAN (Reg. No. 20PPH04), under my supervision and guidance.

Head of the Department

PG & RESEARCH DEPARTMENT OF PHYSICS
THANTHAI PERIYAR GOVERNMENT
ARTS AND SCIENCE COLLEGE (AUTONOMOUS)
TIRE-CHIRAPPALLI - 620 023.

Examiner

Fignature of the guide Dr. T. BALAKRISHNAN

M.Sc.,BE.d.,M.Phil.,Ph.D.,
ASSOCIATE PROFESSOR AND HEAD
P G & RESEARCH DEPARTMENT OF PHYSICS
THANTHAI PERIYAR GOVERNMENT

ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

TIRUCHIRAPPALLI - 620 023.

1. Cul 32/6/20

TIRUCHIRAPPALLI 620 023

Prof. S. Lalitha. M. Sc., M. Phil., Ph. D.

Associate Professor of Physics.

PG and Research Department of Physics,

Thanthai Periyar Government Arts and Science College (Antonomous and Reaccredited), Tiruchirappalli-620 023.

### CERTIFICATE

This is to certify that the project work entitled "VIBRATIONAL SPECTROSCOPIC STUDY OF DIMETHYLISOPHTHALATEsubmitted to THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE, (Autonomous and Re accredited). Affiliated to Bharathidasan University, Thiruchirappalli-23 in partial fulfillment for the requirement for the award of the degree of MASIER OF SCIENCE IN PHYSICS, is a bonafide record of the orginal work dome by T.DHANABAL (Reg.No:20PPH03) and under my supervision and guidance.

Head of the Department

P G & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS) TIRE CHIRAPPALLI - 620 023.

Signature of the Guide

S. Laletta

(S. LALITHA)

submitted for the Viva-Voice examination held on ... 02 1

2. S. Rajvonravi 02/06/2022.

#### CERTIFICATE

This is to certify that the project work entitled 'OZONE DEPLETION AND CRISIS ANALYSIS IN GLOBAL LEVEL' submitted to Thanthai Periyar Government Arts And Science College (Autonomous) affiliated to Bharathidasan University in partial fulfilment for the award of degree of MASTER OF SCIECE I PHYSICS, is a bonafide record of a project work done by Mr BALASUBRAMANIAN K (Reg. No. 20PPH02), under my supervision and guidance.

Head of the Department P G & RESEARCH DEPARTMENT OF PHYSICS

THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

Вжаго поррасы - 620 023.



Research supervisor

Dr. S. BALAMURUGAN, M.Sc., M.Phil., Ph.D.,

ASSISTANT PROFESSOR,

PG AND DEPARTMENT OF BOTANY,

THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A),

TIRUCHIRAPPALLI -620 023.

#### CERTIFICATE

This is to certify that the project work entitled "SURVEY & MEDICINAL PLANTS IN THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE CAMPUS, TIRUCHIRAPPALLI-23" submitted to the Department of Botany, THANTHAI PERIYAR GOVERNMENT ARTS SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI, in partial fulfilment of the recruitment for the award of MASTER OF SCIENCE for the academic year 2020-2022 is a Bonafide record of original work done by M.ARULMANI under my guidance.

31/05/2012

Research Supervisor

Signature of Head of the Department

Dr.F.SHANTHA MARGARET, M.Bc., M.Phil., Ph.D., Head & Associate Professor PO & Research Department of Botany Thanthan Veryar Government Arts & Science Cullege (Autonomous) Trachirappalli-620 023, Tamihadu, India.

The Viva Voce Examination held on 02.06.2022

Signature of the External Examiner

06

Dr. A. SHAJAHAN M.Sc., M.Phil., Ph.D.
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Cooking and Consultancy

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Research supervisor

Dr. R.SENTHIL KUMAR, M.Sc., M.Phil., Ph.D., PGDCA., PDF., HEAD AND ASSISTANT PROFESSOR, DEPARTMENT OF BIO CHEMISTRY,

THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE(A), TIRUCHIRAPPALLI -620 023.

#### CERTIFICATE

This is to certify that the project work entitled "IN VITRO STUDY OF ANTIUROLITHIATIC ACTIVITY IN RHIZOMES OF ZINGIBER OFFICINALE ON STRUVITE CRYSTALS." submitted to the Department of Bio chemistry, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE(A) TIRUCHIRAPPALLI. in partial fullfilment of the requirements for the award of MASTER OF SCIENCE for the academic year 2020-2022 is a bonafide record of original work done by A.RAJAESHWARAN under my guidance. Research supervisor Signature of head of the department.

Research supervisor

Dr. R. SENTHILKUMAR, Assistant Professor & Head, Department of Bioshemistry, Thatha Penjar Gost, Acts & Science College (A),

Tiruchirappalli - 620 023.

Signature of head of the department

Head Of the Department, Department of Biochemistry, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli - 620 023.

The viva voce examination held on 2:6.2022

Signature of the external examiner

2.6.262n



# THANTHAI PERIVAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous)

# TIRUCHIRAPPALLI-620 023. PG & RESEARCH DEPARTMENT OF PHYSICS

# CERTIFICATE

This is to certify that the project work entitled "SYNTHESIS AND CHARACTERIZATION OF UNDOPED NANOPARTICLES" is a bonafide project work done by E.ARUN AND (Reg.No:20PPH01), PG & Research Department of Physics, Thanthai Periyar Government Arts and Science College (Autonomous\*\*\*), Affiliated to Bharathidasan University. Tiruchirappalli in partial fulfilment of the requirements for the award of degree of MASTER OF SCIENCE IN PHYSICS, during the academic year 2021-2022.

Signature of the Head of the department

HEAD

PG & RESEARCH DEPARTMENT OF PHYSICS THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOLS) TIRUCHIRAPPALLI - 620 023.

Examiner

(ii) he- her 02/6/2022



Dr. P. BHARATHI, M.Sc., M.Phil., Ph.D., Assistant Professor PG and Research Department of Mathematics Thanthai Periyar Govt. Arts and Science College (Autonomous)

# CERTIFICATE

This is to certify that the project work entitled "CHARACTERIZATION HEPTAGONAL NUMBER, OCTAGONAL NUMBER AND TRIANGULAR NUMBER" done under my guidance submitted to the Thanthai Periyar Govt. Arts and Science college (Autonomous and Accredited), Tiruchirappalli -23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

VIJAYALAKSHMI. N (Reg. No: 20PMA42) in the PG and Research Department of Mathematics, Thanthai Periyar Govt. Arts and Science college (Autonomous and Accredited), Tiruchirappalli -23 during the period 2020-22.

Head of the department

Head of the Department PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science College(Autonomous) - Tiruchirappalli - 620 023

Signature of the Guide

Dr. P. BHARATHI, M.Sc., M.Phil., Ph.D.,
Assistant Professor
PG & Research Department of Mathematics
Thanthai Periyar Government
Arts and Science College (Autonomous)
Tiruchirappalli-620 023.

Dr. P. BHARATHI, M.Sc., M.Phil., Ph.D., PG & Research Department of Mathematics
Thankhai Periyar Government
Arts and Science College (Autonomous)
Tiruchirappalli-620 023. Dr. B. GAYATHRI, M.Sc., UGC-NET, M.Phil., Ph.D., P.G.D.C.A., M.C.A., **Associate Professor** PG and Research Department of Mathematics Thanthai Periyar Govt. Arts and Science College (Autonomous) Tiruchirappalli-620 023

#### CERTIFICATE

This is to certify that the project work entitled "A STUDY ON K BANHATTI INDEX OF GRAPHS" done under my guidance submitted to the Thanthai Periyar Govt. Arts and Science college (Autonomous and Accredited), Tiruchirappalli -23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

VALLI DEIVANAI. S (Reg.No:20PMA41)

in the PG and Research Department of Mathematics, Thanthai Periyar Govt. Arts and Science college (Autonomous and Accredited), Tiruchirappalli -23 during the period 2020-22.

Signature of the

Head of the department

Head of the Department PG & Research Department of Mathematics Thanthai Periyar Government Arix & Science College (Autonomous)

Tiruchirappaili - 620 023

Signature of the Guide

ASSOCIATE PROFESSOR PG & RESEARCH DEPARTMENT OF MATHEMATICS THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620 023.

**EXAMINERS:** 

Dr. V. MALATHI, M.Sc., B.Ed., M.Phil., Ph.D., Assistant Professor, PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli-620 023.

# CERTIFICATE

This is to certify that the project work entitled "A STUDY ON LINEAR DIOPHANTINE EQUATION" done under my guidance submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous and Accredited), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by T.UMAMAHESHWARI(Reg.No:20PMA40) in the PG and Research Department of Mathematics, Thanthai Periyar Govt. Arts Science college (Autonomous and Accredited), Tiruchirappalli -23 during the period 2020-2022.

Signature of the

Head of the department

Head of the Department. PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science College Autonomous Tiruchirappalli - 620 023

ignature of the Guide ASSISTANT PROFESSOR PG & RESEARCH DEPARTMENT OF MATHEMATICS THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620 023.

Signature of the EXAMINERS:

Just /8/5 -

Dr. P. THIRUNAVUKARASU, M.Sc.,M.Phil.,Ph.D.,B.Ed.,PGDCA. Assistant Professor PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli-620 023, Tamilnadu, India

Dr. P. THIRUNAVUKARASU, M.Sc., M. Phil., Ph.D., PGDCA., B.Ed., Assistant Professor, PG & Research Department of Mathematics. Thanthai Periyar Government Arts & Science College (A), Tiruchirappalli - 620 023.

#### CERTIFICATE

This is to certify that the Project work entitled "LIKELIHOOD RATIO ORDERING AND SOME APPLICATIONS" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE(A), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by THANUPRIYA T (Register No.: 20PMA39) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (A), Tiruchirappalli - 23, during the period 2020-2022.

SIGNATURE OF THE HOD

Head of the Department PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science College (Autonomous)

Tiruchirappalli - 620 023

SIGNATURE OF THE G

**EXAMINERS** 

Dr. P. THIRUNAVUKARASU,
M.Sc.,M.Phil.,Ph.D.,B.Ed.,PGDCA.,
Assistant Professor
PG & Research Department of Mathematics
Thanthai Periyar Government k Science College (Autonomous) reppalli-620 023. Tamilnadu, India

2.

M.Sc., M.Phil. Ph.D., B.Ed., PGDCA.
Assistant Professor
PG & Research Department of Mathematics
Thanthai Penyar Government
Arts & Science College (Autonomous)
Tiruchirappalli-620 023. Tamilnadu, India

Dr.B.GAYATHRI, M.Sc., UGC-NET, M.Phil., Ph.D., P.G.D.C.A., M.C.A., Associate Professor PG and Research Department of Mathematics Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli-620 023

## CERTIFICATE

This is to certify that the project work entitled "A STUDY ON CENTROIDAL AND F-CENTROIDAL MEAN LABELING OF GRAPHS" done under my guidance submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous and Accredited), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

## SUDHARSANA.M (Reg.No:20PMA37)

in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science college (Autonomous and Accredited), Tiruchirappalli -23 during the period 2020-22.

Head of the department

Head of the Department PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science College(Aptonomous) Tiruchirappalli - 620 023

PG & RESEARCH DEPARTMENT OF MATHEMATICS THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS)

EXAMINERSLUI - 620 023.

Dr. P. MARAGATHA MEENAKSHI, M.Sc., M.Phil., PBDCSA., NET., Ph.D.,
Associate Professor
PG and Research Department of Mathematics
Thanthai Periyar Government Arts and Science College (Autonomous)
Tiruchirappalli 620-023

#### CERTIFICATE

This is to certify the project work entitled "A Study on Multiscale Singularly Perturbed Linear System of First Order Ordinary Differential Equations" done under my guidance and submitted to the Thanthai Periyar Government Arts and Science College (Autonomous), affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by SUBASHINI. S (Reg. No. 20PMA36) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli- 620 023 during the period 2020-2022.

Signature of Head of the Department
Head of the Department
PG & Research Department of Mathematics
Pathai Periyar Government Arts & Science College (Automorphis)

Tiruchirappalli - 620 023

Internal Examiner 2 6 22

Dr. P. MARAGATHA MEENAKSHI, M.Sc.M.Phil. PEDCSA, CSIR LIGO NET, Ph.D., Associate Professor & Research Supervisor PG & Research Department of Mathematics Thanthai Periyar Govt. Arts & Science College (A) Tiruchirappalli - 820 023, TAMIL NADU INDIA 8.M. 285/22

Signature of the Guide
Dr.P.MARAGATHA MEENAKSHI,
M.S., M.Phil., PBOCSA, NET., Ph.D.,
Associate Professor & Research Supervisor
P.G. and Research Department of Methematics
Thanthal Periyar Government
Arts & Science College (Autonomous)

External Examiner

Dr. M. Tamil Selvi Associate Professore Head SRC College, Triely 2

Scanned with OKEN Scanner

Dr.K.PONNAMMAL,M.Sc.,M.Phil.,M.C.A.,Ph.D., Assistant Professor, PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli-620 023.

#### CERTIFICATE

This is to certify that the project work entitled "A STUDY ON SURFACES IN THE LARGE" done under my guidance submitted to the THANTHAI PERIYAR GOVERNMENT.ARTS AND SCIENCE COLLEGE (Autonomous), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

G.SIVA RANJANI (Reg.No:20PMA35)

in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science college (Autonomous), Tiruchirappalli -23 during the period 2020-2022. @02000000 2715/22

Head of the department

Head of the Honor will PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science College (Astonomous) Tiruchirappalli - 620 023

Dr. K. PONNAMMAL, M.Sc. M.Phil. M.C.A. Ph.D.

Signature of the Guide Periyar E.V.R. College (Autonomous) Tiruchirappalii - 620 023

**EXAMINERS:** 

1. n. Ganihel 2/6/22

Dr. M. MARAGATHAM ,M.Sc., M.Phil., B.Ed., Ph.D., Associate Professor, PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous) Tiruchirappalli-620 023

#### CERTIFICATE

This is to certify that the project work entitled "CENTERED TRIANGULAR SOME LABELING OF SOME GRAPHS" done under my guidance submitted to the THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

#### REVATHI S (Reg.No:20PMA34)

in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science college (Autonomous), Tiruchirappalli -23 during the period 2020-2022

Signature of the Head of the department Head of the Department PG & Research Department of Mathematics

Tearthai Pariyar Comerciaent Auts & Science College (Antonomous) - Tiruchirappalli - 620 023 \_-

1. Dr.P. SHANMUGANANTHAM

ASSO. PROF OF MATHS

Notional College

Dr.(Mrs.) R.RAZIYA BEGAM, M.Sc., M. Phil., B.Ed., M.CA., Ph.D., Associate Professor,

PG and Research Department of Mathematics,

Thanthai Periyar Government Arts & Science College (Autonomous).

Tiruchirappalli- 620 023.

#### CERTIFICATE

This is to certify that the Project work entitled "MAXIMUM DISTANCE BETWEEN MIDDLE PARTS IN GENERAL TREES" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), affiliated to the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by T.PRAVEENA (Register No.: 20PMA33) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23, during the period 2020-2022.

Signature of the

R.R.J.B.
Signature of Guide

Head of the department

Head of the Department PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli - 620 023

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# VIVA-VOCE EXAMINATION

The Project Viva-Voce the candidate Examination of Mr. R. Anbarasan (Register No. 20PBO01) was held at the Dept of Botany, Thanthai Periyar Government Arts and Science College (Autonomous). Trichy - 620 023 on ... 02 =06- 2022

Signature of the HOD

Signature of the Project Guide

Dr.F.SHANTHA MARGARET.

M. Sc. M. Phil., Ph.D.,

Head & Associate Professor

PG & Research Department of Infanta

Translate Prigar Gavernamia

Arts & Science College (Automolious)

Tencharappalli (20.02.1 Tanahada, Iddia.

.06.22 Dr. A. SHAJAHAN, M.Sc., M.Phil., Ph.D.

Doon of Research and Consultancy
Consecut of DET Size College Scheme & Associate Professor of Botang,
1007 Perfect College (Autonomous) Truchrappail- 620 020

Dr. S. SETHURAMAN, M.Sc., M.Phil., Ph.D.,

Associate professor & Head,
PG and Research Department of Mathematics,
Thanthai Periyar Government Arts & Science College (Autonomous),
Tiruchirappalli- 620 023.

#### CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON LAGUERRE POLYNOMIAL" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY – TRICHY In partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

P. PONMANI (Register No.: 20PMA32)

in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli – 23 during the period 2020-2022

Signature of the

Head of the department

Head of the Department
PG & Research Department of Mathematics
Thanthai Periyar Government Aris & Science College (Autonomous)

Tiruchirappalli - 620 023

Sign Hange of Guide tment

PG & Research Department of Mathematics

Thanthai Periyar Government Arts & Science College (Autonomous)

Tiruchirappalli - 620 023

Signature of the Examiners

1. J

88elil\_ 206-22

Dr. (Mrs.) K. KASTURRI, M.Sc., M. Phil., SLST., Ph.D.,

Assistant Professor.

PG and Research Department of Mathematics,

Thanthai Periyar Government Arts & Science College (Autonomous),

Tiruchirappalli- 620 023.

#### CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON FIBANOCCI AND LUCAS SUMS BY MATRIX METHODS" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), TRICHY-23 affiliated the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by M.MARIAMMAL (Register No: 20PMA31) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23, during the period 2020-2022.

Signature of the

Head of the department Head of the Department PG & Research Department of Mathematics

Tiruchirappalli - 620 023

Theathail Periyar Government Arts & Science College (Actionomous) Signature of the

**External Examiners** 

Dr.K.KASTURRI,M.Sc.,M.Phil.,Ph.D.,

K. Kastwaj Jasas Signature of the Guide

Assistant Professor
P.G. and Research Department of Mathematics
Thanthar Periyar Government
Aris & Science College (Autonomous)
TIRUCHIRAPPALLI-620 023.

2. K. Kastrustofos

Dr. A. THANTTHAMH, M.Sc., M.Phil., Phil., B.I.S., PLAKE. Assistant Professor. PC and Research Department of Mathematics. Hunthui Perigai Cerremment Arts & Science Cellege (16). Tiruchirappalli - 626 623

#### CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON SECOND ORDER PARTIAL DIFFERENTIAL EQUATIONS" done under my guidance and submitted to the THANTHAI PERIYAR COVERNMENT ARTS & SCIENCE COLLEGE (A), TRICHY-23 adfilliated to the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by M. KEERTHANA (Register No.: 20PMA30) in the PG and Research Department of Mathematics. Thanthai Periyar Government Arts & Science College (A), Tiruchirappalli - 23, during the period 2020-2022.

Head of the department

Head of the Department PG & Research Department of Mathematics Thanhai Periyer Envenment Arts & Esience College (Administrati) Tiruchirappelli - 620 623

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Examiners

Dr.K.RADHA,M.Sc.,M.Phil.,B.Ed.,SELT.,Ph.D., Assosicate Professor pG and Research Department of Mathematics Thanthai Periyar Government Arts and Science College (A)

# CERTIFICATE

This is to certify that the project work entitled "A STUDY ON VERTEX MAGIC AND EVEN VERTEX MAGIC TOTAL LABELING "done under my guidance submitted to the THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous and Accredited), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by K.KANIMALAR (Reg.No:20PMA29) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science college (Autonomous and Accredited), Tiruchirappalli -23 during the period 2020-22.

Signature of the Head of the Department Head of the Department PG & Research Department of Mathematics

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K. RADHER WISE MINISTER SLET PLD. Associate Professor of Mathematics Thanthal Perlyar Government Arts & Science College (Autono Tiruchirappalli-620 023.

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# A STUDY ON FUNDAMENTAL EQUATIONS OF SURFACE THEORY

A dissertation submitted to the

Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli,

Affiliated to Bharathidasan University, Tiruchirappalli in partial fulfillment of the requirements for the award of the degree of

#### MASTER OF SCIENCE IN MATHEMATICS

Submitted by

#### K.GAYATHRI

(Register No.: 20PMA28)

Under the Guidance of

Dr. (Mrs.) K.PONNAMMAL, M.Sc., M.Phil., M.C.A., Ph.D.,

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MAY-2022

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This is to certify that the work entitled "MARKOVIAN DECISION PROCESS" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A), affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by Ms. E.GANGA (Reg No:20PMA27) in PG and Research Department of Mathematics, THANTHAI PERIYAR ARTS AND SCIENCE COLLEGE(A), Triruchirappalli - 620 023 during the period 2020-2022.

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#### CERTIFICATE

This is to certify that the project work entitled "A STUDY ON FUZZY TREE AND FUZZY FOREST" done under my guidance submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous and Accredited), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

#### K.DHIVYA PRIYA (Reg.No:20PMA26)

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#### CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON TRIANGULATED GRAPH AND THE ELIMINATION PROCESS" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE(A), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by S.BHARATHI (Register No: 20PMA25) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (A), Tiruchirappalli - 23, during the period 2020-2022.

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#### CERTIFICATE

This is to certify that the project work entitled "CLASSICAL ENCRYPTION TECHNIQUES" done under my guidance and submitted to the Thanthai Periyar Government Arts and Science College (Autonomous), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by ANITHA.S (Reg. No. 20PMA24) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli-23 during the period 2020-2022.

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This is to certify the project work entitled "A Study on Partially Singularly Perturbed Linear System of First Order Ordinary Differential Equations" done under my guidance and submitted to the Thanthai Periyar Government Arts and Science College (Autonomous), affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by ABINAYA. J (Reg. No. 20PMA23) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli- 620 023 during the period 2020-2022.

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# SURVEY OF INDIGENOUS PLANTS IN THIYAGANUR VILLAGE, THALAIVASAL TALUK, SALEM DISTRICT, TAMIL NADU

Dissertation submitted to

#### THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE

(Autonomous), TIRUCHIRAPPALLI

(Affiliated to Bharathidasan University, Tiruchirappalli)

In partial fulfillment of the requirement for the award of the Degree of

MASTER OF SCIENCE IN BOTANY

Submitted by R. ANBARASAN Reg. No. 20PBO01

Under the guidance of

Dr. G. SUJATHA, M.Sc., Ph.D.,



# DEPARTMENT OF BOTANY THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

(Affiliated to Bharathidasan University) TIRUCHIRAPPALLI – 620 023

**MAY 2022** 

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#### CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON LATIN SEQUARE DESIGN AND 22- FACTORIAL DESIGN" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (A), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY. TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by YOKESHWARAN C (Register No. : 20PMA22) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (A). Tiruchirappalli - 23, during the period 2020-2022.

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This is to certify that the project work entitled "FUZZY MODEL USING FUZZY MATRIX" done under my guidance and submitted to the Thanthai Periyar Government Arts And Science College (Autonomous), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by VISHNU GOPAL.N (Reg. No. 20PMA21) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli – 23 during the period 2020 - 2022.

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This is to certify that the project work entitled "A STUDY ON PELL'S EQUATION" done under my guidance submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (Autonomous Accredited), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by G.VINOTHKUMAR (Reg. No. 20PMA20) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science college (Autonomous and Accredited), Tiruchirappalli -23 during the period 2020-2022.

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Dr. S. SETHURAMAN, M.Sc., M.Phil., Ph.D.,

Head & Associate Professor,

PG and Research Department of Mathematics,

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# CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON HERMITE POLYNOMIAL " done under my guidance and submitted to the THANTHAI GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS) TRICHY-23, affiliated to the BHARATHIDASAN UNIVERSITY - TRICHY In partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by S.VIGNESH (Register No.: 20PMA19) in the PG and Research Department of Mathematics, Thanthai Periyar Goverment Arts & Science College (Autonomous), Tiruchirappalli - 23 during the period 2020-2022.

Head of the department Head of the Department. PG & Research Department of Mathematics Danibai Periyar Government Arts & Science College (Astosowass) - Tiruchirappalli - 620 023

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Head of the Description PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli - 620 023

Signature of Examinar

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Dr. P. MARAGATHA MEENAKSHI, M.Sc., M.Phil., PBDCSA., NET., Ph.D.,

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#### CERTIFICATE

This is to certify the project work entitled "A Study on Singularly Perturbed Linear System of First Order Ordinary Differential Equations" done under my guidance and submitted to the Thanthai Periyar Government Arts and Science College (Autonomous), affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by SURYA. D (Reg. No. 20PMA18) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli- 620 023 during the period 2020- 2022.

Signature of Head of the Department
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External Examiner

1. n. Gami bely: 2/6/21

Dr.M.Tamil Selvi.
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Dr. K. RADHA, M.Sc., M.Phil., B.Ed., SLET., Ph.D.,

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Tiruchirappalli- 620 023.

# CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON FUZZY SETS AND THEIR APPLICATIONS" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (AUTONOMOUS),TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY - TRICHY In partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by SURESH.S (REGISTER NO: 20PMA17) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli - 23 during the period 2020-2022.

Signature of the

Head of the department
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Dr. K. RADHA

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#### CERTIFICATE

This is to certify that the project work entitled "A STUDY ON POWER 3 MEAN GRAPHS" done under my guidance submitted to the THANTHAI PERIYAR GOVERMENT ARTS AND SCIENCE COLLEGE (Autonomous and Accredited), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

SRIDHAR.A (Reg.No:20PMA16)

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Head of the department

Head of the Department PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli - 620 023

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# **CERTIFICATE**

This is to certify that the Project work entitled "A STUDY ON LEGENDRE POLYNOMIAL " done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT COLLEGE ARTS & SCIENCE (AUTONOMOUS),TRICHY-23 BHARATHIDASAN affiliated to the UNIVERSITY - TRICHY In partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by S.SELVARAJ (Register No.: 20PMA15) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 during the period 2020-2022.

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Head of the Department PG & Research Department of Mathematics Thanthai Periyar Government Arts & Science Cellage(Autonomous) Tiruchirappalli 600 100

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Dr. (Mrs.) K. KASTURRI, M.Sc., M. Phil., SLST., Ph.D.,

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#### CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON ITERATIVE METHODS FOR FIXED POINTS " done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by R. PRASANTH (Register No: 20PMA14) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23, during the period 2020-2022.

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**External Examiners** 

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#### CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON LINEAR ALGEBRA WITH APPLICATION" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by G. MUNISHWARAN (Register No.: 20PMA13) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli – 23, during the period 2020-2022.

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2.

Dr.R.SENTHILKUMAR, MSc., M.Phil., Ph.D., PGDCA Head and Assistant Professor PG & Research Department of Biochemistry Thanthai Periyar Govt. Arts and Science College (A) Thiruchirappali-23



#### CERTIFICATE

This is to certify that the dissertation entitled "NEMATICIDAL ACTIVITY OF POLYHERBAL FORMULATION AGANIST BANANA ROOT DISEASE" is a record of project work done by VASUKI.D(Reg. No: 20PBC20) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at THANTHAI PERIYAR GOVT. ATRS AND SCIENCE COLLEGE (Autonomous), Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other University or Institution for the award of any degree or diploma.

Head Of the Department, Department of Biochemistry, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli - 620 023.

Dr. R. SENTHILKUMAR, Assistant Professor & Head, Department of Biochemistry,

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Dr. (Mrs.) K. KASTURRI, M.Sc., M. Phil., SLST., Ph.D.,

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This is to certify that the Project work entitled " A STUDY ON INTEGRAL TRASNFORM METHODS " done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by M.MOHANRAJ (Register No: 20PMA12) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23, during the period 2020-2022.

Head of the department

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Dr.K.KASTURRI,M.Sc.,M.Phil.,Ph.D.,

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**External Examiners** 

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Dr.K.KASTURRI,M Sc ,M Phil ,Ph D.,

2. K. Kastur 2/6/24

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Dr. W. LILLY MERLINE, M.Sc., M.Phil., B.Ed., PGDCA., Ph.D., Assistant Professor, PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli - 23.

#### CERTIFICATE

This is to certify that the project work entitled "APPLICATION OF FUZZY MATRIX IN REAL LIFE PROBLEMS" done under my guidance and submitted to the Thanthai Periyar Government Arts And Science College (Autonomous), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by MARTIN ROSARIO. J (Reg. No. 20PMA11 ) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli-23 during the period 2020-2022.

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Signature of the Examiners

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Dr. M.MARAGATHAM M.Sc., M.Phil., Ph.D. Assosicate Professor PG and Research Department of Mathematics Thanthai Periyar Government Arts and Science College (A) Tiruchirappalli-620 023.

### CERTIFICATE

This is to certify that the project work entitled "A STUDY ON PERFECT GRAPH AND CHORDAL GRAPHS" done under my guidance submitted to the THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (A), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

MARIYAPPAN K (Reg.No:20PMA10) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts and Science(A), Tiruchirappalli-23 during the period 2020-2022.

Signature of the

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**EXAMINERS** 

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Assistant Professor
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This is to certify that the project work entitled "A STUDY ON QUEUEING MODEL" done under my guidance submitted to the Thanthai Periyar Govt. Arts and Science college (Autonomous and Accredited), Tiruchirappalli -23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

MANIKANDAN. M (Reg. No: 20PMA09)

in the PG and Research Department of Mathematics, Thanthai Periyar Govt. Arts and Science college (Autonomous and Accredited), Tiruchirappalli -23 during the period 2020-22.

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**EXAMINERS:** 

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#### CERTIFICATE

This is to certify that the project work entitled "A STUDY ON DOMINATING COLORING NUMBER OF SOME GRAPHS" done under my guidance submitted to the THANTHAI PERIYAR GOVERMENT ARTS AND SCIENCE COLLEGE (Autonomous and Accredited), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

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#### **CERTIFICATE**

This is to certify that the project work entitled "GALOIS THEORY AND SOME APPLICATIONS" done under my guidance submitted to the THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous and Accredited), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by A.KISHORE KUMAR (Reg.No:20PMA07) in the PG and Research Department of Mathematics, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE (Autonomous and Accredited), Tiruchirappalli -23 during the period 2020-22.

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#### CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON EULER TOURS AND HAMILTON CYCLES " done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by P.KALAIVANAN (Register No.: 20PMA06) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli – 23, during the period 2020-2022.

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**Examiners** 

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### CERTIFICATE

This is to certify that the Project work entitled "A STUDY ON MINIMAL SURFACE" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

# C.KABISH KUIMARAN (Register No: 20PMA05)

in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli - 23 during the period 2020-2022.

DE MATHEMATICS THAN THAT PERIVAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620 023.

Signature of the Guide ASSISTANT PROFESSOR PG & RESEARCH DEPARTMENT OF MATHEMATICS THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620 023. Signature of the Examiners:

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This is to certify that the Project work entitled " A STUDY ON INDEPENDENT SETS AND CLIQUES "done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY, TRICHY In partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by S.JUSTIN BOSCO (Register No.: 20PMA04) in the PG and Research Department of Mathematics, Thanthai Periyar (Autonomous), Government Arts Science College Tiruchirappalli – 23, during the period 2020-2022.

Signature dethof the Department PG & Research Denvenent of Mathematics Head of the department of college Autonomous Tiruchirap, . . J 023

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ASSOCIATE PROFESSOR PG & RESEARCH DEPARTMENT OF MATHEMATICS THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620 023.

Signature of Examiner

N. Ganibel 2 6/22

(Dr. M. TAMILSELVI, Head & Associate Presor

of Mathematics, SRC, Tricky) R.R. 24a Begon 2/6/22

Dr. P. THIRUNAVUKARASU, M.Sc., M. Phil., Ph.D., PGDCA., B.Ed., Assistant Professor, PG & Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (A), Tiruchirappalli - 620 023.

#### CERTIFICATE

This is to certify that the Project work entitled "INTRODUCTION TO Z TRANSFORM AND ITS PROPERTIES" done under my guidance and submitted to the THANTHAI PERIYAR GOVERNMENT ARTS & SCIENCE COLLEGE(A), TRICHY-23 affiliated to the BHARATHIDASAN UNIVERSITY, TRICHY, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by DHINESHKUMAR S (Register No.: 20PMA03) in the PG and Research Department of Mathematics, Thanthai Periyar Government Arts & Science College (A), Tiruchirappalli - 23, during the period 2020-2022.

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Head of the Department PG & Research Department of Mathematics Theathai Periyar Government Arts & Science College(Autonomous) Tiruchirappalli - 620 023

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Dr. P. THIRUNAVUKARASU, M.Sc., M. Phil. Ph.D., B.Ed., PGDCA., Assistant Professor

**EXAMINERS** 

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Arts & Scie

roment Autonomous)

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Assistant Professor & Research Department S

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#### CERTIFICATE

This is to certify that the dissertation entitled "Isolation, Biochemical characterization and screening of amylase production bacterial isolates from Rameswaram Marine Water" is a record of project work done by SINDHUJA (Reg. No: 20PBC19) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other University or Institution for the award of any degree or diploma.

R. Simbliga Candidate Signature

Guide Signature

Signature of Head of the Department

Head Of the Department, Department of Biochemistry, Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli - 620 023. Examiner

2. Chay

Dr.R.MURUGANANDAM,M.Sc.,M.Phil.,Ph.D., PG and Research Department of Mathematics Thanthai Periyar Government Arts and Science College (A) Tiruchirappalli-620 023

# CERTIFICATE

This is to certify that the project work entitled "THE DOMINATOR VERTEX AND EDGE COLORING OF SOME GRAPHS" done under my guidance submitted to the THANTHAI PERIYAR GOVERMENT ARTS AND SCIENCE COLLEGE (Autonomous and Accredited), Trichy-23 affiliated to the BHARATHIDASAN UNIVERSITY in partial fulfilment of the requirements for the award of the Degree of MASTER OF SCIENCE IN MATHEMATICS is a bonafide record of the work done by

# AJITH KUMAR. A (Reg.No:20PMA01)

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TIRUCHIRAPPALLI - 620 023.

**EXAMINERS:** 

# ஆய்வாளர் உறுதிமொழி

த.சூரியா முதுகலை வரலாறு (பதிவு எண். 20PHI13) வரலாற்றுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023

🧦 "நமசிவாயபுரம் கிராமம் –ஓர் ஆய்வு" என்னும் தலைப்பில் முதுகலை பட்டத்திற்கு என்னால் செயய்ப்பட்ட இவ்வாய்வு என் சொந்த முயற்சியால் உருவானது என்றும், இதற்கு முன் வேறு எந்தப் பட்டத்திற்கும் அளிக்கப்படவில்லை உறுதியளிக்கின்றேன்.

நெறியாளர் ஒப்பம்

Dr. R. RAJESHWARI,
MA MA, B.Ed., M.Phil., Ph.D.,
And Professor,
P.G. & Manual Annual of History
Peri, at F. C. Innomous)
Tilled to BANA 2012

இடம்: திருச்சி-23

நாள்:

ஆய்வாளர் ஒப்பம்

# நெறியாளர் சான்றிதழ்

திரு. து. இராமலிங்கம்., எம்.ஏ., எம்ஃபில்,பி.எட்., உதவிப் பேராசிரியர், முதுகலை மற்றும் வரலாற்று ஆய்வுத்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி), திருச்சிராப்பள்ளி – 620 023.

பாத்திமா ஷேக் ''மகாத்மா ஜோதிராவ் பூலே கல்வி பாதையில் தலைப்பில் மாணவி ரா. ரஞ்சிதா, (பதிவு எண் : ஓர் ஆய்வு" என்னும் 20PHI12) செய்துள்ள இவ்வாய்வேடு தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லுாரி முதுகலை மற்றும் வரலாற்று ஆய்வுத்துறையில் எம்.ஏ., பயின்ற எனது மேற்பார்வையின் கீழ் காலத்தில் அவர் தம் சொந்த முயற்சியால் இவ்வாய்வேடு எப்பட்டத்திற்கும் வேறு மேற்கொள்ளப்பெற்றது என்றும், அளிக்கப்படவில்லை என்றும் சான்றளிக்கிறேன்.

வரலாற்று துறைத் தனவவர் துறைத் தளவிலி நடிப்பும் துறைத் தளவிலி நடிப்பும் மற்றும் அறிவியல் கல்லூரி ( தன்னாட்சி) இட்ட அடுச்சியக்கை 223

நாள்: 02/06/2022

MA,MPHILBELPLD. Head of the Department P.G., History & Ph.d., Full Time Research Centre Government Arts College (Grade - I) Ariyalur - 621 713, Tamil Nadu

நெறியாளர் ஒப்பும் D.RAMALINGAM, M.A., M. Phil., B.Ed., SET.

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முனைவர் ஜெ.ஜாய்ஸ், எம்.ஏ.,எம்.∴பீல்.,பிஎச்.டி., உதவிப்பேராசிரியர், வரலாற்றுத்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி . (தன்னாட்சியும் தரமறுமதிப்பீடும் பெற்றது), திருச்சிராப்பள்ளி — 620 023.



# நெறியாளர் சான்றிதழ்

மூவலூர் இராமாமிர்தம் அம்மையாரின் வாழ்க்கை அவரின் சமூகத் தொண்டும் – ஓர் ஆய்வு என்னும் தலைப்பில் மாணவி நீ. பவித்ரா மேகம் (பதிவு எண் : 20PHI11) தந்துள்ள இந்த ஆய்வேடு தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி வரலாற்று ஆய்வுத்துறையில் முதுகலை வரலாறு (2020-2022) பயின்ற காலத்தில் சொந்த முயந்சியில், नला மேற்பார்வையின் அவர் தம் எப்பட்டத்திந்கும் இவ்வாய்வேடு மேற்கொள்ளப்பட்டது என்றும், வேறு அளிக்கப்படவில்லை என்றும் சான்றளிக்கிறேன்.

TIRUCHIRAPPALLI 620 023

இடம் : திருச்சி

ыт : 01.06. 2022

துறைத்தலைவர்

வரலாற்று துறைத் தலைவர்

**மற்று**ம் அறிவியல் கல்லூரி ( தன்**னஈட்சி)** தீருச்சிராப்பள்ளி - 620 023.

நெறியாளர் கையொப்பம்

Dr J. JOICE Than the Bepartment of His Than the Department of His Than the Department Government Acts & Science College (Autonomous & Reactechte iruchimpische 620 023,

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முனைவர் செ. சேவியர், எம்.ஏ., எம்.∴பில்., பி.எச்.டி., உதவிப்பேராசிரியர் முதுகலை மற்றும் வரலாற்று ஆய்வுத்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி, (தன்னாட்சியும் தரமறுமதிப்பீடும் பெற்றது) திருச்சிராப்பள்ளி - 620 023.



### நெறியாளர் சான்றிதழ்

"புதுக்கோட்டை மாவட்ட நினைவுச் சின்னங்கள் குறித்த ஓர் ஆய்வு" என்னும் தலைப்பில் மாணவர் சு. சிவா (பதிவு எண். 20PHI09) செய்துள்ள இந்த அறிவியல் கல்லூரி ஆய்வேடு தந்தை பெரியார் அரசு கலை மற்றும் வரலாற்றுத் துறையில் முதுகலை (2020 — 2022) பயின்ற காலத்தில் அவர்தம் சொந்த முயற்சியால் எனது மேற்பார்வையின் கீழ் மேற்கொள்ளப்பெற்றது என்றும், இந்த ஆய்வேடு வேறு எப்பட்டத்திற்கும் அளிக்கப்படவில்லை என்றும் சான்றளிக்கிறேன்.

இடம் : திருச்சி ын : 03/06 Ke 2С

துறைத்தலைவர் 64/56/2024 வரலாற்று துறைத் தலைவர்

தந்தை பெரியார் அரசு கலை

மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி)

திருச்சிராப்பள்ளி - 620 023. 🛩

நெறியாளர் கையொப்பம்

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முனைவர் தெ. செந்தில்குமார், உதவிப்பேராசிரியர், வரலாற்றுத்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சியும் தரமறுமதிப்பீடும் பெற்றது), திருச்சிராப்பள்ளி — 620 023.



## நெறியாளர் சான்றிதழ்

"மக்கள் பட்டுக்கோட்டை கவிஞர் செல்வன் கல்யாணசுந்தனார் தலைப்பில் ஆய்வு" என்னும் சி. செல்வதுரை (பதிவு எண்: ஆய்வேடு செய்துள்ள இந்த 20PHI08) பெரியார் அறிவியல் கல்லூரி தந்தை மற்றும் அரசு கலை எம்.ஏ(2020-2022) பயின்ற வரலாற்றுத்துறையில் காலத்தில் அவர் தம் மேற்கொள்ளப் சொந்த (முயற்சியால் எனது மேற்பார்வையின் கீழ் இவ்வாய்வேடு பெற்றது என்றும் வேறு எப்பட்டத்திற்கும் அளிக்கப்படவில்லை என சான்று அளிக்கிறேன்.

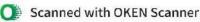
இடம் : திருச்சிராப்பள்ளி நாள் : 02/06/2022

துறைத்தலைவர் OX (22) வரலாற்று துறைத் தலைவர் தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்டு) திருச்சிராப்பள்ளி - 620 023.



நேறியாளர்

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**முனைவர் வீ.கல்பனாதேவி**, எம்.ஏ.,எம்..்.பில்.,எம்.மு.எம்..மு.இ.,பிஎச்.மு., உதவிப்பேராசிரியர், வரலாற்றுத்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சியும் தரமறுமதிப்பீடும் பெற்றது), திருச்சிராப்பள்ளி — 620 023.



#### நெறியாளர் சான்றிதழ்

"இந்திய விடுதலை போராட்டத்தில் தமிழகத்தின் பங்கு" — ஓர் ஆய்வு" என்னும் தலைப்பில் மாணவர் மு. பொன்னுசாமி (பதிவு எண் : 20PHI06) தந்துள்ள இந்த ஆய்வேடு தந்தை பெரியார் அரசு கலை அறிவியல் மற்றும் கல்லூரி வரலாற்று ஆய்வுத்துறையில் முதுகலை வரலாறு (2020-2022) பயின்ற காலத்தில் அவர் தம் சொந்த முயற்சியில், மேற்கொள்ளப்பட்டது नळा மேற்பார்வையின் கீழ் என்றும், வேறு அளிக்கப்படவில்லை எப்பட்டத்திற்கும் இவ்வாய்வேடு என்றும் சான்றளிக்கிறேன்.

இடம் : திருச்சி

நாள்: 01-06,2022

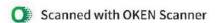
துறைத்தலைவர்

வரமாற்று துறைத் தலைவர் தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி)

தீருச்சிராப்பள்ளி - 620 023.

29. கூறாவர் கையோப்பம்

Dr. V. KALPANA DEVI, M.A. M. Phil. Ph.D., Assistant Professor, Department of History, Perlyar E. V.R. College (Autonomous) TIRUCHIRAPPALLI-23.



பேராசிரியர் A.M.J. மோகனகுமாரி, எம்.ஏ.எம்..'.பில்..பி.எட்..மிஎச்.ஒ. உ தவிப்போசிரியர் முதுகலை மற்றும் வரலாற்று ஆய்வுத்துறை தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023.



# ஆய்வு நெறியாளர் சான்றிதழ்

தலைப்பில் என்னும் விஞ்ஞானி நம்மாழ்வார்" "இயற்கை வேளாண் மாணவன். **இரா. மோகன்** (பதிவு எண்: 20PHI05) சமாப்பித்துள்ள இந்த ஆய்வேடு தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி, வரலாற்று ஆய்வுத்துறையில் முதுகலை வரலாறு (2020-2022) பயின்ற காலத்தில் கீழ் மேற்பார்வையின் முயற்சியில், नळा தம் சொந்த அவர் இந்த பட்டத்திற்கும் எந்தப் மேற்கொள்ளப்பட்டது என்றும், வேறு ஆய்வேடு அளிக்கப்படவில்லை என்றும் சான்றளிக்கின்றேன்.

துறைத்தலைவர் 02/06/2022 வரலாற்று துறைத் தலைவர் தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்னூரி (தன்னாட்சி) திருச்சிராப்பள்ளி - 620 023.

இடம் : திருச்சிராப்பள்ளி

நாள்: 02 -06-2022

ஆய்வு நெறியாளர் 2 6/99

A.M.J.MOHANAKUMARI, MA, M.Phi., B.Ed., Assistant Professor P.G. & Research Department of History Periyar E.V.R. College (Autonomous) Tiruchirappalli - 620 023.





முனைவர் நா.சீத்தாலட்சுமி,எம்,ஏ,பிஎச்.டி.டி.டி.இ. இணைப்பேராசிரியர் தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சியும் தரமறுமதிப்பீடும் பெற்றது), திருச்சிராப்பள்ளி — 620 023.



# நெறியாளர் சான்றிதழ்

"வை.மு.கோதைநாயகி அம்மாளின் வாழ்க்கை வரலாறும் சாதனையும் ஓர் ஆய்வு" என்னும் தலைப்பில் செல்வன் லெ.கார்த்திக் (பதிவு 20PHI04) बळाः செய்துள்ள இந்த ஆய்வேடு தந்தை பெரியார் அரசு ക്കൈ மற்றும் அறிவியல் கல்லூரி வரலாற்றுத்துறையில் எம்.ஏ(2020-2022) பயின்ற காலத்தில் அவர் தம் சொந்த முயற்சியால் எனது மேற்பார்வையின் கீழ் மேற்கொள்ளப் பெற்றது என்றும் வேறு எப்பட்டத்திற்கும் இவ்வாய்வேடு அளிக்கப்படவில்லை என சான்று அளிக்கிறேன்.

இடம் : திருச்சிராப்பள்ளி நாள் : 04 .06. 2022

துறைத்தலைவர்

வரலாற்றி துறைத் தலைவர் தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) ) திருச்சிராப்பள்ளி – 620 023. N. Juhaleke L.

Dr. Mrs. N. SEETHALAKSHMI, M.A. Ph.D., Dip. In Epig,
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Thanthal Periyar Government Arts and Science College (Autonomous)
Taruchirappalli - 620 023,

# நெறியாளர் சான்றிதழ்

முனைவர் வீ.பரமசிவம்.,எம்.ஏ., எம்..்.பில்., பி.எட்,.பி.எச்.டி., இணைப்பேராசிரியர், வரலாற்றுத்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி- 620 023.

"ஆறகழூர் ஸ்ரீ காமநாதீஸ்வரர் கோவில" - ஓர் ஆய்வு என்னும் தலைப்பில் மாணவர் (ச.தினேஷ் பதிவு எண்: 20PHI03) செய்துள்ள இந்த ஆய்வேடு தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி வரலாற்றுத் துறையில் எம்.ஏ பயின்ற காலத்தில் (2020-2022) மேற்பார்வையின் அவர் முயற்சியில் தம் சொந்த எனது வேறு ஆய்வு மேற்கொள்ளப்பட்டது என்றும். மேலும் இந்த எப்பட்டத்திற்கும் அளிக்கப்படவில்லை என்றும் சான்றளிக்கிறேன்.

இடம் : திருச்சிராப்பள்ளி

நாள்: 30,05.2022,

துறைத்தலைவர் வரலாற்று துறைத் தலைவர் தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) திருச்சிராப்பள்ளி – 620 023. தி. மூல் விரும் நெறியாளர் Research supervisor Dr. R. SENTHILKUMAR, M.Sc., M.Phil., Ph.D., PGDCA, HEAD AND ASSISTANT PROFESSOR, DEPARTMENT OF BIOCHEMISTRY, THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE(A), TIRUCHIRAPPALLI -620 023.

#### CERTIFICATE

This is to certify that the dissertation entiled "IN VITRO STUDY OF ANTI DIABETIC ACTIVITY OF ETHANOL EXTRACT OF SPILANTHES ACMELLA STEM" is a bonafide record of work done by A. SELCIYA (Reg. No:18PBC18) in the PG AND RESEARCH DEPARTMENT OF BIOCHEMISTRY Than that Periyar Government Arts And Science College. (Autonomous), Tiruchi-6200023. In partial fullfilment of the requirements for the award of the degree of MASTER OF SCIENCE BIO-CHEMISTRY during the academic period 2020-2022 in the Department of Bio-Chemistry under my guidance and supervision and the project work has not previously formed the basis for the award of any degree, diploma, associateship, of any other similar title...

Head of the Department
Head Of the Department,
Department of Biochemistry,
Thanthai Periyar Government Arts and
Science College (Autonomous),
Tiruchirappalli - 620 023.

**EXAMINERS** 

1. Jagunalou 2.6.2022

2. Danzilon

Signature of the guide
Dr. R. SENTHILKUMAR,
Assistant Professor & Head,
Department of Biochemistry.
Thanthai Periyar Gevt. Arts & Science College (A)
Tiruchirappalli - 620 023.

முனைவர் கோ.ஜெயகுமார், எம்.ஏ.,எம். பில்.மு.மு.எட்.பிஎச்.மு. இணைப்பேராசிரியர், வரலாற்றுத்துறை, தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சியும் தரமறுமதிப்பீடும் பெற்றது), திருச்சிராப்பள்ளி - 620 023.



## நெறியாளர் சான்றிதழ்

மேலத்தாணியம் ஊராட்சி – ஓர் தலைப்பில் செல்வன் ச.தினகரன் (பதிவு எண்: 20PHI02) செய்துள்ள இந்த ஆய்வேடு தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி வரலாந்றுத்துறையில் எம்.ஏ(2020-2022) பயின்ற காலத்தில் அவர் தம் சொந்த முயற்சியால் எனது மேற்பார்வையின் கீழ் மேற்கொள்ளப் இவ்வாய்வேடு எப்பட்டத்திற்கும் வேறு என்றும் பெற்றது அளிக்கப்படவில்லை என சான்று அளிக்கிறேன்.

இடம் : திருச்சி நாள் : 31/05/22

நெறியாளர் கையொப்பம் Dr. K. JAYAKUMAR M.A.,D.TE.,M.Phil.,Ph.D., Associate Professor of History Thanthai Periyar Government Arts and Science College (Autonomous) Tiruchirappalli - 620 023.



துறைத்தலைவர் வரலாற்று துறைத் தலைவர் தந்தை பெரியார் அரசு கலை

மற்றும் அறிவியல் கல்லூரி (தன்னாட்சி) தீருச்சிராப்பள்ளி - 620 023.

முனைவர் ஜோ.ஜெரோம் பெர்ணான்டோ,எம்.ஏ.,எம்..'.பில்.,பிஎச்டி., இணைப்பேராசிரியர் மற்றும் வரலாற்றுத்துறை தலைவர், தந்தை பெரியார் அரசு கலை மற்றும் அறிவியல் கல்லூரி (தன்னாட்சியும் தரமறுமதிப்பீடும் பெற்றது), திருச்சிராப்பள்ளி — 620 023.



## நெறியாளர் சான்றிதழ்

"புதுக்கோட்டை மாவட்டத்தின் சில முக்கிய இந்து ஆலயங்கள் ஆய்வு" தலைப்பில் என்னும் செல்வன் அழகுபாண்டி (பதிவு எண்: 20PHI01) செய்துள்ள இந்த ஆய்வேடு பெரியார் தந்தை அரசு கலை மற்றும் அறிவியல் கல்லூரி வரலாற்றுத்துறையில் எம்.ஏ(2020-2022) பயின்ற காலத்தில் அவர் தம் சொந்த முயற்சியால் மேற்பார்வையின் கீழ் மேற்கொள்ளப் எனது வேறு எப்பட்டத்திற்கும் இவ்வாய்வேடு பெற்றது என்றும் அளிக்கப்படவில்லை என சான்று அளிக்கிறேன்.

இடம் : திருச்சிராப்பள்ளி நாள்: 04-06-2022

04156/202 Verified

துறைத்தலைவர் , வரலாற்று துறைத் தலைவர்

தந்தை பெரியார் அரசு கலை ந்தும் அறுவயல் கல்லூர் - 620 02**ி**ர். P. RAVICHANDRAN, RA MPH, RE**ந்திம் அறிவியல் கல்லூரி (தன்னாட்சி)** மற்றும் அறிவியல் கல்லூரி ( தன்னாட்சி)

நெறியாளர் வுவுவை வரலாற்று துறைத் தலைவர் தந்தை பெரியார் அரசு கணை

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## THANTHAI PERIYAR GOVERNMENT ARTS AND SCIENCE COLLEGE, TRICHY

## PG Project Details of Geography Department 2021-2022

| S.<br>No | Roll No | Name            | Project Title  | Date of viva<br>voce<br>examination |
|----------|---------|-----------------|--|-------------------------------------|
| 1        | 20PGE01 | X A GLARY GEO   | Spatial Analysis of General Libraries and<br>Literacy Level in Coimbatore District<br>2020 - 2021  | 03.06.2022                          |
| 2        | 20PGE02 | A. GUNASEKAR    | Spatial Analysis of Literacy Rate and<br>General Libraries in Pudukottai District –<br>2020 - 2021 | 03.06.2022                          |
| 3        | 20PGE03 | S. JEYACHANDRAN | A Study on Distribution of Selected<br>Crops in Tamilnadu  | 03.06.2022                          |
| 4        | 20PGE04 | K. MOHANRAJ     | Identifications of Educational Institution in Tiruchirappalli District                             | 03.06.2022                          |
| 5        | 20PGE05 | T. PERIYASAMY   | A Study of Land Use Changes in<br>Maharajasamudram Watershed<br>Tamilnadu                          | 03.06.2022                          |
| 6        | 20PGE06 | A. RANJITH      | Assessment of Literacy Rate and Public<br>Libraries in Dindigul District – 2020 -<br>2021          | 03.06.2022                          |
| 7        | 20PGE07 | S. SILAMBARASAN | An Assessment of Agricultural in Coimbatore District   | 03.06.2022                          |
| 8        | 20PGE08 | M. VETRIVEL     | An Assessment of Land Use and Land<br>Cover Pattern of Erode District                              | 03.06.2022                          |
| 9        | 20PGE09 | R. MEENA        | A Study of Changes in Cropping Pattern in Nagapattinam District                                    | 03.06.2022                          |
| 10       | 20PGE11 | V. PRIYA        | An Analysis of Literacy and Public<br>Libraries in Salem District – 2020 – 2021                    | 03.06.2022                          |
| 11       | 20PGE12 | R. RENUGA DEVI  | An Analysis of Cyber Crime Against<br>Womens in India  | 03.06.2022                          |
| 12       | 20PGE13 | D. SASIKALA     | An Analysis of Red dhall Characteristics for Cropping in Tiruchirappalli District                  | 03.06.2022                          |
| 13       | 20PGE14 | M. SUVALAKSHMI  | An Analysis of Cyber Crimes in India   | 03.06.2022                          |

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This is to certify that the Project entitled Dignity in Distress: A Study of Gabriel Garcia Marquez's No One Writes to the Colonel submitted by S.Veeralakshmi (Reg.No.20PEL36) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled Critical Study of Anita Desai's Fire on the Mountain submitted by T.Usha Mary (Reg.No.20PEL35) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the Project entitled Realism and Fantasy in R.K. Narayan's The Vendor of Sweets submitted by A.THILAGAVATHI (Reg.No.20PEL34) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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P.G. & RESEARCH DEFARYMENT OF ENGLISH
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## Dr. T. Jayakumar

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## CERTIFICATE

This is to Certify that the dissertation entitled The Empowerment of Indians on a globalized World in Chetan Bhagats One Nights @ the Call Center done under my guidance submitted to Thanthai Periyar Government Arts & Science College, Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of the Master of Arts in English. During the 2020-2022 in the subject English is the Original work of the candidate.

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This is to certify that the dissertation entitled "GREEDINESS" IN R.K. NARAYAN'S THE FINANCIAL EXPERT submitted by K. SHIVANI (Reg. No. 20PEL32) to Thanthai Periyar Government Arts & Science College (Autonomous) Tiruchirappalli- 23 in partial fulfillment of the requirements for the award of the Degree of Master Of Arts in English, during the year 2021-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled Conflict between old and Emerging Ideas in Anita Desai's Voices in the City submitted by E. SATHYA (Reg.No.20PEL31) to Thanthai Periyar Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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Signature of the External Examiner

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#### CERTIFICATE

This is to certify that the project work entitled "Psychological Trauma in Toni Morrison's *Beloved*" submitted by A. SARANYA, Reg. No. 20PEL30, in partial fulfilment of the requirement of the P.G. Degree Course in M.A. English for the academic year 2021 - 2022, is a bonafide record of the project work undertaken by the candidate independently.

A. Sarange Signature of the Candidate

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#### CERTIFICATE

This is to certify that the dissertation entitled "PHYTOCHEMICAL ANALYSIS, ANTI-MICROBIAL AND ANTI-OXIDANT ACTIVITY OF Metha X Piperita (pudina) polar extracts" is a record of project work done by RANJANI. R (Reg. No. 20PBC17) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other University or Institution for the award of any degree or diploma.

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This is to certify that the dissertation entitled Realism in Select Short Stories of Mulk Raj Anand submitted by G.PRIYANKA (Reg.No.20PEL29) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022 is the original work of the candidate.

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This is to certify that the Project entitled Thematic Analysis in Margaret Atwood's The Blind Assassin submitted by S.Pavithra Lakshmi (Reg.No.20PEL28) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2021-2022, is the original work of the candidate.

5. Pavithra Lakshni Signature of the candidate

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Signature Research Department of English
Signature Research Department

Arts & Science College (Autono Tiruchirappalli-620 023. Signature of the Guide

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#### Dr.S.MOHANDOSS

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This is to certify that the dissertation entitled "Small Things" in Arundhati Roy's "The God of Small Things": A Thematic Study submitted by R.Kokila (Reg.No.20PEL27) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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#### **CERTIFICATE**

This is to certify that the Project Work entitled Feminist Ideology in Robertson Davies's At my Heart's Core done under my guidance submitted to Thanthai Periyar Government Arts and Science College (Autonomous), Tiruchirappalli – 23, in partial fulfillment of the requirements for the award of the Degree of the Master of Arts in English, during the year 2020-2022 in the subject English; is the original work of the candidate.

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This is to certify that the dissertation entitled Casteism and Dalitism In Arundhtai Roy's THE GOD OF SMALL THING'S submitted by M.DEVIKA (Reg.No.20PEL25 ) to Thanthai Periyar Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled A Study of Marxism in the Communist Manifesto submitted by S.Bhuvaneswari (Reg.No.20PEL24) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled Domestic Violence In The Thousand Splendid Suns submitted by R.Aswitha (Reg.No.20PEL23) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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#### Certificate

This is to certify that the dissertation entitled The Optimism in Penury in Anitha Desai's The Villages by The Sea submitted by S.Vishnu (Reg.No.20PEL22) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled "Representation of ClassStruggle in Aravind Adiga's The WhiteTiger" submitted by P.VINOTHKUMAR (Reg.No.20PEL21) to Thanthai Periyar Government Arts and Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled Sense of Belonging in Jhumpa Lahiri's *The Namesake* submitted by P. Vignesh (Reg.No.20PEL20) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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## CERTIFICATE

This is to certify that the dissertation entitled "Biosynthesis of Silver Nanoparticles from Origanum majorana (Marikozhundhu) and its Anti-Microbial and Anti-oxidant activity" 'is a record of project work done by RAJALAKSHMI. G (Reg. No. 20PBC16) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other university or institution for the award of any degree or diploma.

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This is to certify that the declaration entitled "THEMES IN SWAMI AND FRIENDS BY R.K.NARAYAN" submitted by B. SUBASHCHANDRABOSE (Reg. No. 20PEL19) to Thanthai Periyar Government Arts And Science College (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2021-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled Historical Perspective of Myth and Tradition iGirish Karnad's Naga- Mandala submitted by S.SRIRAM (Reg.No.20PEL18) to Thanthai Periyar Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled Nostalgia of College Life in R.K. Narayan's Bachelor of Arts submitted by (Reg.No.20PEL17) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled Caste Consciousness in Arundhati roy's The god of small things submitted by A. Rackesh (Reg.No.20PEL15) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled THE TREATMENT OF MARITAL LOVE IN R.K.NARAYAN'S THE ENGLISH TEACHER submitted by B.PARTHASARATHI (Reg.No.20PEL13) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2021-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled Theme of Self-Respect in Rabindranath Tagore's Chitra submitted by K.Mathiyalagan (Reg.No.20PEL12) to Thanthai Periyar Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the Project entitled Pluralism in Mahesh Dattani's Final Solutions submitted by C.Manivel (Reg.No.20PEL11) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2021-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled A Study of An Individual & Cultural Society In The Age of Innocence submitted by K.Manikandan (Reg.No.20PEL10) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

of the read of the Department earch Department of English

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This is to certify that the dissertation entitled Feminine Identity In Manju Kapur's *Home* submitted by K.Manikandan (Reg.No.20PEL09) to Thanthai Periyar Government Arts and Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2021-2022, is the original work of the candidate.

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#### CERTIFICATE

This is to certify that the dissertation entitled "Isolation, Biochemical characterization and antibiotic resistance of selected bacterial isolates from Rameswaram marine water' 'is a record of project work done by PRIYANKA . E (Reg. No: 20PBC15) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at Thanthai Periyar Government Arts & Science College (Autonomous), ,Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other university or institution for the award of any degree or diploma.

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This is to certify that the dissertation entitled An Ecocritical Appreciation in Daniel Defoe's Robinson Crusoe is the bonafide record of the original work carried out by KUMARAN ARUL DEVARAM S (Reg.No. 20PEL08) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 during the academic year 2020-2022 under my supervision and that this work is genuine.

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This is to certify that dissertation entitled The Idea of Religion in Charlotte Bronte's Jane Eyresubmitted by S. Dhinakar (Reg.No.20PEL07) to Thanthai periyar Government Arts and Science college, (Autonomous), Tiruchirappalli-23 in partial fulfilment of the requirements for the award of the Degree of master of Arts in English, during the year 2021-2022, is the original work of the candidate.

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#### Certificate

This is to certify that the dissertation entitled Realism and Socio Culture Struggle in Coolie by Mulkraj Anand submitted by (Reg.No.20PEL06) to Thanthai Periyar Government Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled EXISTENTIAL ANXIETYIN R.K.NARAYANAN'S "THE ENGLISH TEACHER" submitted by (Reg.No.20PEL05) to Thanthai Periyar Government Arts Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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This is to certify that dissertation entitled Conflicts Between Tradition and Modernity in R.K. Narayan 'The Guide' submitted by S. Aravinthkumar (Reg.No.20PEL03) to Thanthai periyar Government Arts and Science college, (Autonomous), Tiruchirappalli-23 in partial fulfilment of the requirements for the award of the Degree of master of Arts in English, during the year 2021-2022, is the original work of the candidate.

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This is to certify that the dissertation entitled Gender Discrimination In Arundhtai Roy's The God of Small Things submitted by M.Anbukkarasu (Reg.No.20PEL02) to Thanthai Periyar Arts & Science College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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#### CERTIFICATE

This is to certify that the dissertation entitled TRANSLATING ERNEST HEMINGWAY'S "THE OLD MAN AND THE SEA" INTO TAMIL. Submitted by B.ADLIN BEJO (Reg.No.20PEL01) to Thanthai Periyar Government Arts and College, (Autonomous), Tiruchirappalli-23 in partial fulfillment of the requirements for the award of the Degree of Master of Arts in English, during the year 2020-2022, is the original work of the candidate.

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## CERTIFICATE

This is to certify that the project work entitled IMPACT OF COVID-19 ON INDIA'S ECONOMIC GROWTH submitted by SELVI K.THANGAMANI(Reg.No.20PEC14), in partial fulfilment of the requirement of the P.G. Degree course M.A. Economics for the academic period 2021-2022 is a bonafied record of the project work undertakeneby the candidate independently.

Thangervanl, K. Signature of Candidate

Ducke by object 2 Signature of the Project Guide

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Date: 30.05.2022

This is to certify that the project work entitled "ECONOMIC ANLAYSIS OF CROP DIVERSIFICATION: A STUDY IN VIRUTHAPPATTY VILLAGE OF PUDUKKOTTAI DISTRICT" is submitted by MS. G. THAMARAI SELVI, REG NO: 20PEC13 in partial fulfilment of the requirements of the P.G Degree course in M.A Economics for the academic period 2020-2022 is a bonafide record of the project work undertaken by the candidate in the department.

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Project Guide associate Professon, PU & Research Dept, of Economic Perivar E V.R. College Autonomou: Truchirappalli 620,023

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#### **CERTIFICATE**

This is to certify that the dissertation entitled "ANTI-AGEING ACTIVITY OF ETHANOL EXTRACT OF COSTUS IGNEUS STEM" is a bonafide record of work done by P.PRASANA SRI (20PBC14) in the PG Department of Biochemistry Thanthai Periyar Government Arts and Science College (Autonomous), Trichy-620023. In partial fulfilment of the requirements for the award of the degree of MASTER OF SCIENCE IN BIOCHEMISTRY during the academic period 2020-2022 in the department of biochemistry under my guidance and supervision and the project work has not previously formed the basis for the award of any degree, diploma, associateship, fellowship of any other similar title..

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## CERTIFICATE

This is to certify that the project work entitled THE IMPACT OF MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACTAMONG RURAL WOMEN WITH SPECIAL REFERENCE TO OLAYUR VILLAGE, SRIRANGAM TALUK THIRUCHIRAPPALLI DISTRICT submitted by K. SINDHMATHI (Reg. No.20PEC12), in partial fulfilment of the requirement of the P.G. Degree course in M.A. Economics for the academic period 2021-2022 is a bonafide record of the project work undertaken by the candidate independently.

SIGNATURE OF CANDIDATE

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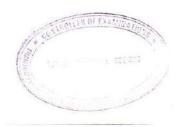
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## CERTIFICATE

This is to certify that this dissertation entitle, "A STUDY ON SOCIO ECONOMIC CONDITIONS OF FISHERMEN IN MANAMELKUDI TALUK, PUDUKKOTTAI DISTRICT OF TAMIL NADU", is being submitted by miss. L. SALINI in partial fulfilment of the degree of Master of Arts in Economics in Thanthai Periyar Government Arts and Science College (Autonomous) (Affiliated to the Bharathidhasan University), Trichirappalli, is a bonafide record of work carried out by her under my guidance and supervision.

It is further certified that to the best of my knowledge this dissertation or any part thereof has not been submitted in this university or elsewhere of any other Degree or Diploma.

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This is to certify that the project work entitled "A STUDY ON THESOCIO ECONOMIC CONDITIONS OF JALLIPATTY VILLAGE AND EFFECTIVENESS OF SWACHH BHARAT ABHIYAN-- KARUR DISTRICT"submitted By S.ARUNPRASATH (REG NO: 20PEC02) in partial fulfillment of the requirements of the P.G Degree course in M.A Economics for the academic period 2020-2022 is a bonafied record of the project work undertaken by the candidate independently.

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This is to certify that the project work entitled A STUDY ON THE PRESENT CENARIO OF INDIA'S FOREIGN DIRECT INVESTMET INFLOW AND THE IMPACT OF COVID-19 submitted by T. AJITHKUMAR Reg.No. 20PEC01 partial fulfilment of the requirement of the P.G. Degree course in M.A. conomics for the academic period 2021-2022 is a bonafied record of the project ork undertaken by the candidate independently.

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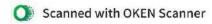
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This is to certify that the dissertation entitled "ANTIFOULING EFFECT OF POLYHERBAL FORMULATION AGAINST ULVA LACTUCA" is a record of project work done by KRISHNAVENI. V (Reg. No: 20PBC12) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at THANTHAI PERIYAR GOVT. ATRS AND SCIENCE COLLEGE (Autonomous). Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other University or Institution for the award of any degree or diploma.

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This is to certify that the dissertation entitled "MOLECULAR DOCKING STUDY OF GALLIC ACID AGAINST GLUCAGON LIKE PEPTIDE-1" is a record of project work done by POOMADAN.M (Reg. No: 20PBC02) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at THANTHAI PERIYAR GOVT. ATRS AND SCIENCE COLLEGE(Autonomous), Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other University or Institution for the award of any degree or diploma.

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This is to certify that the dissertation entitled "MORPHOLOGICAL IDENTIFICATION, GROWTH PROFILE ANALYSIS AND BIOCHEMICAL PARAMETER ESTIMATION ON BLUE GREEN ALGAE' 'is a record of project work done by M. EBENEZER (Reg. No: 20PBC01) under my supervision for the award of the Degree of MASTER OF SCIENCE in PG & Research Department of Biochemistry at Thanthai Periyar Government Arts & Science College (Autonomous), Tiruchirappalli-23, the results embodied in this thesis are new and have not been submitted to any other university or institution for the award of any degree or diploma.

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