



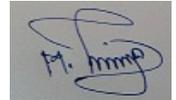
Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:30-06-2020

Department	ELECTRICAL AND ELECTRONICS ENGINEERING	Application No.	20200185
Area of Research	MICROGRID AND RENEWABLE ENERGY SYSTEMS	Research Mode	PART TIME

Name :THIYAGARAJAN.M
Date of Birth / Age :22-07-1985 / 34 Years
Gender :MALE
Category :BC
e-Mail ID :thiyagarajanped@gmail.com
Mobile :9788460396



Father's/Husband's Name	MUTHAIYAN.V	Father's/Husband's Occupation	BUSINESS
Family Income	2,40,000	Residential Type	RURAL
Birth Place	KUMBAKONAM	Mother Tongue	TAMIL
Religion	HINDU	Martial Status	MARRIED
Aadhaar No.	922310355895	PAN No.	AIOPT4834F
Physically Challenged	NO	Type of Disability	-

Address for Communication: 113-24 NORTH STREET, THIRUNAGESWARAM KUMBAKONAM THANJAVUR DISTRICT TAMILNADU INDIA Pin-612204	Permenant Address: 113-24 NORTH STREET, THIRUNAGESWARAM KUMBAKONAM THANJAVUR DISTRICT TAMILNADU INDIA Pin-612204
------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------

Qualification						
Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
M.TECH	POWER ELECTRONICS AND DRIVES	PRIST UNIVERSITY	2013	8.91 CGPA	DISTINCTION	REGULAR
B.E	EEE	ANNA UNIVERSITY	2006	62 %	FIRST	REGULAR

Experience					
Organization	Designation	Experience From	Experience TO	Work Nature	
ARASU ENGINEERING COLLEGE	ASSISTANT PROFESSOR	2015-06-15	2020-06-30	TEACHING	
BHARATHIYAR COLLEGE OF ENGINEERING AND TECHNOLOGY	ASSISTANT PROFESSOR	2013-07-15	2015-05-28	TEACHING	
SRI GANESH ENGINEERS	ELECTRICAL ENGINEER	2010-07-01	2011-05-31	PROJECT MANAGEMENT	
PROMAC ENGINEERING INDUSTRIES PRIVATE LTD	ELECTRICAL ENGINEER	2008-10-29	2010-03-30	PROJECT MANAGEMENT	

Payment Details				
Transaction ID	Reference	Date of transaction	Amount	Status
20200185_200630165304	SCUB8947867475	30-06-2020	600	SUCCESS

Power quality Enhancement in Microgrid by using IOT

This write up presents an optimal power control strategy for an autonomous microgrid operation based on a real-time self-tuning method. The purpose of this work is to improve the quality of power supply of the microgrid where some Distributed Generation (DG) units are connected to the grid. Voltage and frequency regulation, and power sharing are the main performance parameters which are considered in this work.

The most desirable characteristics of today's power system with distributed energy resources (DER) forming the microgrid is the reliability of the power supply and immunity to various power quality (PQ) issues. It is important to examine PQ issues arising from the introduction of DER and behavior of Microgrid with penetration of various loads.

microgrid that has some special characteristics that would improve the overall efficiency of system to make it environment friendly, gain more functionality by increasing energy intensity, increasing the overall use and values of existing productions and transmission capacity, integrate greater levels of renewable energy sources (RESs), improve power quality to correspond to new digital demands, become more reliable, resilient, flexible, and sustainable.

The key characteristics needed for these changes are listed as follows:

- Intelligence (learning ability)
- Two-way communication
- Self-healing
- Advanced metering infrastructure (AMI)

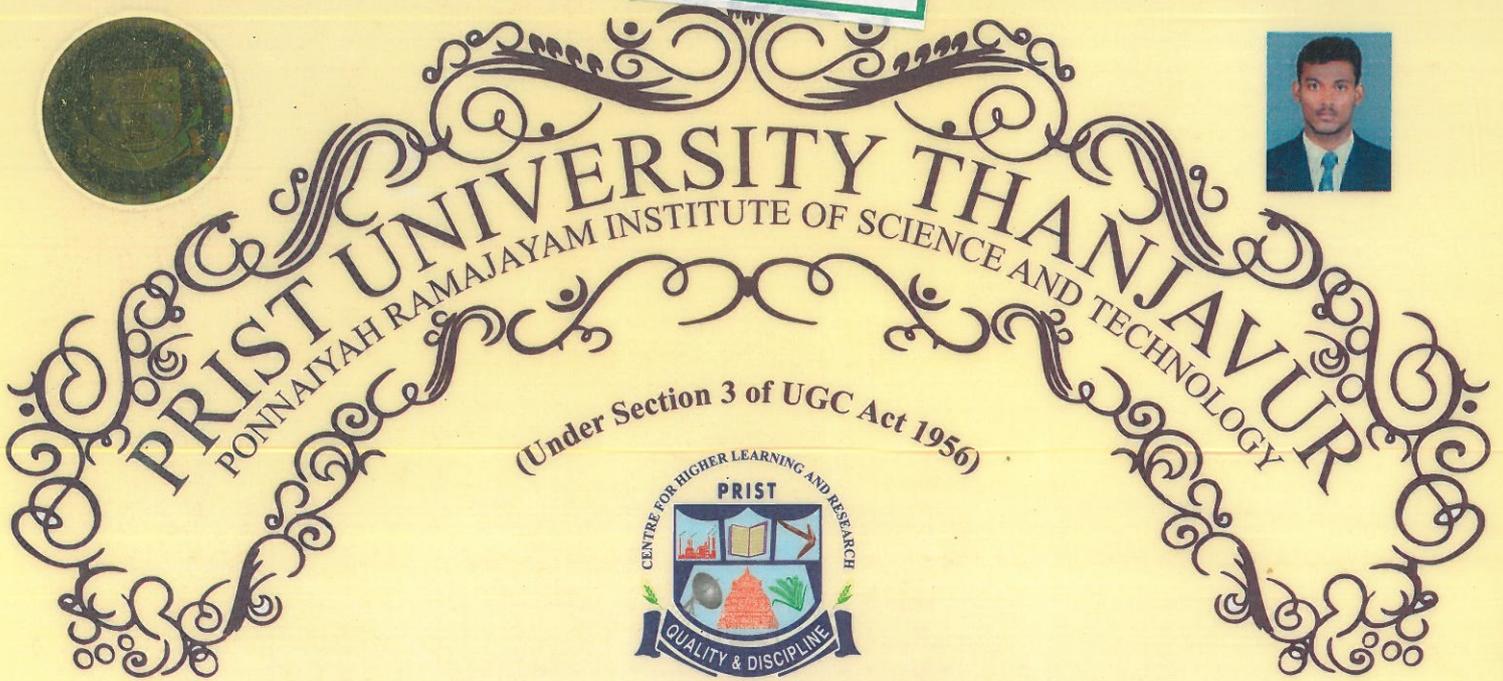
The major Challenges in micro grid power quality are Power electronic devices, Renewable energy sources integration and Plug-in hybrid electrical vehicles integration. Hence the micro grids technology will bring new tools as well as new challenges that are inevitable.

These tools are Advanced metering infrastructure, Information and communication technology, Smart appliances, Storage devices, Computational intelligence, Advanced control methods, Active demand-side management and demand response, Multiagent technology and Internet of things.

These tools could be divided into several categories such as technologies, concepts, and novel control methods. A smarter grid requires the participation of the tools, which can deliver technology solutions to overcome the challenges in power quality issues , assist utilities and engage consumers.

In the research, I am planning to enhance the power quality in Microgrid through power quality improvement devices, power electronic converters and power electronic controllers by using internet of things..

15 M.TECH
PED 09



The Board of Management and the Academic Council of

this University hereby make known that

THIYAGARAJAN .M

has been admitted to the Degree of

MASTER OF TECHNOLOGY IN POWER ELECTRONICS AND DRIVES

having completed all the Academic requirements and having been certified by duly appointed Examiners to be qualified to receive the same with **FIRST CLASS WITH DISTINCTION.**

in the Examination conducted during **APRIL 2013**



Given under the seal of the University



The Syndicate of the Anna University hereby makes known that **THIYAGARAJAN M** has been admitted to the **DEGREE OF BACHELOR OF ENGINEERING** in **ELECTRICAL AND ELECTRONICS ENGINEERING** under the Faculty of Electrical Engineering having completed the prescribed programme of study and having been certified by duly appointed examiners to be qualified to receive the same and having been placed by them in the **FIRST CLASS** at the Examination held in **NOVEMBER 2006**.

Given under the Seal of the University



Chennai 600 025
India
March 2007

CSUM310500925

V. Thyagarajan

Controller of Examinations

K. Jeyaraman

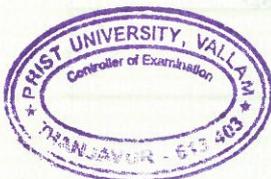
Registrar

Thiyagarajan M

Vice-Chancellor

61070A9171C46A0DA3649BCFC7A



Name of the Candidate	THIYAGARAJAN .M ✓		Register No.	2111281009 ✓		
Programme & Branch	M.Tech - Power Electronics and Drives ✓	Batch	2011 - 13 ✓	Month & Year of last appearance	APRIL 2013 ✓	
Semester & Subject Code	Subject Title	Credit	Grade	Grade Point	Month & Year	
1 11248S11	APPLIED MATHEMATICS FOR ELECTRICAL AND ELECTRONICS ENGINEERING	4	A	9	DEC2011	
1 11253H12	ADVANCED SEMICONDUCTOR DEVICES AND THEIR APPLICATIONS	4	A	9	DEC2011	
1 11253H13	ANALYSIS OF POWER CONVERTERS	4	B	8	DEC2011	
1 11253H14	ANALYSIS OF INVERTERS	4	B	8	DEC2011	
1 11253H15	MODELING AND ANALYSIS OF ELECTRICAL MACHINES	4	B	8	DEC2011	
1 11253L16	POWER ELECTRONICS LAB - I	3	S	10	DEC2011	
2 11253E24A	FLEXIBLE AC TRANSMISSION	4	B	8	MAY2012	
2 11253H21	SOLID STATE DC DRIVES	4	A	9	MAY2012	
2 11253H22	SOLID STATE AC DRIVES	4	B	8	MAY2012	
2 11253H23	MICROPROCESSOR AND MICROCONTROLLER APPLICATIONS IN POWER ELECTRONICS	4	A	9	MAY2012	
2 11253L25	POWER ELECTRONICS LAB - II	3	A	9	MAY2012	
2 11253P26	MINI PROJECT	6	A	9	MAY2012	
3 11253E32B	WIND ENERGY CONVERSION SYSTEM	4	B	8	NOV2012	
3 11253E33B	HVDC TRANSMISSION	4	A	9	NOV2012	
3 11253H31	EMBEDDED CONTROL OF ELECTRICAL DRIVES	4	B	8	NOV2012	
3 11253P34	PROJECT WORK PHASE - I	6	S	10	NOV2012	
3 112TECWR	TECHNICAL WRITING / SEMINARS	3	A	9	NOV2012	
4 11253P41	PROJECT WORK PHASE - II	12	S	10	APR2013	
----- End of The Statement -----						
Extra Credits Earned						
 -- NIL --						
CGPA	8.91	CLASS	DISTINCTION ✓			

DATE: **02 JUL 2013**

This grade sheet bears no correction


CONTROLLER OF EXAMINATIONS



B.E. DEGREE EXAMINATIONS

CONSOLIDATED STATEMENT OF MARKS

NAME OF THE CANDIDATE		THIYAGARAJAN M				REGISTER NO.		80402105048					
COLLEGE OF STUDY		804: Arasu Engineering College				MONTH & YEAR OF LAST APPEARANCE		November 2006					
PROGRAMME & BRANCH		B.E. Electrical and Electronics Engineering				REGULATIONS		2001					
SEM.	SUBJECT CODE	SUBJECT TITLE	MAX	MIN	MARKS SECURED	MONTH & YEAR OF PASSING	SEM.	SUBJECT CODE	SUBJECT TITLE	MAX	MIN	MARKS SECURED	MONTH & YEAR OF PASSING
01	CMI131	Chemistry I	100	50	065	DEC 2002	05	EE336	Design of Electrical Apparatus	100	50	053	APR 2005
01	GE131	Engineering Mechanics	100	50	057	DEC 2002	05	EE341	Control Systems Laboratory	100	50	081	APR 2005
01	MA131	Mathematics I	100	50	053	DEC 2003	05	EE342	Power Electronics Lab	100	50	090	APR 2005
01	PH131	Physics I	100	50	061	APR 2003	06	EE337	Digital Signal Processing	100	50	061	APR 2005
01	HS041	English - I	100	50	054	DEC 2002	06	EE338	Protection and Switchgear	100	50	052	APR 2005
01	GE132	Computer Practice I	100	50	074	DEC 2002	06	EE339	Power System Analysis	100	50	052	APR 2005
01	GE133	Workshop Practice	100	50	081	DEC 2002	06	EE340	Microprocessor and Applications	100	50	065	APR 2006
02	CE151	Solid Mechanics	100	50	050	APR 2004	06	EE350	Computer Architecture	100	50	060	APR 2006
02	EE131	Electric Circuit Analysis	100	50	050	DEC 2003	06	MG331	Principles of Management	100	50	067	APR 2005
02	MA132	Mathematics II	100	50	058	APR 2006	06	EE343	Measurement and Instrumentation Laboratory	100	50	087	APR 2005
02	PH133	Physics II	100	50	059	NOV 2004	06	EE344	IC and Microprocessor Laboratory	100	50	080	APR 2005
02	HS042	English II	100	50	050	DEC 2003	07	CE071	Principles of Environmental Science and Engineering	100	50	050	NOV 2005
02	EE141	Electric Circuits Laboratory	100	50	068	APR 2003	07	EE431	Power System Control	100	50	055	APR 2006
02	GE134	Engineering Graphics	100	50	064	APR 2003	07	EE432	Solid State Drives	100	50	050	NOV 2006
02	GE135	Computer Practice II	100	50	063	APR 2003	07	EE433	High Voltage Engineering	100	50	056	NOV 2005
03	CE261	Fluid Mechanics	100	50	050	NOV 2005	07	GE035	Professional Ethics	100	50	071	NOV 2005
03	EC253	Electron Devices	100	50	056	NOV 2004	07	MG431	Engineering Economics and Financial Accounting	100	50	051	NOV 2005
03	EE231	Electromagnetic Theory	100	50	050	NOV 2004	07	EE435	Power System Simulation Lab	100	50	089	NOV 2005
03	EE232	Electrical Machines - I	100	50	052	NOV 2004	07	EE439	Comprehension	100	50	075	NOV 2005
03	MA231	Mathematics - III	100	50	050	APR 2004	08	GE406	Total Quality Management	100	50	054	APR 2006
03	ME251	Thermodynamics	100	50	052	NOV 2005	08	EE045	Bio-Medical Instrumentation	100	50	058	APR 2006
03	PH231	Materials Science	100	50	051	NOV 2004	08	EE050	Solid State Relays	100	50	069	APR 2006
03	EE241	Electrical Machines Lab - I	100	50	081	DEC 2003	08	EE444	Project Work	200	100	177	APR 2006
04	EC254	Electronic Circuits	100	50	051	APR 2004							
04	EC256	Communication Engineering	100	50	066	APR 2004							
04	EE234	Electrical Machines - II	100	50	055	NOV 2004							
04	EE235	Control Systems	100	50	064	APR 2004							
04	EE236	Network Analysis and Synthesis	100	50	052	APR 2005							
04	EE237	Object Oriented Programming	100	50	053	APR 2006							
04	EC258	Electronics Laboratory	100	50	070	APR 2004							
04	EE242	Electrical Machines Lab-II	100	50	058	APR 2004							
05	EE331	Measurements and Instrumentation	100	50	060	NOV 2005							
05	EE332	Power Electronics	100	50	050	APR 2005							
05	EE333	Digital Systems	100	50	050	APR 2005							
05	EE334	Integrated Circuits	100	50	051	APR 2006							
05	EE335	Transmission and Distribution	100	50	057	APR 2006							
End of Statement													
Classification : FIRST CLASS													
Total Marks (from 3rd to 8th semester) : 2782 / 4500													
Percentage (rounded to nearest integer): 62													



Medium of Instruction : ENGLISH

Chennai - 600 025.

Date : 15/02/2007

Controller of Examinations



TRANSFER & CONDUCT CERTIFICATE

Serial No: 07855

1. Name of the Student (IN BLOCK LETTERS) : **M,THIYAGARAJAN**
2. Name of the Father / Guardian : **V,Muthaiyan**
3. Date of Birth as entered in the University Records (in figures and words) : **22.07.1985**
(TwentySecond July Nineteen Eighty Five)
4. Gender : **Male / Female**
5. Nationality : **Indian**
6. Date of Admission : **July-2011**
7. Programme to which the Student was admitted : **M.Tech(Power Electronics and Drives)**
8. Register Number : **2111281009**
9. Duration of the Programme : **2years**
10. Semester studied at the time of leaving the University : **4th Sem**
11. Whether completed the Programme of Study : **Refer Grade Sheets**
12. Date of Leaving the University : **May-2013**
13. Conduct and Character : **GOOD**
14. Date of issue of Transfer Certificate : **05.07.2013**



Office Seal

DEAN,
Engineering & Technology
PRIST UNIVERSITY
THANJAVUR-613 403



Arasu Engineering College

(Approved by AICTE & Affiliated to Anna University)

Chennai Main Road, Kumbakonam - 612 501.

PH : (0435) 2452444, 3299999, 6533333 FAX : (0435) 2452166

Website : www.aec.org.in E-mail : arasuengg@aec.org.in



T. Senthilkumar

Vice Chairman

AEC/Est/2015/T-069

May 29, 2015

Mr. M. Thiyagarajan
S/o. V. Muthaiyan
113/24, North Street
Thirunageswaram
Kumbakonam

Dear Sir/Madam,

Sub.: Appointment order for the post of **Assistant Professor** in the **Department of Electrical and Electronics Engineering** – Reg.

With reference to your application and the subsequent interview you had with us on **29.05.2015**, we are happy to issue this appointment order to you, for the post of **Assistant Professor** in the Department of **Electrical and Electronics Engineering** of this institution, in the scale of pay of **Rs.15600-39100** plus other allowances.

You are requested to convey your acceptance immediately on receipt of the order, and join duty on or **before 15.06.2015**.

You should not engage yourself in any other employment, either on full time or part time basis, during your tenure in this institution.

The minimum tenure of service shall be 3 (three) years, of which the first two years will be your probation period and the third year will be your regularization period. In this connection, you are required to sign an affidavit to the effect that you will work in this institution for a period of minimum 3 (three) years without any break.

The normal relieving from duty will be allowed only after completing 3 (three) years of service in this institution; that too, at the end of the academic year. For that, you have to tender your resignation letter during the month of March of the year; or three-month salary in lieu thereof. Service certificate will not be issued if you happen to leave the institution before completion of the stipulated three years period.

Also you are required to submit the following original certificates/documents as may be applicable to the post at the time of joining duty.

- U.G. & P.G. Degree certificates
- Transfer certificate from the last institution studied
- SSLC or HSC Mark sheet - Age proof
- Community certificate – for statistical purpose
- Experience certificate, if any

The receipt of the appointment order should be acknowledged.

Copy to:

1. The Principal
2. The HoD
3. Establishment section



T. Senthilkumar
VICE-CHAIRMAN
29/5/15



BHARATHIYAR COLLEGE OF ENGINEERING AND TECHNOLOGY

THIRUVETTAKUDY, KARAİKAL - 609 609. U.T. OF PUDUCHERRY

Sponsored by Sri Balaji Educational & Charitable Public Trust

(Approved by AICTE, New Delhi and Affiliated to Pondicherry University)



Courses Accredited by NBA; ISO 9001 - 2008 Institution

Phone : 04368 - 265915-917, 266415-417, 266015; Fax: 04368-266016; E-mail: bcetmail@vsnl.net

Dr. S. RAVICHANDRAN, M.E, Ph.D
PRINCIPAL

May 28, 2015

Ref: BCET / Staff File / 15 /127

SERVICE CERTIFICATE

This is to certify that Mr. M. THIYAGARAJAN worked as Assistant Professor in Electrical and Electronics Engineering Department at Bharathiyar College of Engineering and Technology, Karaikal from 15.07.2013 to 28.05.2015.

He was relieved of his duties on 28-05-2015 AN of his request.


PRINCIPAL



SRI GANESH ENGINEERS

No.9, 5th Cross, Pudunagar,
Reddiarpalayam, Puducherry - 10

Res : 04142 - 278334
Mobile : 99409 88988
94865 21008
97876 98468

Selvakumar.D
Sole Proprietor

Date : 04.06.2011

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. **M. THIYAGARAJAN** working in our organization as an **ELECTRCAL ENGINEER** from JULY 2010 to MAY 2011

He was involved in industrial electrical erection and commissioning works...

He gets salary Rs 22,000 per month from our organization on the basis of mentioned below

Basic salary = 16,000
Site allowance = 6,000 (Rs 200 per day)
Total salary = 22,000

His performance, character and conduct were found good during this period.

We wish to him better success in his future.

C. Mahesh
04.06.11
C MAHESH (G)
FOR GANESH ENGINEERS

✦ Instrumentation & Electrical Work
✦ Maintenance Work

✦ Calibration, Erection & Commissioning
✦ Man Power Supply

✦ Supply & Erection Contractor
✦ Ferrul Printing



Ref: HR/CER/10

March 27, 2010

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.Thiyagarajan.M joined our Organization on October 29, 2008. He served the company for 1year 5 months in Electrical department.

He was involved in industrial electrical works of many projects. His performance, character and conduct were found satisfactory during the tenure with the company.

We wish him all the best in his future endeavors

For Promac Engineering Industries Ltd


N.Subbaraya
President

URS ENGINEERING CONTRACTORS

(HEAVY EQUIPMENTS ERECTORS)

Galaxy
Niramaruthur PO.
Via Tirurr
Malappuram Dt.
Kerala 676109

Camp

Ref No

Date :

30.05.2008

TO WHOM SO EVER IT MAY CONCERN

This is the certify that Mr. M.THİYAGARAJAN as worked with us as a ELECTRICAL ENGINEER in the erection and Commissioning of Coal Handling Plant by M/s ThyssenKrupp Industries India pvt ltd, at NTPC, Sipat site in Blaspur (C.G), from June 2006 to May 2008.

During this service period his performance was good to the best of our knowledge. We wish to him better success in his future.



For, URS ENGINEERING CONTRACTORS,

आयकर विभाग

INCOME TAX DEPARTMENT



भारत सरकार

GOVT. OF INDIA

M THIYAGARAJAN

MUTHAIYAN

22/07/1985

Permanent Account Number

AIOPT4834F

M. Thiyagarajan

Signature



27022009



India Driving Licence (Tamilnadu)
Form - 7

D.O.I. 06/04/2006

D.L. No : F/TN/49Z/001232/2006

Name : M.Thiyagarajan

S/D/W of : V.Muthaiyan

Address :

113-24, North St
Thirunageswaram
Kumbakonam Tk

D.O.B. : 22/07/1985 B.G.:



Endorsement



Licensed to drive throughout India, vehicles of the following description and valid upto 05/04/2026

MCWG -06/04/2006/TN/49Z LMV -06/04/2006/TN/49Z

[Handwritten Signature]
Signature/L.T.I.
of the Holder

[Handwritten Signature]
Asst.Licensing Authority
Kumbakonam

2001/2001

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11 2001
GCP(ET6)-26/6—7,90,900 Cps.-9-6-2000

R.Dis...../200 dt.

BC



மாவட்டக் குறியீடு எண் District Code	11
வட்டக் குறியீடு எண் Taluk Code	04
கிராமக் குறியீடு எண் Village Code	030

சான்றிதழ் எண்
Certificate No.

8977803

சாதிச் சான்றிதழ்
COMMUNITY CERTIFICATE

தீட்சையூர் மாவட்டம் சூப்பகோணம் வட்டம்
கிராமம்/நகரம் திருச்செல்வனம்
சூப்பகோணம்
M. தியாகைய்யன்
தகப்பனார்/தணவர்
V. சீனிவாசன்
கூட்டி - சீனிவாசன்
சார்ந்தவர், தமிழ்நாடு அரசு ஆணை நிலை எண் 28 பிற்பட்ட மற்றும்
பிரிவு-பிற்பட்ட பிரிவின் நலத் துறை, நாள் 19-7-1994 வரிசை எண் 39
பிற்பட்ட கிராமத்தின் சார்ந்தவர் எனச் சான்றளிக்கப்படுகிறது.

This is to certify that Son/Daughter
of Thiru..... of
Village / Town..... Taluk.....
District of the State of Tamil Nadu belongs to

Community which is recognised as a
Backward Class as per Government Order (Manuscript series) No. 28, Backward
Classes and Most Backward Classes Welfare, dated 19th July 1994

Serial No.
தீட்சையூர் மாவட்டம் சூப்பகோணம் வட்டம்
கிராமத்தில் / நகரத்தில் வசித்து வருகிறார்கள் எனச் சான்றளிக்கப்படுகிறது.

2. It is certified that Thiru/Tmt/Selvan/Selvi..... and
his/her family and family residents at Village/Town
..... District of Tamil Nadu.

முத்திரை
Seal



கையொப்பம் :
Signature :

நாள்
Date

(Handwritten Signature)
11-8

.....
Name (in Capital Letters) :

.....
Designation
27.11.2001

சூப்பகோணம்.

ANNEXURE-I

CERTIFICATE FROM THE ORGANISATION WHERE THE CANDIDATE IS EMPLOYED

Certified that Mr./~~Ms./Mrs.~~ M. THAYAGARAJAN is
employed as Assistant Professor (Designation) in the
EEE (Department/Division Name)
of Arasu Engineering College, Kumbakonam
(Institution/Industry Name).

We have no objection in forwarding his/her application for the Ph.D. Research Programme.

FOR FULL TIME:

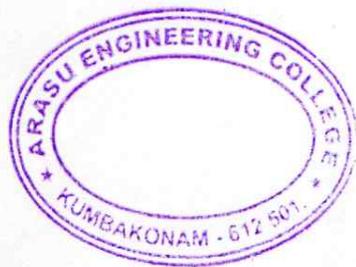
The candidate will be sanctioned leave for the duration of the research programme and will be relieved from duty from _____ to _____ to undertake the full time research work in the University.

FOR PART TIME:

The candidate will be permitted to undertake part time study in the University/College and will be allowed to be present for discussions with the supervisor, attending course works, conduct of experiments and participations in seminars and related presentations. Further the required facilities at our organization will also be provided to the candidate for doing research.

Date: 29/06/20

Signature of the Head of Organization with office seal



PRINCIPAL
ARASU ENGINEERING COLLEGE
Kumbakonam - 612 501