

# REPORT OF THE STUDENT PROJECTS



Cy

# NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)

(Approved by AICTE, New Delhi)(Affiliated to Jawaharlal Nehru Technological  
University, Kakinada) Narasaraopet-522601, Guntur (Dist), A.P

## DEPARTMENT OF CIVIL ENGINEERING



### BONAFIDE CERTIFICATE

This is to certify that the report entitled "PLANNING, ANALYSIS AND  
DESIGN OF G+5 RESIDENTIAL BUILDING BY USING AUTOCAD &  
STAADPROV8i SOFTWARES "is the bonafide work done by

Mr. N.Suresh	17471A0111
Mr. K.Veera Reddy	17471A0129
Mr. M Pavan	17471A0150
Mr. SD.Mastanvali	17471A0149
Mr. P.Bhanu Prakash	17471A0136

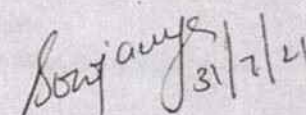
In partial fulfilment of requirement for the award of the degree of Bachelor of  
technology in Civil Engineering of the NARASARAOPETA ENGINEERING  
COLLEGE, NARASARAOPET, during the year 2017-2021



PROJECT GUIDE

D.PRADEEP M.Tech

Assistant professor

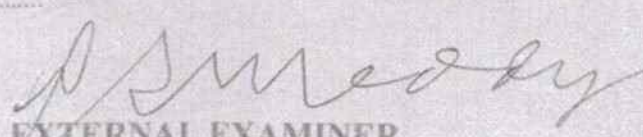
  
HEAD OF THE DEPARTMENT


P.NAGA SOWJANYA M.Tech, PH.D

Associate professor & Head of Department

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Project viva-voce held on.....

  
EXTERNAL EXAMINER

  
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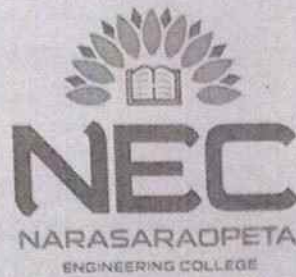
  
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**DEPARTMENT OF CIVIL ENGINEERING**



**BONAFIDE CERTIFICATE**

This is to certify that project report entitled **PLANNING, ANALYSIS AND DESIGN OF G+2 RESIDENTIAL BUILDING LOCATED AT HILLY TERRAIN WITH HIGH WIND VELOCITY**

**SUBMITTED BY**

V.MANGAMMA	18475A0131
A.SAIDULU	17471A0167
G.PRIYANKA	18475A0113
N.ROJA KIRAN	18475A0121
P.LAKSHMI NARAYANA	18475A0126

Under the guidance and supervision in partial fulfilment for the Degree of Bachelor of Technology in Civil Engineering in NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPETA during the academic year of 2017 – 2021.

*Amr 01/08/2021*  
PROJECT GUIDE

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**Dr. P. NAGARAJU, Ph.D.**  
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This is to certify that the thesis titled "MAPPING AND MONITORING OF LAND USE AND LAND COVER CHANGES IN ANDHRA PRADESH BY USING REMOTE SENSING AND GIS" is a bonafide record of the work done by

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Dr. P. NAGA SOWJANYA  
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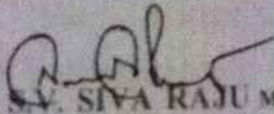


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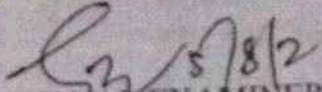
This is to certify that the report entitled ANALYSIS AND DESIGN OF G+9 STOREYED RESIDENTIAL BUILDING BY USING STAAD PRO is a bonafide record of the work done by

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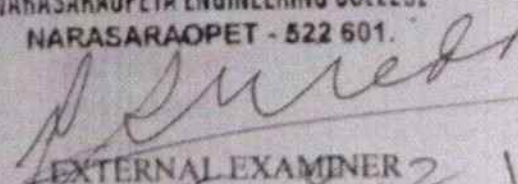
In partial fulfillment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPETA, During the year 2018-2021

  
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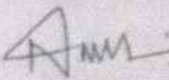


### BONAFIDE CERTIFICATE

This is to certify that the report entitled "ANALYSIS AND DESIGN OF G+6  
RESIDENTIAL BUILDING BY USING AUTOCAD & STAADPROV8i SOFTWARES  
"is the bonafide work done by

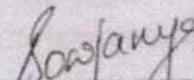
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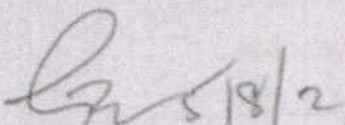
  
21/07/2021  
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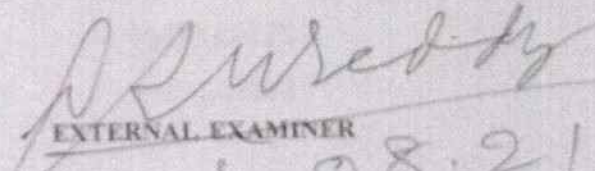
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### BONAFIDE CERTIFICATE

This is to certify that the report entitled "COMPARITIVE STUDY ON C-SHAPED FRAME AND V-SHAPED FRAME OF G+10 MULTI STORIED BUILDINGS BY USING SHEAR WALL AT VARIOUES LOCATIONS FOR DIFFERENT SEISMIC ZONES "is the bonafide work done by

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Mr. Y Karthik Yadav	18475A0110
Mr. A Mani kanta	17471A0157
Mr. SK Abdulla Basha	17471A0169

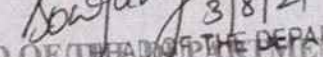
In partial fulfilment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPET, during the year 2017-2021

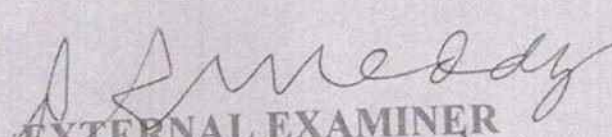
  
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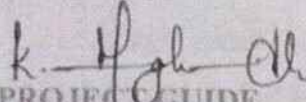


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This is to certify that the report entitled "PLANNING, ANALYSIS AND DESIGN OF G+4 RESIDENTIAL BUILDING BY USING AUTOCAD & STAADPROV8i SOFTWARES" is the bonafide work done by

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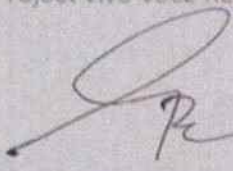
  
PROJECT GUIDE

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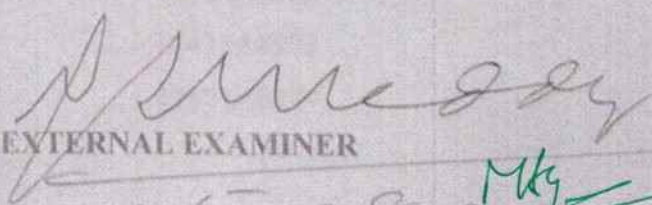
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### BONAFIDE CERTIFICATE

This is to certify that the report entitled "ANALYSIS AND DESIGN OF G+5 RESIDENTIAL BUILDING BY USING STAADPROV8i SOFTWARE" is the bonafide work done by

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In partial fulfilment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPET, during the year 2017-2021

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Associate professor and Head of Department

Project viva-voce held on.....

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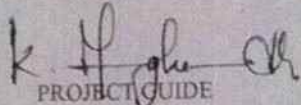
**(AUTONOMOUS)**

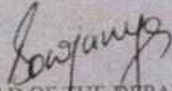
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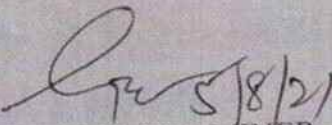
Certified that this project report "ANALYSIS AND DESIGN OF A G+6 RESIDENTIAL BUILDING WITH AND WITHOUT FLOATING COLUMN BY USING STAAD Pro." is a bonafide record of the work done by

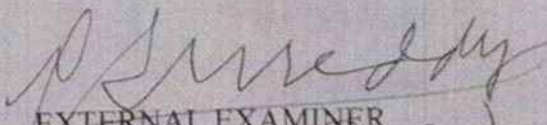
Mr. B. MAHAMMAD RAFI	18475A0119
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In partial fulfillment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, Narasaraopet, during the year 2017-2021


  
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**Dr. P. NAGA SOWJANYA** Ph.D  
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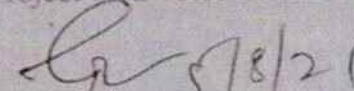
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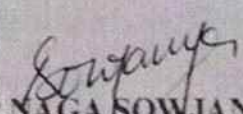
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**MR.D.PRADEEP**

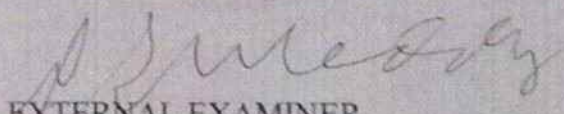
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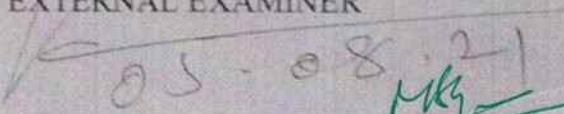
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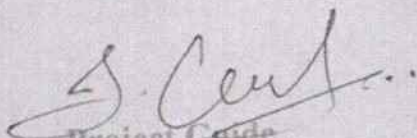
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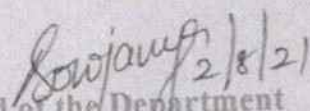
17471A0170

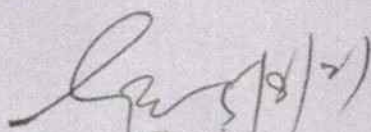
S. RAJASEKHAR REDDY

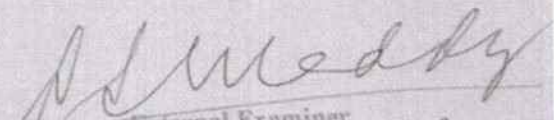
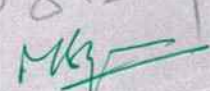
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In partial fulfillment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPET, during the year 2017-2021

  
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Mr. K.SUMANTH	17471A0155
Mr.P.NAVEEN KUMAR REDDY	17471A0158
Mr. G.KARUNYA SHARAN	17471A0172

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Project viva -voice held on *04/08/2021*

*Dr. Bala G. Kishore*  
EXTERNAL EXAMINER



*Principal*  
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NARASARAOPETA ENGINEERING COLLEGE  
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DEPARTMENT OF CIVIL ENGINEERING



BONAFIDE CERTIFICATE

This is to certify that the thesis titled "STABILITY ANALYSIS OF EMBANKMENT USING GEO SLOPE" is a bonafide record of the work done by

Mr.V.AJAY KUMAR	17471A0134
Ms.G.JHANSI BHUVANESHWARI	17471A0124
Mr.SK.MASTAN	17471A0102
Mr.SK.CHAND BASHA	17471A0107
Mr.D.MYTHRESH KRISHNA	17471A0110

In partial fulfillment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, Narasaraopet, during the year 2017-2021

*30/07/21*  
Project Guide  
Mr.B.SIVA MANIKANTA KUMAR M.Tech  
Assistant Professor  
Dept of Civil Engineering

*30/07/21*  
Head of the Department  
DEPARTMENT OF CIVIL ENGINEERING  
NARASARAOPETA ENGINEERING COLLEGE  
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Associate Professor  
Dept of Civil Engineering

Project viva-voce held on *4/8/21*.....

*4/8/21*  
INTERNAL EXAMINER

*4/8/21*  
EXTERNAL EXAMINER



*4/8/21*  
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BONAFIDE CERTIFICATE

This is to certify that project report entitled "PLANNING, ANALYSIS & CONSTRUCTION CONTROLLING OF G+5 BUILDING BY USING PRIMAVERA" is a bonafide record of the working done by.

SHAIK. MOHAMMAD ABUBAKAR	18475A0116
G. VENKATA RAMAKRISHNA	18475A0118
SHAIK. NAGUR BASHA	18475A0122
T. LAKSHMI VENKATESH	18475A0134
PATHIPATI LOKESH	18475A0139

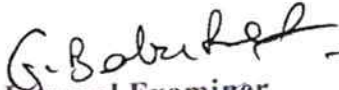
Under the guidance and supervision in partial fulfilment for the Degree of Bachelor of Technology in Civil Engineering in NARASARAOPETA ENGINEERING COLLEGE, Narasaraopet during the academic year of 2018 – 2021.

  
PROJECT GUIDE

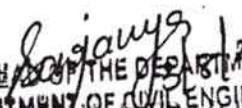
Mr. S. V. SIVA RAJU, M.Tech

Assistant Professor

Project viva- voice held on.....

  
Internal Examiner



  
HEAD OF THE DEPARTMENT  
DEPARTMENT OF CIVIL ENGINEERING  
NARASARAOPETA ENGINEERING COLLEGE

Dr P NARASIMHAIYA M.Tech Ph.D

Associate Professor

  
External Examiner

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## DEPARTMENT OF CIVIL ENGINEERING

### BONAFIDE CERTIFICATE

This is to certify that the report entitled "AN EXPERIMENTAL STUDY ON  
MANUFACTURING OF BRICKS BY USING PLASTIC AND FOUNDRY  
WASTE" is the bonafide work done by

Mr.B. Veeranjanyulu	17471A0115
Mr.B.Shanmukha Krishna	18475A0133
Mr.Y.Krishna Reddy	17471A0148
Mr. M.Uday Kumar	17471A0113
Mr. N. Gopi Ananda Sai	17471A0127
Mr. A.Srinivasa Reddy	17471A0114

In partial fulfilment of requirement for the award of the degree of Bachelor of  
technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE,  
NARASARAOPET, during the year 2017-2021

L. Satish Kumar  
PROJECT GUIDE

L. SATISH KUMAR<sup>M.Tech</sup>

Assistant professor

Project viva-voce held on.....

*Sowjanya* 28/21  
HEAD OF THE DEPARTMENT

P.NAGA SOWJANYA<sup>M.Tech, PHD</sup>

Associate Professor in Charge  
DEPARTMENT OF CIVIL ENGINEERING  
NARASARAOPETA ENGINEERING COLLEGE  
NARASARAOPET - 522 601.

*H. Bala Gopi Krishna* 18/21  
EXTERNAL EXAMINER



*H. Bala Gopi Krishna*  
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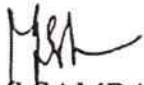



BONAFIDE CERTIFICATE

This is to certify that the thesis titled "DESIGN AND COMPARISON OF STRUCTURAL ELEMENTS BY INDIAN AND EUROPE CODES" is a bonafide record of the work done by

Mr. SK. SAYYAD MOHAMMAD	17471A0117
Mr. SK. ABDUL REHMAN	17471A0138
Mr. N. NIRMAL KUMAR	18475A0120
Mr. SK. FAYAZ	17471A0175
Mr. N. VENKATESWARLU NAIK	16471A0127

In partial fulfillment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPET, during the year 2017-2021

  
Mr. M.N.S. SAMBA SIVA RAO, M-Tech  
PROJECT GUIDE  
ASST. PROFESSOR  
DEPT OF CIVIL ENGINEERING

  
Dr. P. NAGA SOWJANYA  
ASSOCIATE PROFESSOR & H.O.D  
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G. Debru  
INTERNAL EXAMINER

  
H. Balu  
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Kakinada) Narasaraopet- 522601, Guntur (Dist), A.P

## DEPARTMENT OF CIVIL ENGINEERING



### BONAFIDE CERTIFICATE

This is to certify that the report entitled "ANALYSIS AND DESIGN OF G+6 RESIDENTIAL BUILDING USING STAAD PRO is the bonafide work done by

Mr. N.RAMA KRISHNA	17471A0123
Mr. S.TEJA VENKATESH	17471A0143
Mr. K.MAHESH BABU	17471A0130
Mr. D.AVINASH	17471A0105
Mr. R.SRIVASTAVA	17471A0104

In partial fulfillment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPET, during the year 2017-2021

*[Signature]* 31/7/21

PROJECT GUIDE

K.V.PRATAP M.Tech

Assistant professor

*[Signature]* 31/7/21  
HEAD OF THE DEPARTMENT  
DEPARTMENT OF CIVIL ENGINEERING  
Dr. P.NAGARAJU  
NARASARAOPETA ENGINEERING COLLEGE  
NARASARAOPET - 522 601.

Associate professor and Head of Department

Project viva-voce held on.....

*[Signature]* 31/7/21  
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## DEPARTMENT OF CIVIL ENGINEERING



### BONAFIDE CERTIFICATE

This is to certify that the report entitled "COMPARITIVE STUDY ON SEISMIC EFFECT OF HIGH RISE BUILDINGS WITH SHEAR WALL & WITHOUT SHEAR WALL EFFECT. "Is the bonafide work done by

Mr. Lanka Akash	17471A0131
Mr. Vijay Bhaskar Reddy	17471A0159
Mr. D.V.S.R.Sekhar Reddy	17475A0108
Mr. J.Praveen kumar	18475A0123
Mr. Shaik Shabbir Ali	18475A0124

In partial fulfilment of requirement for the award of the degree of Bachelor of technology in  
Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE,  
NARASARAOPET, during the year 2017-2021

  
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K.VENKATESH M.Tech

Assistant professor

Project viva-voce held on.....

HEAD OF THE DEPARTMENT  
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Dr. P.NAGA SOWJANYA PH.D

Associate professor and Head of Department

  
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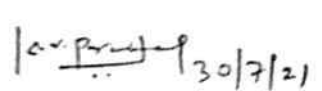
NARASARAOPETA ENGINEERING COLLEGE  
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Certified that this project report "MODELLING AND DESIGNING OF G+3 RESIDENTIAL BUILDING USING REVIT ARCHITECTURE" is a bonafide record of the work done by

Mr. N. MANIKANTA BABU	18475A0127
Mr. L. AKHILESH	18475A0125
Mr. N. RAJESH	18475A0111
Mr. K. RAJA SEKHAR	18475A0106
Mr. S. RAVI TEJA	17471A0166


In partial fulfillment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, Narasaraopet, during the year 2017-2021

  
PROJECT GUIDE  
Mr. K.V. PRATAP, M.Tech  
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HEAD OF THE DEPT. OF CIVIL ENGINEERING  
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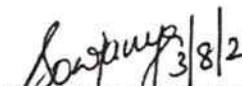
This is to certify that the thesis titled "COMPARITIVE STUDY OF GROUND WATER QUALITY IN INDUSTRIAL AND AGRICULTURAL AREAS OF GUNTUR DISTRICT" is a bonafide record of the work done by

Mr. B. ANIL KUMAR	17471A0122
Mr. M. BALAJI	18475A0108
Mr. M. SANTOSH KUMAR	18475A0114
Mr. K.H.V.N. TRINADH	18475A0112
Mr. R. BHARATH	18475A0107

In partial fulfillment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPET, during the year 2017-2021

  
**Dr. G. BABU RAO** Ph.D. FSIESRP  
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ASSOCIATE PROFESSOR  
DEPT. OF CIVIL ENGINEERING

  
INTERNAL EXAMINER 4/8/21

  
**Dr. P. SOWJANYA** Ph.D.  
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EXTERNAL EXAMINER 4/8/21



  
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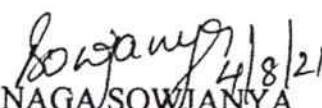


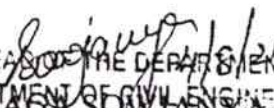
BONAFIDE CERTIFICATE

This is to certify that the thesis titled 'MORPHOMETRIC ANALYSIS OF BUDAMANERU BASIN USING REMOTE SENSING AND GIS TECHNIQUES' is a bonafied record of the work done by

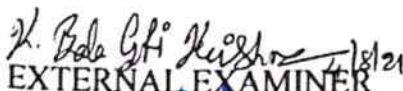
B. AJAY BHASKAR REDDY	-	17471A0125
G. CHANTI BABU	-	17471A0152
P. LAKSHMA REDDY	-	17471A0171
K. SRIKANTH REDDY	-	17471A0103
G. VENKATA REDDY	-	17471A0142

In partial fulfilment of requirement for the award of the degree of Bachelor of technology in Civil Engineering of the NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPETA, During the year 2017-2021

  
Dr. P. NAGA SOWJANYA  
Project guide  
Associate professor

  
HEAD OF THE DEPARTMENT  
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Associate professor & H.O.D.  
NARASARAOPETA - 522 601.  
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Project viva-voice held on.....

  
EXTERNAL EXAMINER



ii

  
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Guntur (Dist.), A.P.



**NARASAROPETA ENGINEERING COLLEGE**  
**(AUTONOMOUS) NARASARAOPETA - 522601**

**BONAFIDE CERTIFICATE**

Certified that the project report "IDENTIFICATION OF GROUNDWATER QUALITY  
AND IRRIGATION SUITABILITY OF GROUNDWATER OF BAPATLA MANDAL  
USING WATER QUALITY INDEX" is a bonafide record of the work done by

Mr. S.V. LEELA KRISHNA	(17471A0116)
Mr. K. MANI BABU	(17471A0156)
Mr. K. P. SAI KUMAR	(17471A0160)
Mr. G. SUDHAKAR	(17471A0137)
Mr. M. KIRAN KUMAR	(17471A0140)

In Partial fulfillment of requirement for the award of the degree of Bachelor of  
Technology in Civil Engineering of the **NARASARAOPETA ENGINEERING COLLEGE,**  
**Narasaraopeta,** during the year 2017-2021

*G. Baburao*  
PROJECT GUIDE

**Dr. G. BABURAO** M.Sc., M.Phil., P.h.D., FSIESRP

ASSOCIATE PROFESSOR  
DEPT. OF CIVIL ENGINEERING

HEAD OF THE DEPARTMENT  
DEPARTMENT OF CIVIL ENGINEERING  
NARASARAOPETA ENGINEERING COLLEGE

**Dr. P. NAGA SOWJANYA** M.Tech., P.h.D.

ASSOCIATE PROFESSOR  
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*G. Baburao*  
INTERNAL EXAMINER 4/8/21

*H. Bala Krishna*  
EXTERNAL EXAMINER 4/8/21



*MB*  
**PRINCIPAL**  
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**NARASARAOPET - 522 601**  
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NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



CERTIFICATE

This is to certify that the project entitled "PV AND BATTERY OPERATED HIGH SPEED WITH BLDC MOTOR CONTROL" is a bonafide work done by "K.Raj kumar (17471A0205), D.Sivakumar (17471A0230), M.Kotaiah (18475A0211), P.Sudharshan rao (18475A0208), S.Naveen (17471A0213)" in partial fulfillment of the requirements for the award of the degree of BACHELOR OF TECHNOLOGY in the Department of ELECTRICAL AND ELECTRONICS ENGINEERING during the academic year 2020-2021.

PROJECT GUIDE

Mr.SK.MD.SHAREEF M.Tech.,(Ph.D)

Assoc.Prof. Dept. of EEE

HEAD OF THE DEPARTMENT

Dr.P.LAKSHMANAN M.E.,(Ph.D)

Professor & HOD Dept. Of EEE

EXTERNAL EXAMINER



  
PRINCIPAL  
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NARASARAOPET-522601(A.P)

**DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING**



**CERTIFICATE**

This is to certify that the Main Project entitled "TWO HYBRID SOURCE BASED THREE PHASE FIVE LEVEL GRID CONNECTED INVERTER ADVANCED LEVEL" is a bonafide work carried out by M. MADHAVI (18475A0201), SK. NAGURBASHA (18475A0214), K.MANASA(17471A0215), D.SATISH(1875A0221), T.PREM YADAV(18475A0222) under our supervision and guidance in partial fulfilment of requirements for the award of Degree of BACHELOR OF TECHNOLOGY in ELECTRICAL & ELECTRONICS ENGINEERING from JNTUK, Andhra Pradesh, during the year 2020-2021.

The content of the main project have not been submitted earlier for the award of any other degree or certificate and we heartily comment the work done by him in this connection.

  
**PROJECT GUIDE**

**Mr. G.NAVEEN, M.Tech,**

Assistant Professor.

Electrical and Electronics Engineering.

  
**HEAD OF THE DEPARTMENT**

**Dr. P. LAKSHMANAN, M.E, Ph.D.**

Head of the Department

Electrical and Electronic Engineering



  
**EXTERNAL EXAMINER**

  
**Principal**  
**NARASARAOPETA ENGINEERING COLLEGE**  
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NARASARAOPET-522601(A.P.)

**DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING**



**CERTIFICATE**

This is to certify that the project report entitled "A SEAMLESS CONTROL METHODOLOGY FOR A GRID CONNECTED AND ISOLATED PV-DIESEL MICROGRID " is a bonafide work carried out by M. HARIKA (17471A0222), P.JOHN LUKE(17471A0202),N.SATYA SIVAMANI (17471A0201),K. KRISHNA MURTHY (18475A0216), B. AJAY KUMAR (17471A0208) under our supervision and guidance in partial fulfilment of requirements for the award of Degree of BACHELOR OF TECHNOLOGY in ELECTRICAL & ELECTRONICS ENGINEERING from JNTUK, Andhra Pradesh, during the year 2020-2021.

The content of the project report have not been submitted earlier for the award of any other degree or certificate and we heartily comment the work done by him in this connection.

**PROJECT GUIDE**

Mr. J.SUNIL BABU, M.Tech.(Ph.D),

Assistant Professor.

Electrical and Electronics Engineering  
Narasaraopeta Engineering College.

**HEAD OF THE DEPARTMENT**  
Dr. P. LAKSHMANAN, M.E, Ph.D.

Head of the Department  
Electrical and Electronic Engineering  
Narasaraopeta Engineering College.

**EXTERNAL EXAMINER**



**Principal**  
NARASARAOPETA ENGINEERING COLLEGE  
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## **DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING**



### **CERTIFICATE**

This is to certify that the Project entitled "STUDY OF AC & DC MICROGRID SYSTEM" is a bonafied work carried out by **K. SAIKRISHNA (17471A0203), T. KRISHNA VAMSI (18475A0213), R. SATISH BABU (17471A0219), B. RAKUMAR (17471A0231), P. RAMANJANEYULU (18475A0220)** under our supervision and guidance in partial fulfillment of requirements for the award of Degree of BACHELOR OF TECHNOLOGY in ELECTRICAL & ELECTRONICS ENGINEERING, from JNTUK, Andhra Pradesh, during the year 2020-2021.

*Chau*  
**PROJECT GUIDE**

Mr. M. CHANDRA SEKHAR M.Tech

Asst. Professor, Dept. of EEE

Narasaraopeta Engineering college

Narasaraopeta.

*[Signature]*  
**HEAD OF DEPARTMENT**

Dr. P. LAKSHMANAN M.E, Ph.D.

Professor & HOD, Dept. of EEE

Narasaraopeta Engineering college

Narasaraopeta.

*[Signature]*  
**EXTERNAL EXAMINER**



*[Signature]*  
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**Guntur (Dist.). A.P.**



NARASARAOPETA ENGINEERING COLLEGE

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Kotappakonda Road, Yallamanda, Narasaraopet - 522601, Guntur (Dist.), Andhra Pradesh.

February, 2021

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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This is to certify the main project entitled " WPT OF HIGH SPEED EV'S APPLICATIONS" is the bonafide work carried out by MS.T.Tejaswani (17471A228), Ms.K.Sailaja (17471A0207), , Mr.B.Koteswara rao (17471A0212) Mr.P.Rajeev Prasad (17471A0229), Mr.G.Pavan Kalyan (17471A0227) in partial fulfilment of the requirements for the award of degree Bachelor of Technology in Electrical and Electronics Engineering from Jawaharlal Nehru Technological University Kakinada , Kakinada during the year 2020-21 under my supervision and guidance.

  
Project Guide


G.Nagaraju . M.Tech/Ph.D

  
Head of the Department

Dr.P.Lakshmanan . M.E/Ph.D

  
External Examiner



  
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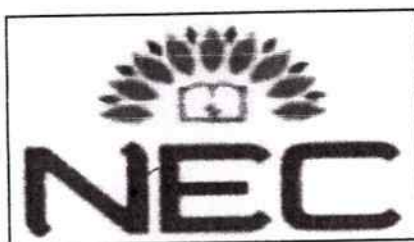
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## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



### CERTIFICATE

This is to certify that the Main Project entitled "A 65 LEVEL LOGIC BASED SWITCHING METHODOLOGY FOR A CASCADED H-BRIDGE MULTILEVEL INVERTER" is a bonafide work carried out by J.HARI TEJA (17471A0209), G.MANI MAHESWARA RAO (18475A0205), MYAMINI (17471A0220), T.MUTHYAL RAO (17471A0214), S.SAI RAM(17471A0216) Under Our supervision and guidance in partial fulfillment of requirement for the award of Degree of BACHELOR OF TECHNOLOGY in ELECTRICAL & ELECTRONICS ENGINEERING, from JNTUK, Andhra Pradesh, during the year 2020-2021.

**PROJECT GUIDE**

**Mr.M.SUBRAMANYAM** M.Tech.

Asst.prof. Dept. of EEE

Narasaraopeta Engineering College

Narasaraopeta.

**HEAD OF THE DEPARTMENT**

**Dr.P.LAKSHMANAN** M.E., Ph.D.

Professor & HOD Dept. Of EEE

Narasaraopeta Engineering College

Narasaraopeta.

**EXTERNAL EXAMINER**



**PRINCIPAL**  
**NARASARAOPETA ENGINEERING COLLEGE**  
**(AUTONOMOUS)**  
**NARASARAOPET - 522 601**  
**Guntur (Dist.), A.P.**



NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET  
(AUTONOMOUS)  
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING



CERTIFICATE

This is to certify that the project entitled "IMPROVEMENT OF VOLTAGE STABILITY WITH STATCOM" is a bonafide work done by "T.Bala Sri Ram Murthy (17471A0225), CH.Rajesh (18475A0207), J.Mattaiah (17471A0226), P.Mahendra Kumar (17471A0211), K.Venkatesh (17471A0223) "in partial fulfillment of the requirements for the award of the degree of BACHELOR OF TECHNOLOGY in the Department of ELECTRICAL AND ELECTRONICS ENGINEERING during the academic year 2020-2021.

PROJECT GUIDE  
Mr.SK.MD.SHAREEF M.Tech.,(Ph.D)  
Assoc.Prof. Dept. of EEE

HEAD OF THE DEPARTMENT  
D.P.LAKSHMANAN M.E.,(Ph.D)  
Professor & HOD Dept. Of EEE

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NARASARAOPET-522601(A.P.)

## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



### CERTIFICATE

This is to certify that the Project entitled "**CONTROL OF UPQC BASED ON STEADY STATE LINEAR KALMAN FILTER FOR COMPENSATION OF POWER QUALITY PROBLEMS**" is a bonafide work carried out by A. SAI KRISHNA (18475A0203), A.N.V.D. TARUN (17471A0217), G. YASHWANTH KRISHNA (17471A0224), G. RAJENDRA PRASAD (17471A0233), G. PRAVEEN KUMAR (18475A0219) under our supervision and guidance in partial fulfillment of requirements for the award of Degree of BACHELOR OF TECHNOLOGY in ELECTRICAL & ELECTRONICS ENGINEERING, from JNTUK, Andhra Pradesh, during the year 2020-2021.

The content of the Project report have not been submitted earlier for the award of any other degree of certificate and we heartly comment the work done by him in this connection.

  
**PROJECT GUIDE**

B. PRAVEEN KUMAR M.Tech.

Asst.prof. Dept. of EEE

Narasaraopeta Engineering College

Narasaraopet.

  
**HEAD OF THE DEPARTMENT**

Dr.P.LAKSHMANAN M.E., Ph.D.

Professor & HOD. Of EEE

Narasaraopeta Engineering College

Narasaraopet.

  
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NARASARAOPET-522601(A.P.)

## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



### CERTIFICATE

This is to certify that the Final Project entitled "**FULL-BRIDGE REACTIVE POWER COMPENSATOR WITH MINIMIZED EQUIPPED CAPACITOR AND ITS APPLICATION TO STATIC VAR COMPENSATOR**" is a bonafide work carried out by **SK.ALLA BAKSH (18475A0210), A.POORNA CHANDRA RAO (17471A0210), T. VAMSI KRISHNA (18475A0212), B.MADHU (18475A0204), G. MAHENDRA REDDY (17471A0221)** under our supervision and guidance in partial fulfillment of requirements for the award of Degree of BACHELOR OF TECHNOLOGY in ELECTRICAL & ELECTRONICS ENGINEERING, from JNTUK, Andhra Pradesh, during the year 2020-2021.

  
**PROJECT GUIDE**

**SK. KARIMULLA** M.Tech

Asst.prof. Dept. of EEE

Narasaraopeta Engineering College

Narasaraopet.

  
**HEAD OF THE DEPARTMENT**

**Dr.P.LAKSHMANAN** M.E., Ph.D.

Professor & HOD.Of EEE

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NARASARAOPET-522601(A.P.)

## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



### CERTIFICATE

This is to certify that the Final Project entitled "AN ADAPTIVE FUZZY LOGIC CONTROL STRATEGY FOR PERFORMANCE ENHANCEMENT OF A GRID CONNECTED PMSG BASED WIND TURBINE" is a bonafide work carried out by **B.GOPI** (18475A0217), **M.RAJESH** (18475A0226), **LABHI RAM REDDY** (17471A0206), **S. JEEVA RATNAM** (17471A0235), under our supervision and guidance in partial fulfillment of requirements for the award of Degree of BACHELOR OF TECHNOLOGY in ELECTRICAL & ELECTRONICS ENGINEERING, from JNTUK, Andhra Pradesh, during the year 2020-2021.

  
PROJECT GUIDE:

**Dr. P. LAKSHMANAN** M.E, Ph.D.

Professor & HOD.Of EEE

Narasaraopeta Engineering College

Narasaraopet.

  
HEAD OF THE DEPARTMENT:

**Dr. P.LAKSHMANAN** M.E, Ph.D.


Professor & HOD.Of EEE

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**DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING**



**CERTIFICATE**

This is to certify that the Project report entitled "A FUZZY LOGIC BASED CASCADED H-BRIDGE 15 LEVEL MULTI LEVEL INVERTER" is a bonafide work carried out by **M. Ravi kumar (18475A0218), S. Akhil kumar (18475A0225), V. Ramakrishna (18475A0209) J.Pothu Raju (18475A0206)** under our supervision and guidance in partial fulfillment of requirements for the award of Degree of BACHELOR OF TECHNOLOGY in ELECTRICAL & ELECTRONICS ENGINEERING, from JNTUK, Andhra Pradesh, during the year 2020-2021.

**PROJECT GUIDE:**

**Dr.P.Lakshmanan M.E,Ph.D**

**Professor & HOD, Of EEE**

**Narasaraopeta Engineering college**

**Narasaraopet.**

**HEAD OF DEPARTMENT:**

**Dr.P.Lakshmanan M.E,Ph.D**

**Professor & HOD, Of EEE**

**Narasaraopeta Engineering college**

**Narasaraopet.**

**EXTERNAL EXAMINER**



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(Approved by AICTE & Affiliated to JNTUK, Kakinada)

NARASARAOPET-522601 (A.P.)



**CERTIFICATE**

This is to certify that the project entitled "ANALYSIS AND COMPARISON OF THE DC-DC CONVERTERS FOR REDUCING CURRENT RIPPLE" is a bonafide work carried out by K. NAGA DEEPTHI (17471A0218), CH. HARSHA (18475A0223), B. GOVARDHAN REDDY (18475A0215), P. KALYAN BABU (18475A0202), M. RAVI TEJA (18475A0224) Under our supervision and guidance in partial fulfillment of the requirements for the award of **BACHELOR OF TECHNOLOGY in ELECTRICAL AND ELECTRONICS ENGINEERING**, from JNTUK, Andhra Pradesh, during the year 2020- 2021.

  
**PROJECT GUIDE**

**P.D.V.S.K. KISHORE**, MTech., (Ph.D.)

Assoc. Professor

Department of EEE

Narasaraopeta Engineering College

  
**HEAD OF THE DEPARTMENT**

**Dr. P. LAKSHMANAN** M.E., Ph.D.


Professor & HOD

Department of EEE

Narasaraopeta Engineering College

  
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Guntur (Dist.), A.P.




## CERTIFICATE

This is to certify that the Project entitled "DESIGN AND FABRICATION OF 360 DESK LAMP" (3D PRINTING) is being submitted by Mr. T.PAVAN KUMAR(17471A0335), Mr.P.GOVARDHAN BABU(17471A0328), Mr.S.KAMALA KUMAR(17471A0332), Mr.G.NARENDRA(17471A0305), Mr.V.TEJA(17471A0334), Mr.K.RAKESH SAINATH REDDY(17471A0345) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.


The results embodied in this project work have not been submitted to any other University or Institute for the award of any degree.


  
Project guide

Dr. M. Sreenivasa Kumar  
M.Tech., Ph.D.(UK), MISTE., FIE(I)

  
Head of the Department

Dr. B. Venkata Siva  
M.Tech.Ph.D., FIE(I), MISTE., ISNT

  
Internal Examiner

  
External Examiner

  
PRINCIPAL

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NARASARAOPET - 522 601  
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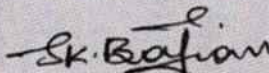
  
**IQAC**

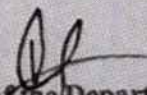



## CERTIFICATE

This is to certify that the Project entitled "DESIGN AND FABRICATION OF FULLY 3D-PRINTABLE TURNTABLE" is being submitted by T.SRIHARI (18475A0301), M.LOKESH (17471A0363), K.VENKATESH (17471A0351), G.PAVAN KALYAN (17471A0371), G.AKASH (17471A0380), P.VENKATESH (17471A0365), N.SIVA NAGARAJU (17471A0379) in partial fulfillment for the award of B. Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

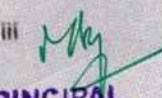
  
Project Guide  
Sk. Bajan

  
Head of the Department  
Dr. B. Venkata Siva

  
Internal Examiner

  
External Examiner

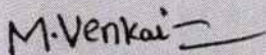


  
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NARASARAOPET - 522 601  
Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that the Project entitled "DESIGN AND FABRICATION OF WALKING MECHANISM" is being submitted by Mr.SK.NAGUR BASHA(18475A0315),Mr.SK.MASTANVALI((18475A0316),Mr.DOKKU.PAVANKUMAR(18475A0302),Mr.R.BALAJI(17471A0376),Mr.K.VIJAY(17471A0354),Mr.N.YAGNA MALLESARARAO(17471A0359) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance. The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.



Project Guide

Mr.M.VENKAIAH, M.Tech.

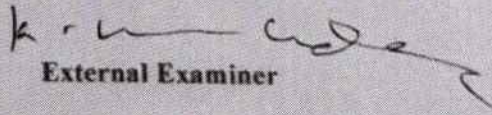


Head of the Department

Dr.B.VENKATASIVA, Ph.D.



Internal Examiner



External Examiner



PRINCIPAL



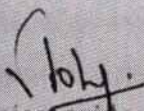
NARASARAOPETA ENGINEERING COLLEGE  
(AUTONOMOUS)  
NARASARAOPET - 522 601  
Guntur (Dist.)



## CERTIFICATE


This is to certify that the Project entitled "MODELING AND OPTIMISATION OF PISTON BY USING SOLID WORKS AND ANSYS" is being submitted by Mr S.KOTI REDDY (18475A0327), T.KARTHEEK (18475A0325), SK AFRIDE (18475A0337), B.VIJAY SAI KUMAR (18475A0345), P.ASHOK (18475A0344), Y.VENKAT (18475A0357) in partial fulfilment for the award of B.Tech in DEPARTMENT OF MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.




Project guide

**KANDRU JOHN BABU M. Tech**  
Assistant professor

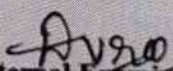


Head of the Department

**Dr. B. VENKATA SIVA M. Tech, PhD.**  
Professor & HOD



Internal Examiner



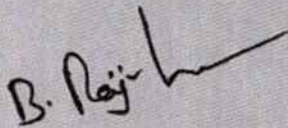
External Examiner




## CERTIFICATE

This is to certify that the Project entitled "DESIGN AND DEVELOPMENT OF 3D PRINTED LINEAR ACTUATOR" is being submitted by Mr. P.ANJI BABU (18475A0305), N.LAKSHMAREDDY (17471A0361), CH.GOPI KRISHNA (17471A0366), D.ASHOK KUMAR (17471A0369), E.SUNIL (17471A0372), B.SUMANTH (17471A0381) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.



Project Guide  
B. Rajiv Kumar



Head of the Department  
Dr. B. Venkata Siva



Internal Examiner



External Examiner



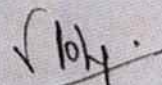
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NARASARAOPET - 522 601  
Guntur (Dist.), A.P.




## CERTIFICATE

This is to certify that the Project entitled "DESIGN ANALYSIS AND OPTIMIZATION OF TWO-WHEELER DISC BRAKE ROTOR" is being submitted by Mr. REDDY RAJA NAVEEN (18475A0328), SHAIK BADULLA (18475A0321), SYED MOHAMMAD ADIL (18475A0361), NETTAM PRAVEEN KUMAR (18475A0348), PAKANATI GOUTHAM KUMAR REDDY (18475A0362), PALAKAYALA SATYA SAI (18475A0343), in partial fulfilment for the award of B.Tech in DEPARTMENT OF MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

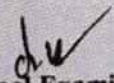
The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

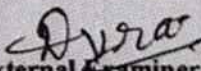
  
Project guide

**KANDRU JOHN BABU M. Tech**  
Assistant professor

  
Head of the Department

**Dr. B. VENKATA SIVA M. Tech, Ph.D.**  
Professor & HOD

  
Internal Examiner

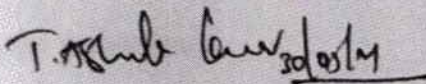
  
External Examiner




## CERTIFICATE

This Is To Certify That The Project Entitled "DESIGN AND ANALYSIS OF DIFFERENTIAL GEAR BOX" Is Being Submitted By A.Anil Kumar (18475A0338), P.Mokthar Basha (18475A0366), B. Maharshi Pavan Kalyan Naik (18475A0371), B.Venkata Gopi Nath (18475A0349), M.Venkatesh (18475A0332), K.Nitish Kumar (18475A0342), N.Chiranjeevulu (18475A0358). In Partial Fulfillment Of The Award Of B.Tech In "BACHELOUR OF TECHNOLOGY in MECHANICAL ENGINEERING" From Narasaraopeta Engineering College Narasaraopet Affiliated To Jawaharlal Nehru Technological University Kakinada.


The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

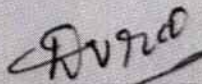
  
PROJECT GUIDE

Mr T.ASHOK KUMAR M.Tech

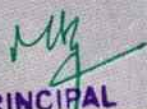
  
HEAD OF THE DEPARTMENT

Dr.B.VENKATA SIVA Ph.D

  
INTERNAL EXAMINER

  
EXTERNAL EXAMINER



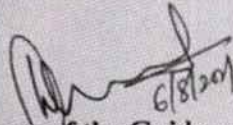
  
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NARASARAOPETA ENGINEERING COLLEGE  
(AUTONOMOUS)  
NARASARAOPET - 522 601  
Guntur (Dist.), A.P.



## CERTIFICATE


This is to certify that the Project entitled "FABRICATION OF APPARATUS TO DETERMINE THE THERMAL CONDUCTIVITY OF PURE METALS AND COMPOSITES" is being submitted by Mr. M. OM PRAKASH REDDY, B.HOSANNA, R.RAMARAO NAIK, B.EMMANUEL, N.RAVI CHANDRA, CH.MANIKANTA and B.C HAKRAVARTHI in partial fulfilment for the award of B.Tech in Mechanical Engineering to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonafide work carried out by him under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

  
Signature of the Guide

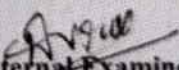
Dr. D. SUNEEL M.Tech, Ph.D., FIE(I), MISTE, MRSI

VICE PRINCIPAL  
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NARASARAOPET - 522 601,  
Guntur (Dist.), A.P.

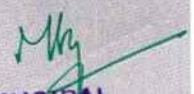
  
Signature of the HOD

Dr. B. VENKATA SIVA M.Tech, Ph.D.

  
Internal Examiner

  
External Examiner



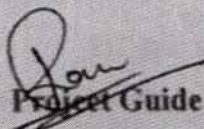
  
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NARASARAOPETA ENGINEERING COLLEGE  
(AUTONOMOUS)  
NARASARAOPET - 522 601  
Guntur (Dist.). A.P.




## CERTIFICATE

This is to certify that Project entitled "MANUFACTURING OF HYPERBOLOIDAL GEAR MODEL USING ULTIMAKER S5 3D PRINTING MAHINE" is being submitted by Mr. C. VENKATA SAI RAM(17471A0343), Y.KOUSHIK KUMAR(17471A0321), B.V.MANIKANTA REDDY (17471A0304), M.ROOP CHANDH (17471A0303), P.SRIKANTH(16471A0326), A.PRUDHVI(17471A0329) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.


  
Project Guide

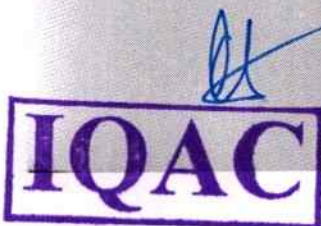
Mr. BACHALI RAMBABU

  
Head of the Department

Dr. B.VENKATA SIVA

  
Internal Examiner

  
External Examiner



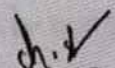
  
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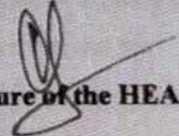



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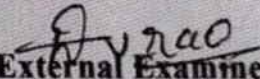
This is to certify that the Project entitled "DETERMINATION OF CI ENGINE PERFORMANCE CHARACTERISTICS USING BIO-DIESEL AND TITANIUM OXIDE NANOPARTICLES BLENDER" is being submitted by Mr.P.KISHORE (18475A0369), Mr.V.BHUVAN CHANDAR (18475A0367), Mr.K.HARIBABU (18475A0365), Mr.V.VIJAY (18475A0359), Mr.B.GANESH REDDY (18475A0330), Mr.V.ASHOK (18475A0324). In partial fulfillment for the award of BACHELOR OF TECHNOLOGY in the Department of MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

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Signature of the Guide  
Ch.Sekhar

  
Signature of the HEAD  
Dr.B.Venkata Siva

  
Internal Examiner

  
External Examiner



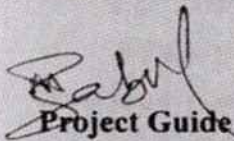
  
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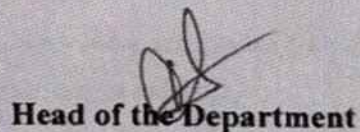
## CERTIFICATE

This is to certify that a major project entitled "**DESIGN AND FABRICATION OF EXPERIMENTAL SETUP TO DETERMINE MOMENT OF INERTIA**" is being submitted by **Mr. K. SAI KUMAR** (18475A0350), **B. AKHIL REDDY** (18475A0352), **S. SAI RAJU** (18475A0331), **G. SAI MAHENDHAR** (18475A0363), **K. SATHISH** (18475A0326), **M. HARISH** (18475A0355), **S PAVAN KUMAR** (18475A0354), in partial fulfillment for the award of B. Tech in Mechanical engineering to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.


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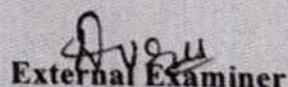
  
**Project Guide**

Mr. M. Venkanna Babu

  
**Head of the Department**

Dr. B. Venkata Siva

  
**Internal Examiner**

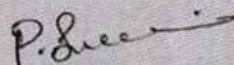
  
**External Examiner**




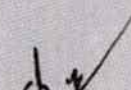
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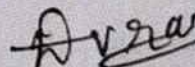
This is to certify that the Project entitled "DESIGN AND CFD ANALYSIS OF SHELL AND TUBE HEAT EXCHANGER" is being submitted by Mr. A. CHANDRA SEKHAR REDDY (18475A0341), NUTHALAPATI ANIL (18475A0335), V.GANESH BABU (18475A0339), Y. SAIDULU (18475A0368), A. PRAVEEN KUMAR (18475A0364), B. RAJA SEKHAR (16471A0314) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS) NARASARAOPET, is a record of bonafide work carried out by them under our guidance.

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Project Guide  
P. Sravani

  
Head of the Department  
Dr. B. Venkata Siva

  
Internal Examiner

  
External Examiner



  
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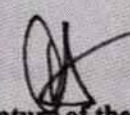
## CERTIFICATE

This is to certify that the Project entitled "PERFORMANCE OF CI ENGINE BY USING BIODIESEL AND IRON OXIDE NANO PARTICLES" is being submitted by P.MALLIKHARJUNA RAO (17471A0311), SK.BAJI (17471A0315), K.RAVINDRA (17471A0349), B.JOHN BABU (17471A0324), M.MAHESH (17471A0330), D.SAI MOHESH (16471A0345), and CH. SITA RAM (16471A0367). In partial fulfilment for the award of **BACHELOR OF TECHNOLOGY** in the Department of **MECHANICAL ENGINEERING** to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.


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Signature of the Guide

Dr.D.Jagadish

  
Signature of the Head

Dr.B.Venkata Siva

  
Internal Examiner

  
External Examiner

  
**IQAC**

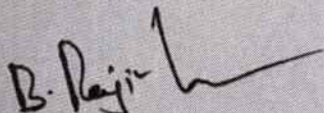
  
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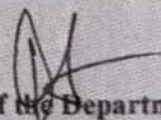


## CERTIFICATE


This is to certify that the Project entitled "DESIGN AND DEVELOPMENT OF 3D PRINTED LINEAR ACTUATOR" is being submitted by Mr. P.ANJI BABU (18475A0305), N.LAKSHMAREDDY (17471A0361), CH.GOPI KRISHNA (17471A0366), D.ASHOK KUMAR (17471A0369), E.SUNIL (17471A0372), B.SUMANTH (17471A0381) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.

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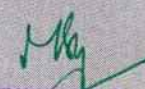
  
Project Guide  
B. Rajiv Kumar

  
Head of the Department  
Dr. B. Venkata Siva

  
Internal Examiner

  
External Examiner



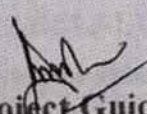
  
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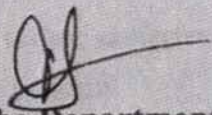
## CERTIFICATE

This is to certify that Project entitled "AUTOMATION OF IGUS ROBO ARM FOR SERVING BEVERAGES BY USING OCR" is being submitted by Mr. SK.JOHN SAIDA (18475A0307), CH.CHANDU(18475A0319), Y.RAVI KUMAR (17471A0377), A CHADRA SEKHAR RAO(18471A0310), U.GANESH(18475A0320), B.RAVI TEJA(17471A0374) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.


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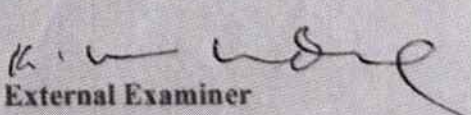
  
Project Guide

Mr. MOJESWARARAO DUDUKU

  
Head of the Department

Dr. B.VENKATA SIVA

  
Internal Examiner

  
External Examiner



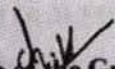
  
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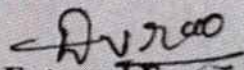
  
Signature of the Guide

Ch.Sekhar

  
Signature of the HEAD

Dr.B.Venkata Siva

  
Internal Examiner

  
External Examiner



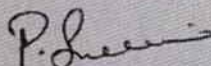
  
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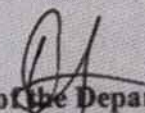


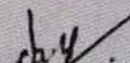
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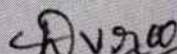
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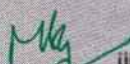
  
Project Guide  
P. Sravani

  
Head of the Department  
Dr. B. Venkata Siva

  
Internal Examiner

  
External Examiner



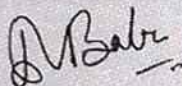
  
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## CERTIFICATE

This is to certify that an industrial training entitled "DESIGN AND ANALYSIS OF IC ENGINE PISTON AND PISTON RINGS BY USING DIFFERENT MATERIALS" is being submitted by Mr. AKHIL SAI TALLURI (17471A0301), B HARI KRISHNA (17471A0307), VV SHANMUKH (17471A0322), D NAGARAJU (17471A0327), P MANI KANTA (17471A0331), D GOPI NAIDU (17471A0338), K SIVA GOPI (17471A0348), in partial fulfillment for the award of Bachelor of technology in Mechanical engineering to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonfire work carried out by him/her under our guidance.

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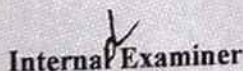
Project Guide

Mr. T N V MAHESH BABU

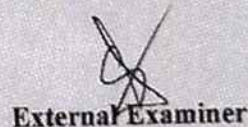


Head of the Department

Dr. B. VENKATA SIVA



Internal Examiner



External Examiner

  
**IQAC**  
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**NARASARAOPETA ENGINEERING COLLEGE**  
**(AUTONOMOUS)**  
**NARASARAOPET - 522 601**  
**Guntur (Dist.), A.P.**



## CERTIFICATE

This is to certify that a major project entitled "DESIGN AND FABRICATION OF EXPERIMENTAL SETUP TO DETERMINE NATURAL FREQUENCY" is being submitted by, Mr. VENNAPUSALA SRIKANTH (17471A0316), Mr. DAREDDY RAMIREDDY (17471A0344), Mr. BOMMINENI ASHOK BABU (17471A0313), Mr. KUNDURU NAGIREDDY (17471A0308), Mr. PATAN MOHIDDHEEN (17471A0318), Mr. NALUKURTHI SUKUMAR (16471A0308), in partial fulfillment for the award of B. Tech in Mechanical engineering to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.


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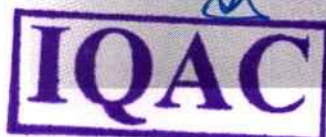
Mr. M. Venkanna Babu

  
Head of the Department

Dr. B. Venkata Siva

  
Internal Examiner

  
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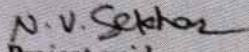




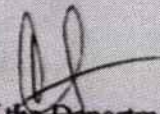
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
This is to certify that the second year these is on "DESIGN AND OPTIMISATION OF RAILWAY AXLE" is the bonafide work of P. NAGA SAI DILEEP (17471A0339), B. MAHESH (17471A0314), G. VENUBABU (17471A0309), M. BALA NAVEEN KUMAR (17471A0326), K. MANI PAVAN (17471A0306), SK. SURAJAHMAD (17471A0340). Under the guidance and supervision submitted in partial fulfilment of the requirement for the award of the B. Tech, MECHANICAL, IN NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPET during 2020-2021.


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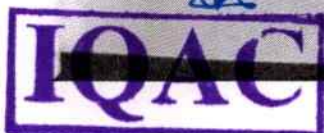
  
Project guide

N. VIJAYA SEKAR

  
Head of the Department  
Dr.B. Venkata Siva

  
Internal Examiner.

  
External Examiner.



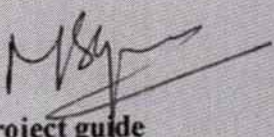
  
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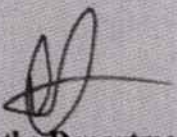
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This is to certify that the Project entitled "DESIGN AND FABRICATION OF 360 DESK LAMP" (3D PRINTING) is being submitted by Mr. T.PAVAN KUMAR(17471A0335), Mr.P.GOVARDHAN BABU(17471A0328), Mr.S.KAMALA KUMAR(17471A0332), Mr.G.NARENDRA(17471A0305), Mr.V.TEJA(17471A0334), Mr.K.RAKESH SAINATH REDDY(17471A0345) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.


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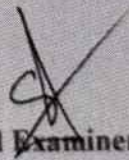
  
Project guide

Dr. M. Sreenivasa Kumar  
M.Tech., Ph.D.(UK), MISTE., FIE(I)

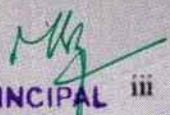
  
Head of the Department

Dr. B. Venkata Siva  
M.Tech.Ph.D., FIE(I), MISTE., ISNT

  
Internal Examiner

  
External Examiner



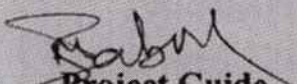
  
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
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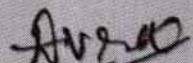
  
Project Guide

Mr. M. Venkanna Babu


  
Head of the Department

Dr. B. Venkata Siva

  
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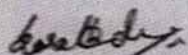
  
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## CERTIFICATE

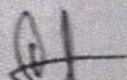
This is to certify that a major project entitled "MANIPULATION OF A ROBOTIC ARM FOR SERVING OF BEVERAGE" is being submitted by Mr. SHAIK. YASIN(17471A0323), Mr. S. CHETANA KRISHNA KUMARA (17471A0347), Mr. J. PURNA CHANDRA RAO (17471A0325), Mr. B. RAJU (17471A0336), Mr. K. NAGARJUNA (17471A0342), Mr. P. RUPANAND(17471A0320), in partial fulfillment for the award of B. Tech in Mechanical engineering to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

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*Project Guide*

Mr. P. Sarath Chandra,  
Assistant Professor



*Head of the Department*

Dr. B. Venkata Siva,  
Professor and Head



*Internal Examiner*



*External Examiner*



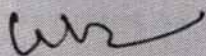
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NARASARAOPET - 522 601  
(Dist.), A.P.



## CERTIFICATE

This is to certify that the Project entitled "FABRCATION AND ANALYSIS OF A356-SiC AND A356-GRAPHITE METAL MATRIX COMPOSITES BY USING STIR CASTING METHOD" is being submitted by **Mr. CHAITANYA BANTU (17471A0312), P SAI PRAVEEN (17471A0302), PRAKASH G (17471A0317), M S D MAHENDRA (17471A0332), K SEKHAR BABU (17471A0341), P VENKAIAH (17471A0346), SYED NURUDDIN (17471A0350)** in partial fulfillment for the award of B. Tech in MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonfire work carried out by him/her under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.



**Signature of the Guide**

**Dr. P SURESH BABU**

Associate Professor

Dept. of Mechanical Egg.



**Signature of HOD**

**Dr. B. VENKATA SIVA**

Prof. & HOD

Dept. of Mechanical Egg.

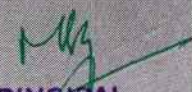


**Internal Examiner**



**External Examiner**



  
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Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that the Project entitled "FABRICATION OF APPARATUS TO DETERMINE THE THERMAL CONDUCTIVITY OF PURE METALS AND COMPOSITES" is being submitted by Mr. M. OM PRAKASH REDDY, B.HOSANNA, R.RAMARAO NAIK, B.EMMANUEL, N.RAVI CHANDRA, CH.MANIKANTA and B.C.HAKRAVARTHI in partial fulfilment for the award of B.Tech in Mechanical Engineering to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonafide work carried out by him under our guidance.

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Signature of the Guide


Dr. D. SUNEEL M.Tech, Ph.D., FIE(I), MISTE, MRSI

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Signature of the HOD

Dr. B. VENKATA SIVA M.Tech, Ph.D.



Internal Examiner



External Examiner



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Guntur (Dist.), A.P.



## CERTIFICATE

This Is To Certify That The Project Entitled "DESIGN AND ANALYSIS OF DIFFERENTIAL GEAR BOX" Is Being Submitted By A.Anil Kumar (18475A0338), P.Mokthar Basha (18475A0366), B. Maharshi Pavan Kalyan Naik (18475A0371), B.Venkata Gopi Nath (18475A0349), M.Venkatesh (18475A0332), K.Nitish Kumar (18475A0342), N.Chiranjeevulu (18475A0358). In Partial Fulfillment Of The Award Of B.Tech In "BACHELOUR OF TECHNOLOGY in MECHANICAL ENGINEERING" From Narasaraopeta Engineering College Narasaraopet Affiliated To Jawaharlal Nehru Technological University Kakinada.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

  
PROJECT GUIDE

Mr T.ASHOK KUMAR M.Tech

  
HEAD OF THE DEPARTMENT

Dr.B.VENKATA SIVA Ph.D

  
INTERNAL EXAMINER

  
EXTERNAL EXAMINER



  
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Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that the Project entitled "DESIGN ANALYSIS AND OPTIMIZATION OF TWO-WHEELER DISC BRAKE ROTOR" is being submitted by Mr. REDDY RAJA NAVEEN (18475A0328), SHAIK BADULLA (18475A0321), SYED MOHAMMAD ADIL (18475A0361), NETTAM PRAVEEN KUMAR (18475A0348), PAKANATI GOUTHAM KUMAR REDDY (18475A0362), PALAKAYALA SATYA SAI (18475A0343), in partial fulfilment for the award of B.Tech in DEPARTMENT OF MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

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Project guide

**KANDRU JOHN BABU M. Tech**  
Assistant professor

  
Head of the Department

**Dr. B. VENKATA SIVA M. Tech, Ph.D.**  
Professor & HOD

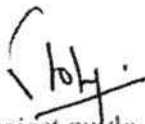
  
Internal Examiner  
External Examiner



## CERTIFICATE

This is to certify that the Project entitled "MODELING AND OPTIMISATION OF PISTON BY USING SOLID WORKS AND ANSYS" is being submitted by Mr S.KOTI REDDY (18475A0327), T.KARTHEEK (18475A0325), SK AFRIDE (18475A0337), B.VIJAY SAI KUMAR (18475A0345), P.ASHOK (18475A0344), Y.VENKAT (18475A0357) in partial fulfilment for the award of B.Tech in DEPARTMENT OF MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

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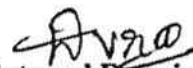
Project guide  
**KANDRU JOHN BABU** M. Tech  
Assistant professor



Head of the Department  
**Dr. B. VENKATA SIVA** M. Tech, PhD.  
Professor &HOD



Internal Examiner



External Examiner



## CERTIFICATE

This is to certify that the Project entitled "PERFORMANCE OF CI ENGINE BY USING BIODIESEL AND IRON OXIDE NANO PARTICLES" is being submitted by P.MALLIKHARJUNA RAO (17471A0311), SK.BAJI (17471A0315), K.RAVINDRA (17471A0349), B.JOHN BABU (17471A0324), M.MAHESH (17471A0330), D.SAI MOHESH (16471A0345), and CH.SITARAM (16471A0367). In partial fulfilment for the award of BACHELOR OF TECHNOLOGY in the Department of MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University, Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

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Signature of the Guide

Dr.D.Jagadish

  
Signature of the Head

Dr.B.Venkata Siva

  
Internal Examiner

  
External Examiner



  
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Guntur (Dist.), A.P.




## CERTIFICATE

This is to certify that the Project entitled "DESIGN AND FABRICATION OF 3D PRINTED PROSTHETIC HAND" is being submitted by Mr. SK. AKBAR JANI (18475A0356), D.VENKATA BHASKAR (18475A0353), P.VENKATA DINESH (18475A0329), V. RAMALINGESWARA RAO (18475A0370), B.HARIKRISHNA REDDY (184750333), B. SRIKANTH NAIK (18475A0334), B.NAGARJUNA REDDY (18475A0336) in partial fulfillment for the award of B. Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.



Project Guide  
SK. NAGUL MEERAVALI



Head of the Department  
Dr. B. VENKATA SIVA



Internal Examiner



External Examiner




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Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that the Project entitled "DESIGN AND ANALYSIS OF WHEEL RIM ON RADIAL LOADS" Is being submitted by Mr./Mrs./Ms. D. SAIKRISHNA REDDY (18475A0304), A. SRIKANTH (18475A0312), P. SYAMBABU (17471A0355), G. TRINADH (17471A0382), P. RAGHAVENDRABABU (17471A0367), K. APPARAO (18475A0318) , in partial fulfilment for the award of B.Tech in MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of degree.

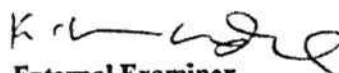
  
Project guide

K. KIRAN CHAND

  
Head of Department

Dr. B. VENKATA SIVA

  
Internal Examiner

  
External Examiner



  
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Guntur (Dist.), A.P.



## CERTIFICATE


This is to certify that the second year these is on "DESIGN AND OPTIMISATION OF RAILWAY AXLE" is the bonafide work of P. NAGA SAI DILEEP (17471A0339), B. MAHESH (17471A0314), G. VENUBABU (17471A0309), M. BALA NAVEEN KUMAR (17471A0326), K. MANI PAVAN (17471A0306), SK. SURAJAHMAD (17471A0340).

Under the guidance and supervision submitted in partial fulfilment of the requirement for the award of the B. Tech, MECHANICAL, IN NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPET during 2020-2021.


The results embodied in this these is have not been submitted to any other University or Institute for the award of any degree or diploma.

  
Project guide

N. VIJAYA SEKAR

  
Head of the Department  
Dr. B. Venkata Siva

  
Internal Examiner.

  
External Examiner.



  
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Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that a major project entitled "MANIPULATION OF A ROBOTIC ARM FOR SERVING OF BEVERAGE" is being submitted by Mr. SHAIK. YASIN(17471A0323), Mr. S. CHETANA KRISHNA KUMARA (17471A0347), Mr. J. PURNA CHANDRA RAO (17471A0325), Mr. B. RAJU (17471A0336), Mr. K. NAGARJUNA (17471A0342), Mr. P. RUPANAND(17471A0320), in partial fulfillment for the award of B. Tech in Mechanical engineering to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

The results embodied in this book have not been submitted to any other University or Institute for the award of any degree or diploma.



*Project Guide*

Mr. P. Sarath Chandra,  
Assistant Professor



*Head of the Department*

Dr. B. Venkata Siva,  
Professor and Head



*Internal Examiner*



*External Examiner*



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## CERTIFICATE

This is to certify that the Project entitled "EXPERIMENTAL ANALYSIS OF SINGLECYLINDER DIESEL ENGINE FUELED WITH BIODIESEL AND COBALT OXIDE NANOPARTICLES" is being submitted by P.MANI (18475A0311), SK.BAJI (18475A0317), B.ESWARA VENKATA SAIYESWANTH (17471A0370), K.JITHENDRA KUMAR (18475A0308), A.HARINATH (17471A0358), V.HEMANTH REDDY (17471A0357). In partial fulfilment for the award of BACHELOR OF TECHNOLOGY in the Department of Mechanical Engineering to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma

  
Signature of the Project Guide

P.SRINIVASARAO M.Tech

  
Head of the Department

Dr. B.Venkata Siva, M.Tech, Ph.D.

  
Internal Examiner

  
External Examiner



  
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Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that the Project entitled "PERFORMANCE OF CI ENGINE BY USING BIO DIESEL AND MAGNESIUM OXIDE NANO PARTICLES" is being submitted by J.BHANUPRASAD (18475A0309), N.PRAVENKUMAR (18475A0313) SK.SHAHUL (17471A0352), R.GURAVAREDDY (18475A0306), CH.V.MANIKUMAR (17471A0364), and D.P.VIJAYKUMAR (17471A0378) . In partial fulfillment for the award of BACHELOR OF TECHNOLOGY in the Department of MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

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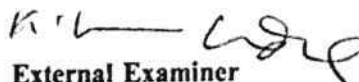
**Project of the Guide**  
Dr.D.Jagadish  
Professor, Dept. of Mech. Engg.



**Head of the Department**  
Dr.B. Venkata Siva  
Professor, Dept. of Mech. Engg.



**Internal Examiner**



**External Examiner**



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Guntur (Dist.), A.P.



## CERTIFICATE

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The results embodied in this thesis have not been submitted to any other University or Institute for the award of degree.



Project guide

K. KIRAN CHAND

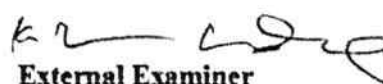


Head of Department

Dr. B. VENKATA SIVA



Internal Examiner



External Examiner



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Guntur (Dist.), A.P.




## CERTIFICATE

This is to certify that the project entitled "DESIGN AND OPTIMIZATION OF FLYWHEEL" is being submitted by Mr. SK. SATTAR (18475A0303), M.DURGA MANI PAVAN (17471A0353), L.NAVEEN (17471A0356), B.PRAKASH (17471A0360), CH. SAI SANDEEP (17471A0362), B. THIRUPATIRAO (17471A0368), CH. RAVITEJA (17471A0373) in partial fulfilment for the award of B.Tech in Mechanical Engineering to the Narasaraopeta Engineering college(AUTONOMOUS), Narasaraopeta is a record of bonafide work carried out by him under our guidance.


The results embodied in this mini project have not been submitted to any other university or institute for the award of any degree or diploma.

  
Project Guide

Dr.B.VENKATA SIVA Ph.D., MISTE, ISNT, FIE(I)

  
Head of the Department

Dr.B.VENKATA SIVA Ph.D., MISTE, ISNT, FIE(I)

  
Internal Examiner

  
External Examiner



  
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Guntur (Dist.), A.P.




## CERTIFICATE

This is to certify that the Project entitled "DESIGN AND FABRICATION OF FULLY 3D-PRINTABLE TURNTABLE" is being submitted by T.SRIHARI (18475A0301), M.LOKESH (17471A0363), K.VENKATESH (17471A0351), G.PAVAN KALYAN (17471A0371), G.AKASH (17471A0380), P.VENKATESH (17471A0365), N.SIVA NAGARAJU (17471A0379) in partial fulfillment for the award of B. Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

  
Project Guide

Sk.Bajan

  
Head of the Department  
Dr. B.Venkata Siva

  
Internal Examiner

  
External Examiner



  
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Guntur (Dist.), A.P.

## CERTIFICATE

This is to certify that the Project entitled "DESIGN AND FABRICATION OF WALKING MECHANISM" is being submitted by Mr. SK.NAGUR BASHA (18475A0315), Mr. SK.MASTANVALI (18475A0316), Mr. DOKKU.PAVANKUMAR (18475A0302), Mr. R.BALAJI (17471A0376), Mr. K.VIJAY (17471A0354), Mr. N.YAGNA MALLESARARAO (17471A0359) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance. The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

M.Venkai

Project Guide

Mr.M.VENKAIAH, M.Tech.



Head of the Department

Dr.B.VENKATASIVA, Ph.D.

Internal Examiner

External Examiner



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NARASARAOPET - 522 601  
Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that a major project entitled "MANIPULATION OF A ROBOTIC ARM FOR SERVING OF BEVERAGE" is being submitted by Mr. SHAIK. YASIN(17471A0323), Mr. S. CHETANA KRISHNA KUMARA (17471A0347), Mr. J. PURNA CHANDRA RAO (17471A0325), Mr. B. RAJU (17471A0336), Mr. K. NAGARJUNA (17471A0342), Mr. P. RUPANAND(17471A0320), in partial fulfillment for the award of B. Tech in Mechanical engineering to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

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*Project Guide*

Mr. P. Sarath Chandra,  
Assistant Professor



*Head of the Department*

Dr. B. Venkata Siva,  
Professor and Head



*Internal Examiner*



*External Examiner*

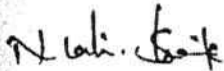


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NARASARAOPET - 522 601  
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## CERTIFICATE

This is to certify that the Project entitled "DESIGN AND FABRICATION OF 3D PRINTED PROSTHETIC HAND" is being submitted by Mr. SK. AKBAR JANI (18475A0356), D.VENKATA BHASKAR (18475A0353), P.VENKATA DINESH (18475A0329), V. RAMALINGESWARA RAO (18475A0370), B.HARIKRISHNA REDDY (184750333), B. SRIKANTH NAIK (18475A0334), B.NAGARJUNA REDDY (18475A0336) in partial fulfillment for the award of B. Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.

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Project Guide

SK. NAGUL MEERAVALI

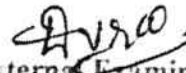


Head of the Department

Dr. B. VENKATA SIVA



Internal Examiner



External Examiner



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Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that a major project entitled "DESIGN AND FABRICATION OF EXPERIMENTAL SETUP TO DETERMINE NATURAL FREQUENCY" is being submitted by, Mr. VENNAPUSALA SRIKANTH (17471A0316), Mr. DAREDDY RAMIREDDY (17471A0344), Mr. BOMMINENI ASHOK BABU (17471A0313), Mr. KUNDURU NAGIREDDY (17471A0308), Mr. PATAN MOHIDDHEEN (17471A0318), Mr. NALUKURTHI SUKUMAR (16471A0308), in partial fulfillment for the award of B. Tech in Mechanical engineering to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

The results embodied in this these is have not been submitted to any other University or Institute for the award of any degree or diploma.

  
Project Guide

Mr. M. Venkanna Babu

  
Head of the Department

Dr. B. Venkata Siva

  
Internal Examiner

  
External Examiner



## CERTIFICATE

This is to certify that an industrial training entitled "DESIGN AND ANALYSIS OF IC ENGINE PISTON AND PISTON RINGS BY USING DIFFERENT MATERIALS" is being submitted by Mr. AKHIL SAI TALLURI (17471A0301), B HARI KRISHNA (17471A0307), VV SHANMUKH (17471A0322), D NAGARAJU (17471A0327), P MANI KANTA (17471A0331), D GOPI NAIDU (17471A0338), K SIVA GOPI (17471A0348), in partial fulfillment for the award of Bachelor of technology in Mechanical engineering to the Jawaharlal Nehru Technological University-Kakinada, Kakinada is a record of bonfire work carried out by him/her under our guidance.

The results embodied in this these is having not been submitted to any other University or Institute for the award of any degree or diploma.



Project Guide

Mr. T N V MAHESH BABU



Head of the Department

Dr. B. VENKATA SIVA



Internal Examiner



External Examiner



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Guntur (Dist.), A.P.




## CERTIFICATE

This is to certify that Project entitled "MANUFACTURING OF HYPERBOLOIDAL GEAR MODEL USING ULTIMAKER S5 3D PRINTING MAHINE" is being submitted by Mr. C. VENKATA SAI RAM(17471A0343), Y.KOUSHIK KUMAR(17471A0321), B.V.MANIKANTA REDDY (17471A0304), M.ROOP CHANDH (17471A0303), P.SRIKANTH(16471A0326), A.PRUDHVI(17471A0329) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.


The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

  
Project Guide

Mr. BACHALI RAMBABU

  
Head of the Department

Dr. B.VENKATA SIVA

  
Internal Examiner

  
External Examiner

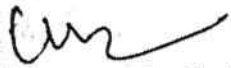



  
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## CERTIFICATE

This is to certify that the Project entitled "FABRCATION AND ANALYSIS OF A356-SiC AND A356-GRAPHITE METAL MATRIX COMPOSITES BY USING STIR CASTING METHOD" is being submitted by Mr. CHAITANYA BANTU (17471A0312), P SAI PRAVEEN (17471A0302), PRAKASH G (17471A0317), M S D MAHENDRA (17471A0332), K SEKHAR BABU (17471A0341), P VENKAIAH (17471A0346), SYED NURUDDIN (17471A0350) in partial fulfillment for the award of B. Tech in MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonfire work carried out by him/her under our guidance.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

  
Signature of the Guide  
Dr. P SURESH BABU  
Associate Professor  
Dept. of Mechanical Egg.

  
Signature of HOD  
Dr. B.VENKATA SIVA  
Prof. & HOD  
Dept. of Mechanical Egg.

  
Internal Examiner

  
External Examiner



  
Principal  
NARASARAOPETA ENGINEERING COLLEGE  
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NARASARAOPET - 522 601.  
Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that the project entitled "DESIGN AND OPTIMIZATION OF FLYWHEEL" is being submitted by Mr. SK. SATTAR (18475A0303), M.DURGA MANI PAVAN (17471A0353), L.NAVEEN (17471A0356), B.PRAKASH (17471A0360), CH. SAI SANDEEP (17471A0362), B. THIRUPATIRAO (17471A0368), CH. RAVITEJA (17471A0373) in partial fulfilment for the award of B.Tech in Mechanical Engineering to the Narasaraopeta Engineering college(AUTONOMOUS). Narasaraopeta is a record of bonafide work carried out by him under our guidance.

The results embodied in this mini project have not been submitted to any other university or institute for the award of any degree or diploma.



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Dr.B.VENKATA SIVA Ph.D., MISTE, ISNT, FIE(I)

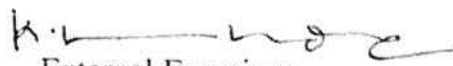


Head of the Department

Dr.B.VENKATA SIVA Ph.D., MISTE, ISNT, FIE(I)



Internal Examiner



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Guntur (Dist.), A.P.


## CERTIFICATE

This is to certify that Project entitled "AUTOMATION OF IGUS ROBO ARM FOR SERVING BEVERAGES BY USING OCR" is being submitted by Mr. SK.JOHN SAIDA (18475A0307), CHLCHANDU(18475A0319), Y.RAVI KUMAR (17471A0377), A CHADRA SEKILAR RAO(18471A0310), U.GANESHI(18475A0320), B.RAVI TEJA(17471A0374) in partial fulfillment for the award of B.Tech in MECHANICAL ENGINEERING to the NARASAROPETA ENGINEERING COLLEGE (AUTONOMOUS), NARASARAOPET, is a record of bonafide work carried out by them under our guidance.


The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

  
Project Guide

Mr. MOJESWARARAO DUDUKU

  
Head of the Department

Dr. B.VENKATA SIVA

  
Internal Examiner

  
External Examiner



  
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(AUTONOMOUS)  
NARASARAOPET - 522  
Guntur (Dist.), A.P.



## CERTIFICATE

This is to certify that the Project entitled "EXPERIMENTAL ANALYSIS OF SINGLECYLINDER DIESEL ENGINE FUELED WITH BIODIESEL AND COBALT OXIDE NANOPARTICLES" is being submitted by P.MANI (18475A0311), SK.BAJI (18475A0317), B.ESWARAVENKATASAIYESWANTH (17471A0370), K.JITHENDRAKUMAR (18475A0308), A.HARINATH (17471A0358), V.HEMANTH REDDY (17471A0357). In partial fulfilment for the award of BACHELOR OF TECHNOLOGY in the Department of Mechanical Engineering to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.

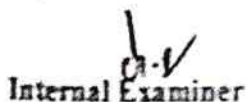
The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma

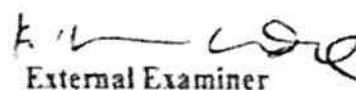
  
Signature of the Project Guide

PSRINIVASARAO M.Tech

  
Head of the Department

Dr. B.Venkata Siva, M.Tech, Ph.D.

  
Internal Examiner

  
External Examiner




  
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Guntur (Dist.), A.P.


## CERTIFICATE

This is to certify that the Project entitled "PERFORMANCE OF CI ENGINE BY USING BIO DIESEL AND MAGNESIUM OXIDE NANO PARTICLES" is being submitted by J.BHANUPRASAD (18475A0309), N.PRAVENKUMAR (18475A0313) SK.SHAHUL (17471A0352), R.GURAVAREDDY (18475A0306), CH.V.MANIKUMAR (17471A0364), and D.P.VIJAYKUMAR (17471A0378) . In partial fulfillment for the award of BACHELOR OF TECHNOLOGY in the Department of MECHANICAL ENGINEERING to the Jawaharlal Nehru Technological University- Kakinada, Kakinada is a record of bonafide work carried out by him/her under our guidance.


The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma

  
Project of the Guide

Dr.D.Jagadish  
Professor, Dept. of Mech. Engg.


  
Head of the Department

Dr.B.Venkata Siva  
Professor, Dept. of Mech. Engg.

  
Internal Examiner

  
External Examiner



  
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**To Whom It May Concern**

This is to certify that **Mr. Punati Manikanta**, with Roll no. **17471A0331**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of IC engine piston** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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**To Whom It May Concern**

This is to certify that **Mr. Potturi Naga Sai Dileep**, with **Roll no. 17471A0339**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Optimization of Railway Axle** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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**To Whom It May Concern**

This is to certify that **Mr. Prattipati Raghavendra Babu**, with **Roll no. 17471A0367**,  
B.Tech Mechanical Engineering student from Narasaraopeta Engineering College  
,Narasaraopet, has done his project work Titled **Design and Analysis of Wheel rim on**  
**radial loads** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments  
and was also regular in attendance.

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### To Whom It May Concern


This is to certify that **Mr. Prathipati Svam Babu**, with **Roll no. 17471A0355**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of Wheel rim on radial loads** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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### To Whom It May Concern

This is to certify that **Mr. Shaik Sattar**, with **Roll no. 18475A0303**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Optimization of flywheel** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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### To Whom It May Concern

This is to certify that **Mr. Shaik Surajahmad**, with **Roll no. 17471A0340**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Optimization of Railway Axle** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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### To Whom It May Concern

This is to certify that **Mr. Talluri Akhil Sai**, with **Roll no. 17471A0301**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopeta, has done his project work Titled **Design and Analysis of IC engine piston** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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**To Whom It May Concern**

This is to certify that **Mr. Vakkalagadda Ganesh Babu**, with **Roll no. 18475A0339**,  
B.Tech Mechanical Engineering student from Narasaraopeta Engineering College,  
Narasaraopet, has done his project work Titled **Design and CFD Analysis of Shell and  
Tube Heat Exchanger** in our organization from 05-04-2021 to 30-07-2021 as part of  
curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments  
and was also regular in attendance.

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**Guntur (Dist.), A.P.**



### To Whom It May Concern

This is to certify that **Mr. Vasa Venkat Shanmukh**, with **Roll no. 17471A0322**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of IC engine piston** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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**Guntur (Dist.), A.P.**

**To Whom It May Concern**

This is to certify that **Mr. Yaragani Saidulu**, with **Roll no. 18475A0368**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and CFD Analysis of Shell and Tube Heat Exchanger** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.



  
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Habsiguda | Himayathnagar | Kukatpally | Mehdiapatnam | Warangal | Secunderabad | Delhi | Ghaziabad | Karnataka



**To Whom It May Concern**

This is to certify that **Mr. Kotra Mani Pavan**, with Roll no. **17471A0306**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Optimization of Railway Axle** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.



  
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**To Whom It May Concern**

This is to certify that **Mr. Kote Niteeshkumar**, with **Roll no. 18475A0342**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of Differential Gear Box** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

Authorized Signature  
  
Nagu K



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### To Whom It May Concern

This is to certify that **Mr. Katam Siva Gopi**, with **Roll no. 17471A0348**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of IC engine piston** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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**Guntur (Dist.), A.P.**

**To Whom It May Concern**

This is to certify that **Mr. Madala Bala Naveen Kumar**, with **Roll no. 17471A0326**,  
B.Tech Mechanical Engineering student from Narasaraopeta Engineering College,  
Narasaraopet, has done his project work Titled **Design and Optimization of Railway Axle**  
in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments  
and was also regular in attendance.



  
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Habsiguda | Himayathnagar | Kukatpally | Mehdiapatnam | Warangal | Secunderabad | Delhi | Ghaziabad | Karnataka



**To Whom It May Concern**

This is to certify that **Mr. Medisetty Durga Mani Pavan**, with **Roll no. 17471A0353**,  
B.Tech Mechanical Engineering student from Narasaraopeta Engineering College,  
Narasaraopet, has done his project work Titled **Design and Optimization of flywheel** in our  
organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments  
and was also regular in attendance.



  
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**NARASARAOPETA ENGINEERING COLLEGE**  
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**Guntur (Dist.), A.P.**

**To Whom It May Concern**

This is to certify that **Mr. Meka Venkatesh**, with **Roll no. 18475A0332**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of Differential Gear Box** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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CANTER CADD  
GUNTUR



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**Guntur (Dist.), A.P.**



**To Whom It May Concern**

This is to certify that **Mr. Nuthalapati Anil**, with **Roll no. 18475A0335**, B.Tech  
Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet,  
has done his project work Titled **Design and CFD Analysis of Shell and Tube Heat**  
**Exchanger** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments  
and was also regular in attendance.

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Nagu

  
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**NARASARAOPET - 522 601**  
**Guntur (Dist.), A.P.**

**To Whom It May Concern**

This is to certify that **Mr. Nakkala Chiranjeevulu**, with **Roll no. 18475A0358**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of Differential Gear Box** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

Authorized signature  
  
Nagu



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**NARASARAOPETA ENGINEERING COLLEGE**  
**(AUTONOMOUS)**  
**NARASARAOPET - 522 001**  
**Guntur (Dist.), A.P.**



**To Whom It May Concern**

This is to certify that **Mr. Pothavaram Mokthar Bhasha**, with Roll no. **18475A0366** ,  
B.Tech Mechanical Engineering student from Narasaraopeta Engineering College ,  
Narasaraopet, has done his project work Titled **Design and Analysis of Differential Gear**  
**Box** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments  
and was also regular in attendance.

Authorized signature  
  
Nagu K



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**To Whom It May Concern**

This is to certify that **Mr. Degala Gopi Naidu**, with **Roll no. 17471A0338**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of IC engine piston** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

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**NARASARAOPETA ENGINEERING COLLEGE**  
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**NARASARAOPET - 522 601**  
**Guntur (Dist.), A.P.**

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Habsiguda | Himayathnagar | Kukatpally | Mehdiapatnam | Warangal | Secunderabad | Delhi | Ghaziabad | Karnataka



**To Whom It May Concern**

This is to certify that **Mr. Darapaneni Naga Raju**, with **Roll no. 17471A0327**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopeta, has done his project work Titled **Design and Analysis of IC engine piston** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

Authorized signature  
  
Nagu



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**To Whom It May Concern**


This is to certify that **Mr. Devarakonda Sai Krishna Reddy**, with **Roll no. 18475A0304**,  
B.Tech Mechanical Engineering student from Narasaraopeta Engineering College,  
Narasaraopet, has done his project work Titled **Design and Analysis of Wheel rim on**  
**radial loads** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments  
and was also regular in attendance.

Authorized signature  
  
Nagu



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**To Whom It May Concern**

This is to certify that **Mr. Garlapati Trinadh**, with **Roll no. 17471A0382**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopeta, has done his project work Titled **Design and Analysis of Wheel rim on radial loads** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

Authorized signature  
  
Nagu



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**To Whom It May Concern**

This is to certify that **Mr. Gurijala Venubabu**, with **Roll no. 17471A0309**, B.Tech  
Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopeta,  
has done his project work Titled **Design and Optimization of Railway Axle** in our  
organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments  
and was also regular in attendance.

Authorized Signature  
  
Nagu K



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**(AUTONOMOUS)**  
**NARASARAOPET - 522 601**  
**Guntur (Dist.), A.P.**



**To Whom It May Concern**

This is to certify that **Mr. Indla Naveen**, with **Roll no. 17471A0356**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Optimization of flywheel** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

Authorized signature  
  
Nagu



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**To Whom It May Concern**

This is to certify that **Mr. Kavuri Appa Rao**, with **Roll no. 18475A0318**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of Wheel rim on radial loads** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

Authorized signature  
  
Nagu K



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**(AUTONOMOUS)**  
**NARASARAOPET - 522 601**  
**Guntur (Dist.), A.P.**



### To Whom It May Concern

This is to certify that **Mr. Burri Prakash**, with **Roll no. 17471A0360**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Optimization of flywheel** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

Authorized Signature  
  
Nagu

  
**IQAC**

  
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### To Whom It May Concern

This is to certify that **Mr. Bokka Rajashekhar**, with **Roll no. 16471A0314**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and CFD Analysis of Shell and Tube Heat Exchanger** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

Authorized signature  
  
Nagu



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### To Whom It May Concern

This is to certify that **Mr. Boddu Thirupathirao**, with **Roll no. 17471A0368**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopeta, has done his project work Titled **Design and Optimization of flywheel** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.



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**To Whom It May Concern**

This is to certify that **Mr. Bhandla Venkatagopinath**, with **Roll no. 18475A0349**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of Differential Gear Box** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.



  
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Ph: 9032220123  
Email: Guntur@cantercadd.com  
Website: www.cantercadd.com

### To Whom It May Concern

This is to certify that **Mr. Chinthapalli Raviteja**, with **Roll no. 17471A0373**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Optimization of flywheel** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.



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Email: Guntur@cantercadd.com  
Website: www.cantercadd.com

### To Whom It May Concern

This is to certify that **Mr. Chollangi Sai Sandeep**, with **Roll no. 17471A0362**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Optimization of flywheel** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.



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Habsiguda | Himayathnagar | Kukatpally | Mehdiapatnam | Warangal | Secunderabad | Delhi | Ghaziabad | Karnataka



**To Whom It May Concern**

This is to certify that **Mr. Atukuri Anil Kumar**, with **Roll no. 18475A0338**, B.Tech Mechanical Engineering student from Narasaraopeta Engineering College, Narasaraopet, has done his project work Titled **Design and Analysis of Differential Gear Box** in our organization from 05-04-2021 to 30-07-2021 as part of curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments and was also regular in attendance.

Authorized signature  
  
Nagu



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Habsiguda | Himayathnagar | Kukatpally | Mehdiapatnam | Warangal | Secunderabad | Delhi | Ghaziabad | Karnataka

**To Whom It May Concern**

This is to certify that **Mr. Akkala Chandra Sekhar Reddy**, with **Roll no. 18475A0341**,  
B.Tech Mechanical Engineering student from Narasaraopeta Engineering College,  
Narasaraopet, has done his project work Titled **Design and CFD Analysis of Shell and  
Tube Heat Exchanger** in our organization from 05-04-2021 to 30-07-2021 as part of  
curriculum.

We have noticed that, during the period, he has shown keen interest in his assignments  
and was also regular in attendance.

Authorized signature  
  
Nagu

  
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**(AUTONOMOUS)**  
**NARASARAOPET - 522 601**  
**Guntur (Dist.), A.P.**



# HOME AUTOMATION USING DJANGO

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
Award of the degree

BACHELOR OF TECHNOLOGY  
IN  
ELECTRONICS AND COMMUNICATION ENGINEERING

By

Mr. T. MUKESH CHOWDARY	(17471A0453)
Mr. N. V S S PRUDHVI KUMAR	(16471A0405)
Mr. P. SAI PAVAN	(17471A0426)
Mr. N. ANJI REDDY	(17471A0456)
Mr. T. SURESH BABU	(17471A0452)

Under the guidance of  
Mr. P. BHAGYA RAJU Asst. Prof.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
NARASARAOPETA ENGINEERING COLLEGE

(Autonomous)

(Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada,  
Accredited by NBA, NAAC with 'A' Grade)

Kotappakonda Road, Yallamanda (Post), NARASARAOPET-  
522 601, Guntur Dist., Andhra Pradesh.

July, 2021



Principal  
NARASARAOPETA ENGINEERING COLLEGE  
(AUTONOMOUS)  
NARASARAOPET - 5  
Guntur (Dist.), A.P.

**DESIGN OF LOW POWER CMOS D-FLIP  
FLOP TOPOLOGY EXPLOITING  
FORWARD BODY BIAS THRESHOLD  
LOWERING**

**A PROJECT REPORT**

**Submitted in partial fulfillment of requirements for the  
Award of the degree**

**BACHELOR OF TECHNOLOGY  
IN  
ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

Mr. SHAIK ABTHAB	(17471A0451)
Ms. K. V V S PRATHYUSHA	(17471A0408)
Mr. M. NAGASAI	(17471A0435)
Mr. L S S R SASTRY	(17471A0436)
Mr. G. VAMSI	(17471A0434)

**Under the guidance of  
Mrs. T. INDIRA  
Asst. Prof.**



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**NARASARAOPET-522 601, Guntur Dist., Andhra Pradesh.**

**July, 2021**



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**Guntur (Dist.), A.P.**



# **4-BIT ARITHMETIC LOGIC UNIT USING VERY HIGH-SPEED INTEGRATED CIRCUIT HARDWARE DESCRIPTION LANGUAGE**

## **A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

### **BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

Ms. T. VYSHNAVI	(17471A0446)
Ms. Y. NAVYA	(17471A0448)
Mr. K. CHAKRI SVC	(17471A0401)
Mr. P. RAMANJI	(17471A0438)
Ms. G. NAVYA SRI	(17471A0450)
Mr. R. SUMANTH	(17471A0459)

**Under the guidance of  
Mr. E. NARENDRA  
Assistant Professor**



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(Autonomous)**

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NARASARAOPET-522 601, Guntur Dist., Andhra Pradesh.**

**July, 2021**



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NARASARAOPET - 522 601  
Guntur (Dist.), A.P.**

# SMART ATTENDENCE SYSTEM USING FACE RECOGNITION

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
Award of the degree

### BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING

By

Ms. N. VENKATA YASHASWINI	(17471A0417)
Mr. M. SAI SRIDHAR	(17471A0419)
Ms. SYED MANISHA	(17471A0433)
Mr. M. AKHIL SURYA	(17471A0442)
Mr. Y. SUDHEER KUMAR REDDY	(17471A0405)

Under the guidance of  
Dr. A. V. NAGESWARA RAO, Ph. D  
Associate Professor



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July, 2021



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NARASARAOPET - 522 601  
Guntur (Dist.), A.P.



**RESOLUTION ENHANCEMENT OF COVID-19 CHEST X-RAY IMAGES  
USING FUZZY LOGIC**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

**BACHELOR OF TECHNOLOGY  
IN  
ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

**Y. SAI VAMSIKRISHNA  
P. YASWANTH GUPTHA  
P. VENKATESH NAIDU  
N. DURGA PRASAD  
M.SAI BHARGAV REDDY**

**(17471A0414)  
(17471A0420)  
(17471A0443)  
(17471A0429)  
(17471A0418)**

**Under the guidance of  
Dr. K. Raju, M.E.PhD  
Professor**



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JULY, 2021**



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**NARASARAOPET - 522 601**  
**Guntur (Dist.), A.P.**

**SMART COLD STORAGE SYSTEM USING IOT**  
**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for  
the Award of the degree**

**BACHELOR OF TECHNOLOGY  
IN  
ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

<b>Mr. M. SAI RAM</b>	<b>(17471A0415)</b>
<b>Mr. CH. KALYAN KUMAR</b>	<b>(17471A0404)</b>
<b>Mr. M. YASWANTH CHOWDARY</b>	<b>(17471A0403)</b>
<b>Mr. K. VINAY</b>	<b>(17471A0410)</b>
<b>Mr. K. GANESH KRISHNA SAI</b>	<b>(17471A0457)</b>

**Under the guidance of  
Dr. Sk. BAJID VALI, M. Tech, Ph. D  
Associate Professor**



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**July, 2021**



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**NARASARAOPET - 5**  
**Guntur (Dist.), Andhra Pradesh**



**RAILWAY TRACK CRACK INSPECTION AND AUTOMATED  
GATE CONTROLLING SYSTEM USING IOT**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

**BACHELOR OF TECHNOLOGY  
IN  
ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

Ms. G. CHARITHA	(17471A0440)
Ms. CH. SAI PRAGNA	(17471A0432)
Mr. P. SRINIVASARAO	(17471A0437)
Mr. G. RAMBHUPAL REDDY	(17471A0413)
Mr. SK. SALMAN	(17471A0441)

Under the guidance of  
P.S.S. Chakravarthy  
M. Tech, Professor



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NARASARAOPET-522 601, Guntur Dist., Andhra Pradesh.

July , 2021



  
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**NARASARAOPET - 522 601**  
**Guntur (Dist.), A.P.**

**HAND GESTURE SIGN LANGUAGE FOR DUMB AND DEAF  
A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

**BACHELOR OF TECHNOLOGY  
IN  
ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

Mr. N. LINGAREDDY	(17471A0444)
Mr. CH. ESWAR RAO	(17471A0424)
Mr. Y. PRATHAP	(17471A0425)
Mr. P. SURESH	(17471A0439)
Mr. G. TEJESWAR REDDY	(17471A0445)

**Under the guidance of  
Mr.CH. ADI BABU  
Asst. Prof**



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(Autonomous)**

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**July, 2021**



  
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NARASARAOPET - 5  
Guntur (Dist.), A.P.**



**MICROSTRIP U-SLOT PATCH ANTENNA  
FOR WIRELESS APPLICATIONS**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the**

**Award of the degree**

**BACHELOR OF TECHNOLOGY**

**IN**

**ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

**Mr. K. JEEVAN JITHENDRA**

**(17471A0427)**

**Mr. K. KRISHNA AKHIL**

**(17471A0422)**

**Mr. B. YASWANTH AMARESH**

**(17471A0430)**

**Mr. P. VENU**

**(17471A0421)**

**Mr. D. PRUDHVI SAI**

**(17471A0423)**

**Under the guidance of**

**Dr. V. Venkata Rao**

**Prof. & HOD**



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**JULY, 2021**



**Principal**  
**NARASARAOPETA ENGINEERING COLLEGE**  
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**NARASARAOPET - 522601**  
**Guntur (Dist.), Andhra Pradesh.**

# **SOLAR TRACKING SYSTEM USING IOT**

## **A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

### **BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

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(17471A04A5)

Mr. A. ASHOK KUMAR

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Under the guidance of  
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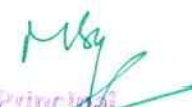


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July, 2021



  
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NARASARAOPET - 522 601  
Guntur (Dist.), A.P.



# COMPARITIVE ANALYSIS OF FULL SUBTRACTOR USING GDI AND CMOS LOGIC TECHNIQUES

## A PROJECT REPORT

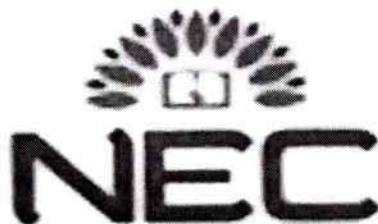
Submitted in partial fulfillment of requirements for the  
Award of the degree

## BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING

By

Mr. G.V.S.DILEEP KUMAR REDDY	(17471A0475)
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July, 2021



  
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ENHANCEMENT OF MR BRAIN IMAGES USING  
FUZZY INTERPOLATION

A PROJECT REPORT

Submitted in partial fulfillment of requirements for the  
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BACHELOR OF TECHNOLOGY  
IN  
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By

Ms. V. N. S. L. MALIKA BRAMARAMBIKA	(17471A04A2)
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# COVID PATIENT HEALTH MONITORING SYSTEM USING IOT

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
Award of the degree

## BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING

By

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# **IOT BASED PREPAID ENERGY METER**

## **A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
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### **BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING**

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# LANDMINE DETECTION AND SURVEILLANCE ROBOT USING IOT

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
Award of the degree

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**DENSITY BASED TRAFFIC CONTROL SYSTEM  
USING IOT**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

**BACHELOR OF TECHNOLOGY  
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# UNMANNED PETROL PUMP SYSTEM USING RFID TECHNOLOGY

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
Award of the degree

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By

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Mr. K. SIVA HEMANTH	(17471A04A9)
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JULY, 2021



  
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NARASARAOPET -  
Guntur (Dist.).

# LOW POWER DESIGN OF 4-BIT SIMULTANEOUS COUNTER USING DIGITAL SWITCHING CIRCUITS FOR LOW RANGE COUNT APPLICATIONS

## A PROJECT REPORT

Submitted in partial fulfilment of the requirements for the Award of the degree

BACHELOR OF TECHNOLOGY

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**MACHINE LEARNING TECHNOLOGY USED FOR  
TOXIC LIQUID DETECTION**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

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July, 2021



  
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**COMPARISON BETWEEN RECTANGULAR  
MICROSTRIP PATCH ANTENNA WITH AND WITHOUT  
DEFECTED GROUND STRUCTURE AT 1.85GHz  
A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

**BACHELOR OF TECHNOLOGY  
IN  
ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

Mr. G. SRINIVASARAO  
Mr. R. RAMCHARAN  
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Mr. T. PAVANKALYAN  
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**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
NARASARAOPETA ENGINEERING COLLEGE**

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**July, 2021**



  
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NARASARAOPET - 522  
Guntur (Dist.), A.P.**



# FLOATING WATER WASTE COLLECTING ROBOT

A Project report submitted in partial fulfilment of the requirements  
for the award of the degree of

## Bachelor of Technology

In

ELECTRONICS AND COMMUNICATION ENGINEERING

Submitted by

N.VENKATA SIVASAI	18475A0406
G.KRANTHI	17471A04F3
R.SHYAM PREMKUMAR	18475A0402
M.VENKATA SANDEEP	18475A0408
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**Dr. A.V. NAGESWARA RAO** M.Tech, Ph.D

Associate Professor, Dept. of ECE



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
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JULY-2021



  
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Guntur (Dist.), A.P.

# **GAS LEAKAGE DETECTION ROBOT USING EMAIL ALERT**

## **A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

## **BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING**

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Ms. P. MALI KHARJUNARAO	(17471A04G2)
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July, 2021



  
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**STUDY OF PERFORMANCE COMPARISON OF  
STATIC AND DYNAMIC APPROXIMATE REVERSE  
CARRY PROPAGATE FULL ADDER USING CMOS  
TECHNOLOGY**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

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IN  
ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

Ms. K. GANGA BHAVANI	(17471A04E8)
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July 2021



  
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# HIGH SPEED FULLY HOMOMORPHIC ENCRYPTION AND DECRYPTION FOR LARGE INTEGER MULTIPLIERS

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
Award of the degree

## BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING

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# SMART SENSOR NETWORK BASED ATM MANAGEMENT SYSTEM USING IOT

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
award of the degree

## BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING

By

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VARIOUS TOXIC GASES DETECTION USING THEIR  
RESPONSE AND RECOVERY TIMES AT DIFFERENT  
TEMPERATURES BY MACHINE LEARNING TECHNIQUE  
AND METAL OXIDE GAS SENSOR

A PROJECT REPORT

Submitted in partial fulfilment of requirements for the Award of the degree

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IN

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BY

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

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# **IOT BASED DAM WATER AND GATE CONTROLLING SYSTEM**

## **A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the Award of the degree**

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**IN**

### **ELECTRONICS AND COMMUNICATION ENGINEERING**

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**July, 2021**



  
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**Guntur (Dist.), A.P.**

# **IOT BASED ANTI THEFT DETECTION AND ALERTING SYSTEM USING SMTP**

## **A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

## **BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING**

**By**

**Mr. V. TULASIRAM  
Mr. M. GOPI KRISHNA  
Ms. P. DIVYA  
Ms. G. DEEPTHI  
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**(17471A04D4)  
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**July, 2021**



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**NARASARAOPET - 522601**  
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# IoT BASED BABY MONITORING SYSTEM FOR SMART CRADLE

## A PROJECT REPORT

Submitted in partial fulfillment of requirements for the  
Award of the degree

### BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING

By

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Mr. BANDARU MAHESH	(17471A04D7)
Mr. BOBBA PRASANTH	(17471A04G4)

Under the guidance of  
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Assistant Professor



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July, 2021



  
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# **IOT BASED SMART DISINFECTANT ROBOT USING RASPBERRY PI 3**

## **A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the Award of the  
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**BACHELOR OF TECHNOLOGY**

**IN**

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**Under the guidance of**

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# **IoT BASED TRASH MANAGEMENT SYSTEM IN SMART CITIES**

## **A PROJECT REPORT**

**Submitted in partial fulfillment of requirements for the  
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### **BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING**

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**SIMULATION OF PARASITIC RECTANGULAR  
PATCH ANTENNA RECESSED GROUND FOR  
WIDEBAND COMMUNICATION**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
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# ACCIDENT PREVENTION SYSTEM USING INTERNET OF THINGS

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
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# **IOT BASED WARD SANITATION WITH ROOM MONITORING ROBOT**

## **A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the**

**Award of the degree**

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**IN**

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# IOT BASED FACIAL RECOGNITION SYSTEM FOR HOME SECURITY USING LPBH ALGORITHM

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
Award of the degree

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**IOT BASED SMART SENSOR NETWORK FOR  
AQUA CULTURE**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

**BACHELOR OF TECHNOLOGY  
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# ANTI THEFT DETECTION AND ALERTING SYSTEM USING IOT

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
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# **IoT BASED BLIND PERSON'S STICK**

## **A PROJECT REPORT**

**Submitted in partial fulfillment of requirements for the  
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**IN**

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**July, 2021**



  
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# **IOT BASED SMART BAND SECURITY SYSTEM**

## **A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the degree**

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**July, 2021**



  
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**Guntur (Dist.), A.P.**

**FINGERPRINT BASED CAR IGNITION SYSTEM USING ARDUINO**  
**A PROJECT REPORT**

**Submitted in partial fulfillment of requirements for the**  
**Award of the degree**

**BACHELOR OF TECHNOLOGY**  
**IN**  
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**Guntur (Dist.), A.P.**



# AREA OPTIMIZATION OF CMOS FULL ADDER DESIGN USING 3T XOR

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
Award of the Degree

## BACHELOR OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING

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# IMPLEMENTATION OF DATA TRANSFER USING LI-FI TECHNOLOGY

## A PROJECT REPORT

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JULY, 2021



  
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**SIMULATION CU-DOPED SNO<sub>2</sub> THICK FILM GAS  
SENSOR FOR METHONAL USING ANN TECHNIQUE**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
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# **GDI LOGIC BASED DESIGN OF HAMMING-CODE ENCODER AND DECODER FOR ERROR FREE DATA COMMUNICATION**

**A PROJECT REPORT**

**Submitted in partial fulfilment of requirements for the  
Award of the Degree**

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**By**

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<b>MR.SK. IMRAN</b>	<b>(17471A04M8)</b>

**Under the guidance of  
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# ADVANCED COAL MINE GAS DETECTION ROBOT

## A PROJECT REPORT

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July, 2021



  
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# DESIGN OF A SCALABLE LOW POWER 1-BIT HYBRID FULL ADDER FOR FAST COMPUTATION

## A PROJECT REPORT

Submitted in partial fulfilment of requirements for the  
Award of the degree

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**NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPETA**  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the mini project entitled " **REDUCING COVID-19 READMISSIONS BY USING MACHINE LEARNING**" is a bonafide work done by "A. L. Narendra Kumar(17471A0521), B. V. V. N. Sai Kumar(17471A0527)" in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
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M.Sireesha,M.Tech,ph.D

  
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**CERTIFICATE**

This is to certify that the mini project entitled "CONVOLUTIONAL LSTM MODEL FOR SENTIMENT ANALYSIS IN SOCIAL BIG DATA" is a bonafide work done by "P. Raghuvver(17471A0537), V. Ananth Reddy(17471A0534), R.O.S.N.V.SaiKiran(1747 1A0511), T.Vignesh(17471A0529)" in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

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PROFESSOR & HEAD  
Dept. of Computer Science & Engineering  
NARASARAOPETA ENGINEERING COLLEGE  
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EXTERNAL EXAMINER

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**NARASARAOPETA ENGINEERING COLLEGE**  
**NARASARAOPETA(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**CERTIFICATE**



This is to certify that the mini project entitled "**HOUSE PRICE PREDICTION**" is a bonafide work done by "**B.SowmyaReddy(17471A0513)**, **MLYaminiPriya(17471A0550)**, **P.Aidhya Lakshmi Manasa(17471A0517)**" in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the department of **COMPUTER SCIENCE AND ENGINEERING** during 2021.

  
PROJECTGUIDE

**B.V Suresh Reddy,M.Tech**

  
PROJECTCO-ORDINATOR

**M.Sireesha,M.Tech**

  
HEAD OF THE DEPARTMENT

**Dr.S.N.TirumalaRao,M.Tech.,Ph.D**

  
EXTERNAL EXAMINER



  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project entitled "WOMEN STYLES" is a bonafide work done by "A.L.V.N.S.A.Pravallika(17471A0515), M.Deepthi(17471A0523), K.Aswini(17471A0535), " in partial fulfilment of the requirements for the award of the degree of BACHELOR OF TECHNOLOGY in the Department of COMPUTER SCIENCE AND ENGINEERING during 2020-2021.

  
PROJECT GUIDE

K.V.Narasimha Reddy, M.Tech

Assistant professor

  
HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D.

  
PROJECT CO-ORDINATOR

K.V.Narasimha Reddy, M.tech

Assistant professor

  
EXTERNAL EXAMINER



  
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**(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project entitled "PRIVATE CLOUD FOR DATA STORING AND MAINTAIN INTEGRITY USING RASPBERRY PI" is a bonafide work done by "T. V. J. Supriya (17471A0531), P. Tejaswini (17471A0528)" in partial fulfillment of the requirements for 1<sup>st</sup> award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2019-2020.

PROJECT GUIDE

Dr. M. Venkata Reddy, M.Tech., Ph.D

PROJECT CO-ORDINATOR

Mr. K.V. Narasimha Reddy, M.Tech

HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D

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**CERTIFICATE**

This is to certify that the project entitled "PLANT DISEASE DETECTION" is a work done by "K.S.L Pavan Kumar (17471A0575), S. Mahesh (17471A05A6), G. Venkateswara Reddy (17471A05A1)" in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

Dr. G.L.N. Jayaprada M.Tech., Ph.D.,  
Professor

  
PROJECT COORDINATOR

Mrs. M. Sireesha M.Tech. (Ph.D.)  
Assoc. Professor

  
HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao M.Tech., Ph.D.,

  
EXTERNAL EXAMINER



  
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**NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPETA**

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**CERTIFICATE**



This is to certify that the project entitled "SPEECH EMOTION RECOGNITION" is a bonafide work done by "M.N.S.L.P.Amulya(17471A0582), Y.C.P.Himaja(17471A05A2), G.Varshini (1747A0594)" in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021

PROJECT GUIDE

O. Aruna, B.Tech, M.Tech(PhD)

Assistant Professor

HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D

PROJECT CO-ORDINATOR

Mrs. Sireesha M, M.Tech.,

Assoc. Professor

EXTERNAL EXAMINER



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**Guntur (Dist.)**

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NARASARAOPETA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



**CERTIFICATE**

This is to certify that the mini project entitled "FAKE NEWS DETECTION SYSTEM" is a bonafide work done by *[Signature]* in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the department of **COMPUTER SCIENCE AND ENGINEERING** during **2020-2021**.

*[Signature]*  
PROJECT GUIDE

**Mrs. O. Aruna, M.Tech.**

Assistant Professor

*[Signature]*  
PROJECT CO-ORDINATOR

**Mrs. M. Sireesha, M.Tech., (Ph.D.)**

Assoc. Professor

*[Signature]*  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D**



*[Signature]*  
EXTERNAL EXAMINER

*[Signature]*  
**PRINCIPAL**  
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**CERTIFICATE**

This is to certify that the project entitled "ONLINE CLOTH SHOPPING" is a bonafide work done by "A. Sai Praveen (17471A05C6), D. Sai Teja (17471A05D1), P. Vijay Krishna (17471A05H8)" in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
**PROJECT GUIDE**

Mr. K.V. Srinivas, M. Tech

  
**PROJECT CO-ORDINATOR**

Mr. K.V. Narasimha Reddy, M. Tech

  
**HEAD OF THE DEPARTMENT**

Dr. S. N. Tirumala Rao, M. Tech, Ph.D.

  
**EXTERNAL EXAMINER**



II

  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project entitled "HEART FAILURE PREDICTION" is a bonafide work done by "T.Hemalatha(17471A05D5), G.Mounika(17471A05H1), K.Prasanthi(17471A05E0), G.Hemavani(17471A05I0)" in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

PROJECT GUIDE

**Dr. S.V.N. Sreenivasu, M.Tech., Ph.D.**

Professor

PROJECT CO-ORDINATOR

**Mrs. M. Sireesha, M.Tech., (Ph.D.)**

Assoc. Professor

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.**

  
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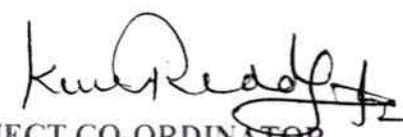
**CERTIFICATE**

This is to certify that the project entitled "ONLINE STUDENT RESULT ANALYSIS" is a bonafide work done by " P.KARTHEEK (17471A05D7), S.SAI LAKSHMAN (17471A05F7), K.DURGA PRASAD(17471A05C7) " in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

Mr. B. Sivakanakaraju, M.Tech.

Associate Professor

  
PROJECT CO-ORDINATOR

Mr. K.V. Narasimha Reddy, M.Tech

Assistant Professor

  
HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D.

  
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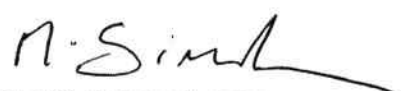
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**CERTIFICATE**

This is to certify that the project entitled "MELANOMA PREDICTION" is a bonafide work done by "N. Aishwarya(17471A05C9), D. Jaya Tejaswini(17471A05F6), J.Prasanthi(17471A05D8), T. Siri Chandana (17471A05D9)" in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE  
**Ch. Anil, M.Tech**  
AssitantProfessor

  
PROJECT CO-ORDINATOR  
**Mrs. M. Sireesha, M.Tech., (Ph.D.)**  
Asso. Professor

  
HEAD OF THE DEPARTMENT  
**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.**

  
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**CERTIFICATE**

This is to certify that the project entitled "SENSEIL SOIL ANALYZING APPLICATION" is a bonafide work done by "M.RAASI (17471A05E1), G.SANTHI SRI (17471A05G4), M.SRAVYA (17471A05E8)" in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

PROJECT GUIDE

**Sk. Khaja Mohiddin Basha, M.Tech.,**

Assistant. Professor

PROJECT CO-ORDINATOR

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Assoc. Professor

HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.**

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project entitled "PNEUMONIA DETECTION USING CHEST X-RAY" is a bonafide work done by "N.V.S. KOWLINI (17471A05E2), K.V.L.N. KRISHNA VENI (17471A05E7), R. LAKSHMI PRASANNA (17471A05E3)" in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

PROJECT GUIDE

Dr. K. Lakshminadh, M.Tech., Ph.D.  
Professor

PROJECT CO-ORDINATOR

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Assoc. Professor

HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D.

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**CERTIFICATE**

This is to certify that the project entitled "HOSPITAL MANAGEMENT SYSTEM" is a bonafide work done by " B. Ayyappa Reddy (17471A05E4), S. Brahma Teja (17471A05F2), R. Praveen Reddy (17471A05G7) " in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

Mr. B.V. Suresh Reddy, M.Tech.  
Assistant Professor

  
PROJECT CO-ORDINATOR

Mr. K.V. Narasimha Reddy, M.Tech.  
Assistant Professor

  
HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D.

  
EXTERNAL EXAMINER



  
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# **LUNG CANCER PREDICTION**

*A Project Report submitted in the partial fulfilment of the  
requirements for the award of the degree*

## **BACHELOR OF TECHNOLOGY In COMPUTER SCIENCE AND ENGINEERING**

Submitted by

G.Naga Mallika (17471A05F1)

M.Navyasri (17471A05G1)

B.Sukanya (17471A05G2)

Under the esteemed guidance of

**CH.ANIL , M.Tech.,**

Assistant Professor



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)**

**NARASARAOPET**

(Affiliated to JNTUK, Kakinada, Approved by AICTE & Accredited by NBA)

2020-2021



  
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**NARASARAOPET**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**




**CERTIFICATE**

This is to certify that the project entitled "IPL SCORE PREDICTION " is a bonafide work done by "D.RAJYA LAKSHMI (17471A05F4), N.LIKITHA (17471A05F5), M.ANMISHA (17471A05F3)" in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

Mrs. Y. Bhagya Lakshmi, M.Tech.,  
Assistant. Professor

  
PROJECT CO-ORDINATOR

Mrs. M. Sireesha, M.Tech., (Ph.D.)  
Assoc. Professor

  
HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D.

  
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**CERTIFICATE**


This is to certify that the mini project entitled "EXAM CELL MANAGEMENT SYSTEM" is a bonafide work done by "K.Uday(17471A05H5), K.Pavankumar (17471A05F8), B.Venkatesh(17471A05H9),B.Samara(17471A05G0) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

K.V.NarasimhaReddy,M.Tech.


  
PROJECT CO-ORDINATOR

K.V.NarasimhaReddy,M.Tech.

  
HEAD OF THE DEPARTMENT  
Dr. S. N. TirumalaRao,M.Tech.,Ph.D

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**CERTIFICATE**

This is to certify that the a project entitled " SPAM DETECTION AND FAKE USER IDENTIFICATION ON SOCIAL NETWORKS" is a bonafide work done by **M.HARISH(17471A05K7),K.JITHENDRA(17471A05L7),G.PAVAN TRINESH(17471A05L7)** in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
**PROJECT GUIDE**

K.V.Srinivas ,M.Tech

Assistant Professor

  
**PROJECT CO-ORDINATOR**

Mr.K.V. Narasimha Reddy,M.Tech

Assistant Professor

  
**HEAD OF THE DEPARTMENT**

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PROFESSOR & HEAD

Dept. of Computer Science & Engineering

NARASARAOPETA ENGINEERING COLLEGE


17471A05K7

17471A05L7

17471A05L7



  
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Guntur

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This is to certify that the mini project entitled "KIDNEY DISEASE ANALYSIS" is a bonafide work done by "CH.poornachandraRaju(17471A05I1),SkPodile.MohammadHilal (17471A05K3),Sk.Basha(17471A05M0)"partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020- 2021.

  
PROJECT GUIDE

Mrs.Sd.Rizwana,M.Tech(Ph.D)  
ASST.Professor

  
PROJECT CO-ORDINATOR

Mrs.M.Sreeesha,M.Tech.,(Ph.D)  
ASSO.Professor

  
HEAD OF THE DEPARTMENT

Dr. S. N. TirumalaRao, MTech., Ph.D.

  
EXTERNAL EXAMINER



  
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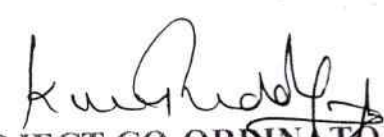


**CERTIFICATE**

This is to certify that the a project entitled " **PERFORMANCE ANALYSIS OF VEHICLE DETECTION ALGORITHM FOR INTELLIGENT TRAFFIC SYSTEM** " is a bonafide work done by **M.GOPI (17471A05L3) , G.KRISHNA SAI(17471A05N1),SAMUEL (16471A05N6)** in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
**PROJECT GUIDE**

**B. Siva Kanaka Raju ,M.Tech**  
Assistant Professor

  
**PROJECT CO-ORDINATOR**

**Mr.K.V. Narasimha Reddy,M.Tech**  
Assistant Professor

  
**HEAD OF THE DEPARTMENT**

**Dr. S. N. Tirumala Rao,M.Tech.,Ph.D**  
PROFESSOR & HEAD  
Dept. of Computer Science & Engg.  
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**NARASAOPETA**  
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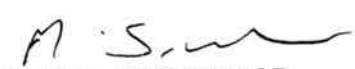


**CERTIFICATE**

This is to certify that the project entitled **"Stock Price Prediction Using Regression"** is a bonafide work done by **"G.Venkatrao (17471A05J0), D.Srinivasa Reddy (17471A05K1), V.Ashok Kumar(17471A05I9)"** in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTERSCIENCE AND ENGINEERING** during 2020 -2021

  
PROJECT GUIDE

**Dr. B. Jhansi Vazram**, M.Tech., Ph.D.,  
Professor

  
PROJECT CO-ORDINATOR

**M.Sireesha**, M.Tech., (Ph.D.)  
Assoc. Professor

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao**, M.Tech, Ph.D.

Professor & HEAD  
Dept. of Computer Science & Engineering  
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(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project entitled "**FOREST FIRES DETECTION**" is a bonafide work done by "N.S.Sesi Kiran (17471A0577), Sk.Mastanvali (17471A0562), P.Nivas (17471A0563)" in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the department of **COMPUTER SCIENCE AND ENGINEERING** during **2020-2021**.

**PROJECT GUIDE**

Mr. P. Lakshmi Narayana M.Tech.  
Assistant Professor

**HEAD OF THE DEPARTMENT**

Dr. S. N. Tirumala Rao M.Tech., Ph.D.  
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**PROJECT CO-ORDINATOR**

Mrs. M. Sireesha M.Tech., (PhD).  
Assoc. Professor

**EXTERNAL EXAMINER**

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the a project entitled "AGRICULTURE HELP LINE" is a bonafide work done by "K.Tirumala Rao (17471A05I8), S.Sriniva Rao (17471A05M7), SK.Sharif (17471A05J1)" in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

Mr. Y. Suresh, M.Tech  
Assistant Professor

  
PROJECT CO-ORDINATOR

Mr. K.V. Narasimha Reddy, M.Tech  
Assistant Professor

  
HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D

  
EXTERNAL EXAMINER





NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPETA  
(AUTONOMOUS)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



CERTIFICATE

This is to certify that the mini project entitled "**REVIEW SELECTION USING MICRO-REVIEWS**" is a bonafide work done by **G. Srikanth(17471A05L2) ,K. Sita ram kalyan(17471A05K4)** in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during the academic year 2020-2021.

  
Project Guide

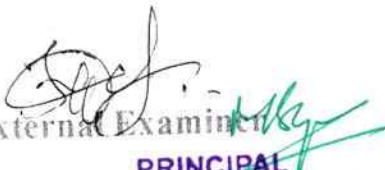
B. Siva Kanaka raju, M.Tech  
Assit.Professor

  
PROJECT CO -ORDINATOR

K.V. Narasimha Reddy, M.Tech  
Assit.professor

  
Head of the Department

Dr. S. N. Srimula Rao, M. Tech, Ph.D  
  
Professor, HOD

  
External Examiner  
PRINCIPAL

NARASARAOPETA ENGINEERING COLLEGE  
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NARASARAOPET - 522 601  
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**NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)**

**NARASARAOPETA**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**




**CERTIFICATE**

This is to certify that the project that is entitled with the name "**PREDICTION OF BRAIN STROKE DISEASES**" is a bonafide work done by the team N. Abhinay Kumar (18471A05F8), D. Leela Sasi Krishna (18471A05D3), N. Yaswanth Reddy (18471A05F7) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**O. Aruna, M.Tech.(Ph.D)**  
**Asst. Professor**

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech, Ph.D**

**Professor**



  
PROJECT CO-ORDINATOR

**M. Sireesha, M.Tech**  
**Assoc. Professor**

  
EXTERNAL EXAMINER

  
**PRINCIPAL**  
**NARASARAOPETA ENGINEERING COLLEGE**  
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**CERTIFICATE**

This is to certify that the project that is entitled with the name  
"FAKE NEWS DETECTION" is a bonafide work done by the team G.Raghu  
Prasad(18471A05D7) , Sk.Imam Vali(18471A05G8) , Sk.Yaseen(18471A05H4) ,  
Ch.Santhi Tej(18471A05C7) in partial fulfillment of the requirements for the award  
of the degree of **BACHELOR OF TECHNOLOGY** in the Department of  
**COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.




PROJECT GUIDE

**CH. Anil ,M.Tech**  
Asst. Professor



PROJECT COORDINATOR

**Mrs. M. Sireesha, M.Tech.**  
Associate Professor



HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao,**  
M.Tech., Ph.D., Professor



EXTERNAL EXAMINER



**NARASARAOPETA ENGINEERING COLLEGE**  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "HIJACKING WEBSITES DETECTION" is a bonafide work done by the team SK.Baba saida(18471A05M4),Shaik.jakeer hussian(18471A05M5),ch.Guna sekhar(18471A05i8) in partial fulfillment of the requirements for the award of the degree of BACHELOR OF TECHNOLOGY in the Department of COMPUTER SCIENCE AND ENGINEERING during 2020-2021.

PROJECT GUIDE

**G.Lakshmi Narayana, M.Tech.,(Ph.D).,**  
**Asst.Professor**

PROJECT CO-ORDINATOR

**M. Sireesha , M.Tech.,**  
**Assoc.Professor**

HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.,**  
**Professor**

EXTERNAL EXAMINER



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**Guntur (Dist.)**



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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "HEART DISEASES PREDICTION SYSTEM" is a bonafide work done by the team K. Sampath Kumar (19475A0584), Ch. Sai Ganesh (18471A05J2), V. Raju (18471A05N5) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**Mr. Dilip Kumar. R, M.Tech.,**  
**Asst. Professor**

  
PROJECT COORDINATOR

**Mr. Sireesha .M, M.Tech.,**  
**Asst. Professor**

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.,**  
**Professor**

  
EXTERNAL EXAMINER



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**NARASARAOPETA ENGINEERING COLLEGE**  
**(AUTONOMOUS)**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "OPEN DOOR ALERT" is a bonafide work done by the K Mithra (18471A05K4) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTERSCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**Dr. K Lakshminadh** M.Tech., Ph.D.,

Professor

  
PROJECT CO-ORDINATOR

**Mrs Sireesha .M.**, M.Tech.,

Assoc. Professor

  
HEAD OF THE DEPARTMENT

**Dr. S. N. TirumalaRao**, M.Tech., Ph.D.,

Professor

  
EXTERNAL EXAMINER



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**NARASARAOPETA ENGINEERING COLLEGE**  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "**MEDICAL INSURANCE PREMIUM PREDICTION**" is a bonafide work done by the team E. Mahesh (18471A05J5), B. Rishith (18471A05I2), N. Prem Kumar (18471A05L4), Sk. Althaf (18471A05M3) in partial fulfilment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

Mr M. Satyam Reddy, M.Tech.,  
Asst. Professor

  
PROJECT COORDINATOR

Mrs M. Sireesha, M.Tech., (Ph.D.),  
Assoc. Professor

  
HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D.,  
Professor

  
EXTERNAL EXAMINER



  
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**CERTIFICATE**

This is to certify that the project that is entitled with the name "**CREDIT CARD FRAUD DETECTION**" is a bonafide work done by the team **G.Pravallika (18471A0512)** , **J.Yamini Sai Lakshmi(18471A0515)** , **Ch.Harini(18471A0506)** , **N.Mary Padma(18471A0536)** in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**Sk.Rafi, M.Tech.,(Ph.d-NIT Mizoram),**  
**Asst. Professor**

  
HEAD OF THE DEPARTMENT  
**Dr. S. N. Tirumala Rao, M.Tech., Ph.d.,**  
**Professor**

  
PROJECT CO-ORDINATOR

**M.Sireesha, M.Tech.,(Ph.d)**  
**Assoc. Professor**

  
EXTERNAL EXAMINER



  
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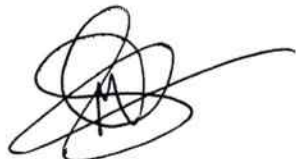
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**




This is to certify that the project that is entitled with the name "Face Mask Detection" is a bonafide work done by the team Patan Irafan Khan(18471A0541), Pujala Charan Mandhata (1847A0543), Saikam Nagarjuna Reddy(18471A0549) in partial fulfillment of the requirements for the award of the degree of BACHELOR OF TECHNOLOGY in the Department of COMPUTER SCIENCE AND ENGINEERING during 2020-2021.

  
PROJECT GUIDE 6/9/21

**Ms Thanuja. A , M.tech**  
**Assistant. Professor**

  
PROJECT CO-ORDINATOR

**Ms Sireesha .M, M.Tech.,**  
**Assoc. Professor**

  
HEAD OF THE DEPARTMENT  
**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.,**

**Professor**

  
EXTERNAL EXAMINER



  
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**Guntur (Dist.)**

# STUDENT SGPA PREDICTION

*A Mini Project Report submitted in the partial fulfilment of the  
requirements for the award of the degree*

## BACHELOR OF TECHNOLOGY

In

## COMPUTER SCIENCE AND ENGINEERING

### Submitted by

A.Siva Sai	(18471A0502)
A.Prakash Babu	(18471A0501)
Ch.Kalyan Chakravarthi	(18471A0508)

Under the Esteemed Guidance Of

**K.V.Narasimha Reddy M.Tech.**

Asst.Professor



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
NARASARAOPETA ENGINEERING COLLEGE: NARASARAOPET  
(AUTONOMOUS)**

(Affiliated to J.N.T.U, Kakinada, Approved by AICTE & Accredited by NBA)

2020-2021



  
**Principal**  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "CREDIT CARD FRAUD DETECTION" is a bonafide work done by the team SHAIK MABU SUBHANI(18471A05H0), JAJA NAGASAI(18471A05E3), CHIGURUPATI SAIKUMAR(18471A05D0) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021

  
PROJECT GUIDE


**Mr K.Arun, M.Tech.(P.hD)**  
**Asst. Professor**

  
PROJECT COORDINATOR

**Ms Sireesha .M, M.Tech.,**  
**Assoc. Professor**

  
HEAD OF THE DEPARTMENT

**Dr. S. N. TirumalaRao, M.Tech., Ph.D.,**  
**Professor**

  
EXTERNAL EXAMINER



  
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



**CERTIFICATE**


This is to certify that the project that is entitled with the name "LOAN PREDICTION" is a bonafide work done by the team G.L.L.Prasanna (18471A05E1), CH.Bhavya(18471A05C8), K.Sri Varshitha(18471A05E9) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2019-2020.

  
PROJECT GUIDE

**U. Vijay Kumar,**  
M.Tech.,(Ph.D.),Asst. Prof

  
HEAD OF THE DEPARTMENT

**Dr. S. N. TirumalaRao,**  
M.Tech., Ph.D., Professor

  
PROJECT CO-ORDINATOR

**Mrs Sireesha .M,**M.Tech.,  
M.Tech.,Assoc. Professor

  
EXTERNAL EXAMINER



  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "**BIKE SHARING DEMAND PREDICTION**" is a bonafide work done by the team **G.Venkata Gopi(18471A05D9), CH.Ravi Kishore (18471A05D2), R.Bala Gangadhar(18471A05C5), K.Srinivasa Reddy (18471A05E6)** in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

PROJECT GUIDE

**Dr. SVN Srinivasu, M.Tech., Ph.D.,**

**Professor**

HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.,**

**Professor**

PROJECT CO-ORDINATOR

**Ms Sireesha .M, M.Tech.,**

**Assoc. Professor**

EXTERNAL EXAMINER



II

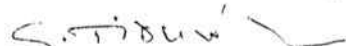
**PRINCIPAL**  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "HOUSE PRICE PREDICTION" is a bonafide work done by the team **SK.M.SAHIL BASHA(18471A05H1), Y.ARUNKUMAR(18471A05I0), P.ESWAR(18471A05G1), G.DEEPCHANDU(18471A05E2)** in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**Dr. S.N.Tirumala Rao** M.Tech., Ph.D.,

**Professor**

  
PROJECT CO-ORDINATOR

**Ms Sireesha .M,** M.Tech.,

**Assoc. Professor**

  
HEAD OF THE DEPARTMENT


**Dr. S. N. Tirumala Rao,** M.Tech., Ph.D.,

**Professor**

  
EXTERNAL EXAMINER



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**(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "DIABETES DETECTION" is a bonafide work done by the team PUSALA.TMGOPINADH (18471A05G5), G.PRAMODAKUMARSHARMA (18471A05D6), M.NAGASANDEEP (18471A05F5), S.VENKATESH (18471A05H5) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

SHAIK RAFI, M.Tech., Ph.D (NIT-IMZ)

ASST PROFESSOR

  
PROJECT COORDINATOR


M.SIREESHA, M.Tech (Ph.D)

ASST PROFESSOR

  
HEAD OF THE DEPARTMENT

Dr. S. N. Tirumala Rao, M.Tech., Ph.D

Professor

  
EXTERNAL EXAMINER



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**NARASARAOPETA ENGINEERING COLLEGE  
(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the mini project that is entitled with the name "STOCK PRICE PREDICTION SYSTEM USING MACHINE LEARNING ALGORITHMS" is a bonafide work done by the team A,TarunReddy (18471A05C1), P.Manikanta (18471A05G0), K.SivaKoteswaraRao(18471A05E8), P.MadhavaRao(18471A05F9) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

PROJECT GUIDE

**Dr. B Jhansi Vazram**, B.Tech., m. Tech., Ph.D.

**Professor**

PROJECT CO-ORDINATOR

**Ms Sireesha .M**, B.Tech., M.Tech.

**Assoc. Professor**

HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao**, B.Tech., M.Tech., Ph.D.

**Professor**

EXTERNAL EXAMINER

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**NARASARAOPETA ENGINEERING COLLEGE**  
**(AUTONOMOUS)**  
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**Guntur (Dist.). A.P.**




**NARASARAOPETA ENGINEERING COLLEGE**  
**(AUTONOMOUS)**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**CERTIFICATE**

This is to certify that the project that is entitled with the name "GOLD PRICE PREDICTION" is a bonafide work done by the team K. Sai Praneetha (18471A0K1), M.Amulya (18471A05L0), I. Jhansi (18471A05J6) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**Mrs. Sireeshs.M, M.Tech.,**  
**Assoc. Professor**

  
HEAD OF THE DEPARTMENT  
**Dr. S. N. TirumalaRao, M.Tech., Ph.D.,**  
**Professor**

  
PROJECT CO-ORDINATOR

**Mrs. Sireesha .M, M.Tech.,**  
**Assoc. Professor**

  
EXTERNAL EXAMINER

II



  
**PRINCIPAL**  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "PHISHING WEBSITES DETECTION" is a bonafide work done by the team A.Bala Keerthimai (18471A05C4), K.Sruthi (18471A05E5), G.Sri Gowri Poojitha (18471A05D8), T.Vishnu Priya (18471A05H8) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**B.Siva Kanaka Raju, M.Tech.,**  
**Asst.Professor**

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.,**  
**Professor**


  
PROJECT CO-ORDINATOR

**M. Sireesha , M.Tech.,**  
**Assoc.Professor**

  
EXTERNAL EXAMINER



II

  
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING




**CERTIFICATE**

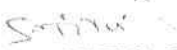
This is to certify that the project that is entitled with the name "CAB FARE PREDICTION" is a bonafide work done by the team K.Srivalli (18471A05E7), A.K.N.V.Sravani(18471A05C2), CH.NagaDeepika(18471A05D1), D.Sirisha(18471A05D4) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
06/09/2021  
PROJECT GUIDE

**Mr Lakshmi Narayana.G,**  
M.Tech.,(Ph.D).,  
Asst. Prof

  
PROJECT CO-ORDINATOR

**Mrs. Sireesha .M,**  
M.Tech., Assoc. Professor

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao,**  
M.Tech., Ph.D.,  
Professor

  
EXTERNAL EXAMINER



**NARASARAOPETA ENGINEERING COLLEGE**  
(AUTONOMOUS)  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "MOBILE PRICE PREDICTION" is a bonafide work done by the team Vankayala Meher Rupasri (18471A0558), Pantangi Lakshmi Divya (18471A0540), Narra Harika (18471A0533), Kantu Priyanka (18471A0517) in partial fulfillment of the requirements for the award of the degree of BACHELOR OF TECHNOLOGY in the Department of COMPUTER SCIENCE AND ENGINEERING during 2020-2021.



**PROJECT GUIDE**  
**Shaik Khaja Mohiddin Basha, M.Tech.**  
Assistant. Professor



**PROJECT CO-ORDINATOR**

**Ms Sireesha .M, M.Tech.,**  
Assoc. Professor



**HEAD OF THE DEPARTMENT**

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.,**  
Professor



**EXTERNAL EXAMINER**



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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**




**CERTIFICATE**

This is to certify that the project that is entitled with the name "PREDICTION OF DIABETES" is a bonafide work done by the team M.Ruchitha (18471A0588), Sk.Shaheena (18471A05B0) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2021-2022.

  
PROJECT GUIDE

**Dr. M. Venkata Reddy**, M.Tech., Ph. D.,  
Assoc. Professor

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao**, M.Tech., Ph.D.,  
Professor

  
PROJECT CO-ORDINATOR

**Mrs. Sireesha .M**, M.Tech., (Ph.D.),  
Assoc. Professor

  
EXTERNAL EXAMINER



  
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**NARASARAOPETA ENGINEERING COLLEGE**  
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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project that is entitled with the name "Email Spam Classification" is a bonafide work done by the team K.Lavanya (18471A0529), Y.Tejaswini(18471A0560), M.Vasantha(18471A0531), Sk.Hashma (18471A0550) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

**PROJECT GUIDE**

**Dr. S.V.N. Srinivasu, M.Tech, Ph.D**  
**Professor**

**PROJECT CO-ORDINATOR**

**Mrs Sireesha .M, M.Tech.,**  
**Assoc. Professor**

**HEAD OF THE DEPARTMENT**

**Dr. S.N. Tirumala Rao, M.Tech., Ph.D.,**  
**Professor**

**EXTERNAL EXAMINER**



  
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**CERTIFICATE**

This is to certify that the project that is entitled with the name "IRIS FLOWER CLASSIFIATION" is a bonafide work done by the team K.Akhila (18471A0523) , Ch.Srivalli (18471A0507) , S.Venkata Ramya(18471A0554) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

PROJECT GUIDE

**Dr. M. Venkata Reddy M.Tech, Ph.D**  
Assoc. Professor

PROJECT COORDINATOR

**Mrs. Sireesha .M M.Tech, (Ph.D)**  
Assoc. Professor

HEAD OF THE DEPARTMENT

**Dr. S.N. Tirumala Rao, M. Tech., Ph.D.,**  
Professor

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**CERTIFICATE**

This is to certify that the Machine Learning project entitled with the name "ENGINE ENERGY PREDICTION" is a bonafide work done by the ~~team~~ of N.SATHYA SWAROOP (18471A0534), K.VINAY(18471A0526), T.NITHISH REDDY (18471A0555) in partial fulfillment of requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021

PROJECT GUIDE

**Dr. S. Siva Nageswara Rao** M.Tech., Ph.D.  
Professor

HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao**, M.Tech., Ph.D.,  
Professor

PROJECT CO-ORDINATOR

**Ms Sireesha .M**, M.Tech.,  
Assoc. Professor

EXTERNAL EXAMINER



IV

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**CERTIFICATE**

This is to certify that the project that is entitled with the name “**CAR PRICE PREDICTION SYSTEM USING MACHINE LEARNING ALGORITHMS**” is a bonafide work done by the team **V.Saketh Sri Harsha(18471A0557) R.V.V.SaiKumar(18471A0548) R.Charaj (18471A054) V. Sai Varun(18471A0559)** in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**Dr. B Jhansi Vazram** B.Tech., M.Tech., Ph.D.

**Professor**

  
PROJECT CO-ORDINATOR

**Ms Sireesha .M,** B.Tech., M.Tech.

**Assoc. Professor**

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao,** B.Tech., M.Tech., Ph.D.

**Professor**

  
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**CERTIFICATE**

This is to certify that the project that is entitled with the name "FLIGHT TICKET FARE PREDICTION" is a bonafide work done by the team D. Chakri Venkata Sai Teja (18471A0510), P. Israyelu (18471A0539), B. Vishnu Charan Teja (18471A0505), K. Soma Sekhar Pavan Kumar (18471A0520) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**Dr. G. L. N. Jayaprada**, M.Tech.PhD  
Assoc. Professor

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao**, M.Tech., Ph.D.,  
Professor

  
PROJECT CO-ORDINATOR

**Ms Sireesha .M**, M.Tech.(PhD)  
Assoc. Professor

  
EXTERNAL EXAMINER



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**CERTIFICATE**

This is to certify that the project that is entitled with the name "PREDICTION OF BREAST CANCER DISEASE" is a bonafide work done by the team SK.M. Sharukh (18471A0551), A.Rakesh (18471A0504), S. Pavan (18471A0553) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**Mr Sathyam Reddy .M,** M.Tech.,  
Asst. Professor

  
PROJECT CO-ORDINATOR

**Ms Sireesha .M,** M.Tech.,  
Assoc. Professor

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao,** M.Tech., Ph.D.,  
Professor

  
EXTERNAL EXAMINER



  
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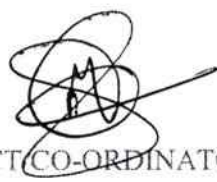


This is to certify that the project that is entitled with the name "Brain Tumor Detection" is a bonafide work done by the team Koppula Praveen Kumar(18471A0524), Padamutham Neeraj(1847A0537), Duaggupati Vighneswara Rao(18471A0509), Kolli Manikanta(18471A0522) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**Ms Sireesha .M., M.Tech.,**

**Assoc. Professor**

  
PROJECT CO-ORDINATOR

**Ms Sireesha .M., M.Tech.,**

**Assoc. Professor**

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.,**

**Professor**

  
EXTERNAL EXAMINER






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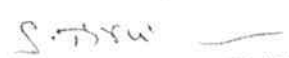


**CERTIFICATE**

This is to certify that the project that is entitled with the name "BITCOIN PRICE PREDICTION" is a bonafide work done by the team Ch. Kavya Sudhanjali (18471A0566), J. Jayasree (18471A0574), Sk. Rumina Kousar (18471A05A9) in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.


PROJECT GUIDE


  
**M. Sireesha** M.Tech.(ph.D.)  
Associative Professor

  
HEAD OF THE DEPARTMENT  
**Dr. S. N. Tirumala Rao**, M.Tech., Ph.D.

Professor

PROJECT CO-ORDINATOR

  
**M. Sireesha** M.Tech.(ph.D.)  
Associative Professor

  
EXTERNAL EXAMINER



  
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# **DISEASE PREDICTION**

*A Mini Project Report submitted in the partial fulfillment of the  
Requirements for the award of the degree*

## **BACHELOR OF TECHNOLOGY**

**In**

## **COMPUTER SCIENCE AND ENGINEERING**

Submitted by

**Shaik Mohammad Arshad(18471A05H2)**  
**Ganugapenta Mallikharjuna Reddy(18471A05D5)**  
**P Siva Koteswararao(18471A05G4)**  
**M Yashwanth(18471A05F3)**

Under the esteemed guidance of

**Mrs.M.Sireesha , M.Tech.....**  
**Assoc . Professor**



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

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(Affiliated to JNTUK, Kakinada, Approved by AICTE & Thrice Accredited by NBA  
2020 - 2021)



  
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(AUTONOMOUS)  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**CERTIFICATE**



This is to certify that the project that is entitled with the name "Unauthorized Access Point Detection Using Machine Learning Algorithms for Information Protection" is a bonafide work done by the team B.Anil (18471A05C6), SK. Munwar Basha (18471A05H3), L. Prasad (18471A05F0) S. Sai Mahesh (18471A05G7), in partial fulfillment of the requirements for the award of the degree of **BACHELOR OF TECHNOLOGY** in the Department of **COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**K.V.Narasimha Reddy M.Tech**

  
HEAD OF THE DEPARTMENT

**Dr. S. N. Tirumala Rao, M.Tech., Ph.D.,**

**Professor**

  
PROJECT CO-ORDINATOR  
**M.Sireesha M.Tech**

  
EXTERNAL EXAMINER



**NARASARAOPETA ENGINEERING COLLEGE:**  
**NARASARAOPETA (AUTONOMOUS)**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the project entitled "HEART FAILURE PREDICTION"  
is a bonafide work done by "Ch.Niharika (18471A05C9), N.Manogna Sai(18471A05F6),  
N.Mahitha(18471A05F1), V.Ramya(18471A05H9)" in partial fulfilment of the requirements for  
the award of the degree of **BACHELOR OF TECHNOLOGY** in the department of  
**COMPUTER SCIENCE AND ENGINEERING** during 2020-2021.

  
PROJECT GUIDE

**N. Venkatesh Reddy**, M.Tech.(Ph.D)  
Assistant Professor

  
HEAD OF THE DEPARTMENT

**Dr. S.A. Urmala Rao**, M.Tech., Ph.D

Professor & HoD

  
PROJECT COORDINATOR

**Mrs. M. Sireesha**, M.Tech..  
Associate Professor

  
EXTERNAL EXAMINER



  
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Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON CUSTOMER SATISFACTION WITH REFERENCE TO SANGAM MILK PRODUCT COMPANY LTD, VADLAMUDI" fulfillment is being submitted by M. MAHESH BABU bearing Regd. No. 19471E0027 in partial of requirement for the award of the degree of Master of Business Administration in Narasaraopeta Engineering College (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from JULY 2020 TO AUGUST 2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

Project guide

T. MALLIKARJUNA RAO

M. B.A., M. PHIL (Ph.D.)

Associate Professor

Head of the Department

Dr. S. VENKATA RAMANA

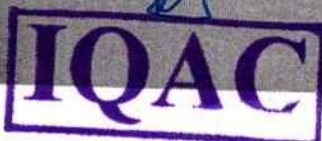
M. B.A., M. PHIL, Ph.D.

Professor

EXTERNAL EXAMINER

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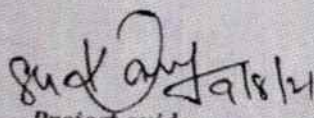
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Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

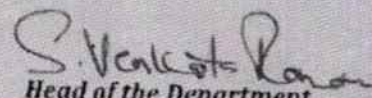
### CERTIFICATE

This is to certify that the project entitled "A STUDY ON JOB SATISFACTION WITH REFERENCE TO JOCIL LTD., DOKIPARRU" fulfillment is being submitted by U. VENKATA SRAVYA bearing Regd. No. 19471E0044 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from JUNE-2020 to AUGUST-2020.

The results presented in this is have been verified and are found to be satisfactory. The results embodied in this is have not been submitted to any other University for the award of any other degree.

  
Project guide

**SK. KAREMBASHA**  
M.B.A., (Ph.D.)  
Associate Professor

  
Head of the Department

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
EXTERNAL EXAMINER

  
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Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

### CERTIFICATE

This is to certify that the project entitled "A STUDY OF MARKETING MIX AT JOCIL LIMITED, DOKIPARRU" is being submitted by Perla koteswararao bearing Regd. No. 19471E0067 in partial fulfillment of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE, (AUTONOMOUS) affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June-2020 to Aug-2020.

The results presented in this report have been verified and are found to be satisfactory. The results embodied in this record have not been submitted to any other University for the award of any other degree.

*T.L. Sravani Kumari*

Project Guide

Mrs. T.L. SRAVANI KUMARI

MBA, LLB

Assistant Professor

*S. Venkata Ramana*  
Head of the Department

Dr. S. VENKATA RAMANA

M.B.A., M.Phil., Ph.D.

Professor

*[Signature]*  
External Examiner

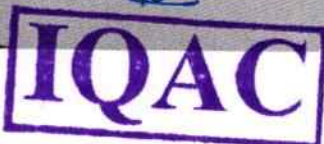
*[Signature]*  
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08647-239916, Website: WWW.nrtengg.com, Email: nrtcc\_mba@yahoo.com


**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON SALES ANALYSIS OF TWO WHEELER IN YAMAHA MOTORS INDIA PVT LTD, GUNTUR" fulfillment is being submitted by **Parsapu Subbarao** bearing Regd. No. 19471E0066 in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bona fide work carried out by him under our guidance and supervision from May-2020 to June-2020.

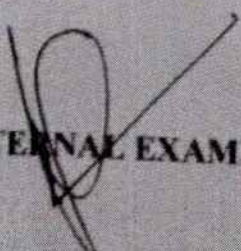
The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
**Project guide**

**Y Suresh**  
M.B.A., M.com, (M. Phil).  
Assistant Professor.

  
**Head of the Department**

**Dr. S. VENKATARAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
**EXTERNAL EXAMINER**

  
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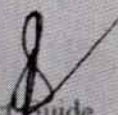
DEPARTMENT OF M.B.A., NARASARAOPET - 522601



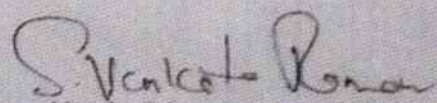
**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON WORKING CAPITAL MANAGEMENT WITH REFERENCE TO VALLABHA FEEDS PVT,LTD. NARASARAOPET", is being submitted by **Mr. MANJULA PEDDARAYUDU** bearing Regd. No. **19471E0062** in partial fulfillment of requirement for the award of the degree of M.B.A in **NARASARAOPETA ENGINEERING COLLEGE**, Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from **JULY-2020 to AUGUST-2020**.

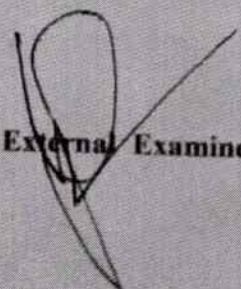
The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
Project Guide

**Y.SURESH**  
MBA, M.Com(M.Phil)

  
Head of the Department

**Dr.S.VENKATA RAMANA**  
MBA, M.Phil, Ph.D

  
External Examiner



  
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Certified Institution) Phone: 08647-239916,

Website: [www.nitongg.com](http://www.nitongg.com), Email: [nitec\\_mba@yahoo.com](mailto:nitec_mba@yahoo.com)

**CERTIFICATE**

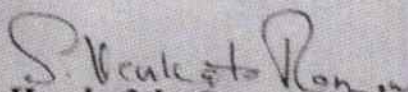
This is to certify that the project entitled "A STUDY ON FOOD INDUSTRY WITH REFERENCE TO M.T.R. FOODS" fulfillment is being submitted by E.HEMA LATHA bearing Regd. No 19471E0052 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
**Project guide**

**P. VENKATESWARARAO**

M.B.A., (Ph.D.)  
Associate Professor


  
**Head of the Department**  
**Dr. S. VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.  
Professor

  
**EXTERNAL EXAMINER**



  
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Website WWW.nrtengg.com, Email nrttec\_mba@yahoo.com

**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON INVENTORY MANAGEMENT with reference to KCP CEMENT LTD, MACHERLA", fulfillment is being submitted by N. SAILAJA bearing Regd. No. 19471E0032 in partial of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by his under our guidance and supervision from June -2020 to Aug-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*P. Pattabhiram*

Project guide

Dr. P. PATTABHIRAM,

M.B.A., M.Phil., Ph.D

Associate Professor

*S. Venkata Ramana*

Head of the Department

Dr. S. VENKATA RAMANA

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*R. Srinivas*  
EXTERNAL EXAMINER

*M. S. R.*  
PRINCIPAL

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Phone: 08647-239916, Website WWW.artengg.com, Email: ntec\_mba@yahoo.com

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON IMPACT OF WORK FROM HOME ON PRODUCTIVITY OF IT INDUSTRY WITH REFERENCE TO COGNIZANT LIMITED" fulfillment is being submitted by **BATCHU CHANDRIKA** bearing Regd No. **19471E0006** in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from May-2020 to June-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*S. Venkata Ramana*  
**Project guide**

**Dr. S. VENKATARAMANA**

M.B.A., M.Phil., Ph.D.  
Professor

*S. Venkata Ramana*  
**Head of the Department**

**Dr. S. VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.  
Professor

*[Signature]*  
**EXTERNAL EXAMINER**

*M. J. Green*

*[Signature]*  
**PRINCIPAL**

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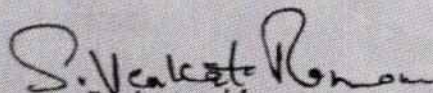
"A" Grade, An ISO 9001:2008 Certified Institution) Phone: 08647-239916,

Website: WWW.nrtegg.com, Email: nrtee\_mba@yahoo.com

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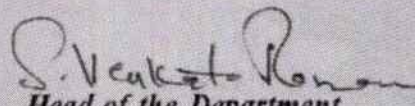
This is to certify that the project entitled "A STUDY ON WORKING CAPITAL WITH REFERENCE TO VIJAYA DAIRY MILK PRODUCER PVT.LTD, VIJAYAWADA" fulfillment is being submitted by BEJAGAM LAKSHMI bearing Regd. No. 19471E0007 in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopet Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from june-2020 to Aug-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
Project guide

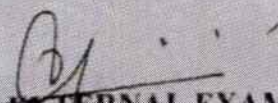
Dr. S. VENKATA RAMANA  
M.B.A., M.Phil., Ph.D.

Professor

  
Head of the Department

Dr. S. VENKATA RAMANA  
M.B.A., M.Phil., Ph.D.

Professor

  
EXTERNAL EXAMINER

Dr. S. Venkateshwar



  
PRINCIPAL  
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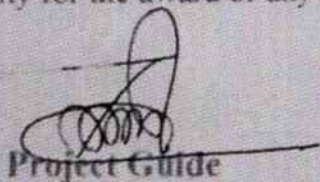
**NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS),**  
(Permanently Affiliated to J.N.T.U., Kakinada, Accredited by NAAC 'A', N.B.A, AICTE and ISO 9001:2008 Certified)  
**DEPARTMENT OF M.B.A., NARASARAOPET - 522601**



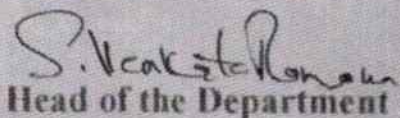
**CERTIFICATE**

This is to certify that the project entitled "A STUDY OF RECRUITMENT AND SELECTION AT KRISHNA DISTRICT MILK PRODUCERS MUTUALLY AIDED CO-OP UNION LTD. IN VIJAYAWADA" is being submitted by M.RUPA RANI bearing Regd. No. 19471E0028 in partial fulfillment of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from May-2017 to June-2017.

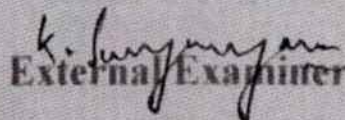
The results presented in this report have been verified and are found to be satisfactory. The results embodied in this record have not been submitted to any other University for the award of any other degree.




**Mr T.MALLIKARJUNA RAO**  
*M.B.A , M.Phil.(ph.d)*



**Dr. S.VENKATA RAMANA**  
*MBA M.Phil., Ph.D.*



**External Examiner**



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**DEPARTMENT OF M.B.A., NARASARAOPET - 522601**



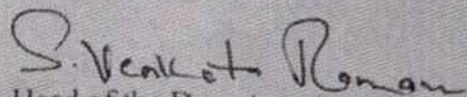
**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON EMPLOYEE MOTIVATION WITH REFERENCE TO COROMANDEL INTERNATIONAL Ltd, ANDHRA PRADESH", is being submitted by **Ms. PADALA.PRIYANKA** bearing Regd. No. **19471E0065** in partial fulfillment of requirement for the award of the degree of M.B.A in **NARASARAOPETA ENGINEERING COLLEGE**, Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by her under our guidance and supervision from **JULY-2020 to AUGUST-2020**.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
Project Guide

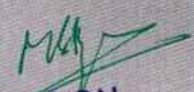
**Y.SURESH**  
**MBA, M.Com (M.Phil)**

  
Head of the Department

**Dr. S. Venkata Ramana**  
**MBA, M.Phil, Ph.D**

  
External Examiner



  
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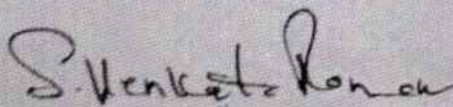
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08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

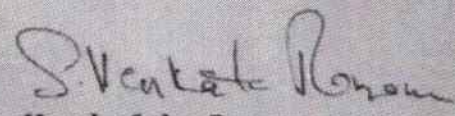
## CERTIFICATE

This is to certify that the project entitled "A STUDY ON IMPACT OF COVID 19 ON INSURANCE WITH REFERENCE TO BAJAJ FINANCE LTD" fulfillment is being submitted by BETAM NAVEEN bearing Regd. No. 19471E0008 in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from JUNE-2020 to AUGUST -2020.

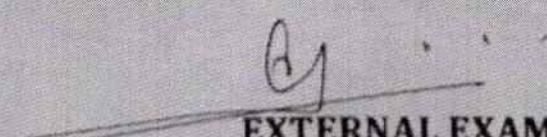
The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
Project guide

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Professor

  
Head of the Department

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Dr. T. Veenishya



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This is to certify that the project entitled "A STUDY ON RATION ANALYSIS WITH REFERNECE JOCIL LTD" fulfillment is being submitted by **NALLAPANENI PAVANI** bearing Regd. No.19471E0030 in partial fulfillment of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision.

The results presented in this is have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*Project guide*

**T.MALLIKARJUNA RAO**

M.B.A., M.Phil

*Head of the Department*

**Dr. S. VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.

Professor

**EXTERNAL EXAMINER**

  
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Website: WWW.nrtengg.com, Email: nrtcc\_mba@yahoo.com

### CERTIFICATE

This is to certify that the project entitled "A STUDY ON EMPLOYEE DISCIPLINARY ACTION AT MASTER ALUMINIUM INDIA PRIVATE LIMITED, HYDERABAD" is being submitted by MUPPALLA ANUSHA bearing Regd. No. 19471E0029 in partial fulfillment of requirement for the award of the degree of M.B.A in **NARASARAOPETA ENGINEERING COLLEGE** (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by his under our guidance and supervision from June-2020 to Aug-2020.

The results presented in this report have been verified and are found to be satisfactory. The results embodied in this record have not been submitted to any other University for the award of any other degree.

Project Guide  
**Mr. T. MALLIKARJUN RAO**  
MBA., (Ph.D)

Head of the Department  
**Dr. S. VENKATA RAMANA**  
MBA M.Phil., Ph.D.

**External Examiner**



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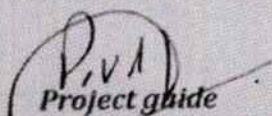
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Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

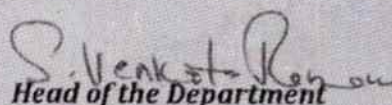
### CERTIFICATE

This is to certify that the project entitled "A STUDY ON RATIO ANALYSIS IN SAGAR CEMENTS PVT. LTD., NALGONDA" is being submitted by Chinta Radhikabearing Regd. No. 19471E0049 in partial fulfillment of requirement for the award of the degree of **Master of Business Administration** in Narasaraopeta Engineering College(Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from May-2019 to August 2021

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
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Mr. Venkateswararao  
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Associate Professor

  
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EXTERNAL EXAMINER



  
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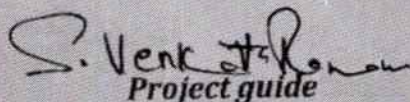
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Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

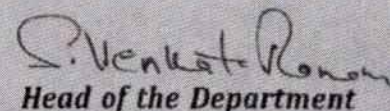
### CERTIFICATE

This is to certify that the project entitled "A STUDY ON CUSTOMER AWARENESS TOWARDS OVER THE TOP PLATFORMS (OTT) WITH REFERENCE TO BHARATHI AIRTEL LTD" fulfillment is being submitted by CHINNAM PAVANI bearing Regd. No. 19471E0009 in partial of requirement for the award of the degree of **Master of Business Administration** in Narasaraopeta Engineering College (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from May-2020 to June-2020.


The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
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**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
*Head of the Department*

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
EXTERNAL EXAMINER

*Dr. J. Greenishana*

  
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Phone: 08647-239916, Website: www.nrteggz.com, Email: nrtec\_mba@yahoo.com



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The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*Project guide*

**Mr. Y. Suresh**

M. B. A., M. Com(M. Phil)

Assistant Professor

*Head of the Department*

**Dr. S. VENKATARAMANA**

M. B. A., M. Phil., Ph. D.

Professor

External Examiner



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08647-239916, Website: WWW.nrengg.com, Email: nreec\_mh@yahoo.com

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This is to certify that the project entitled "A STUDY ON RATIO ANALYSIS IN BHARATHI CEMENTS CORPORATION PVT LTD, HYDERABAD" fulfillment is being submitted by RASLM D bearing Regd. No 19471E0039 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*P. Pattabhiram*

*Project guide*

**Dr. P. PATTABHIRAM**

M.B.A., M.Phil., Ph.D.  
Associate Professor

*S. Venkata Ramana*  
*Head of the Department*

**Dr. S. VENKATA RAMANA**

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Professor

*K. H. S. R.*  
**EXTERNAL EXAMINER**



*M. K. S.*  
**PRINCIPAL**  
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Institution) Phone: 08647-239916,

Website: www.nrtengg.com, Email: nrtec\_mba@yahoo.com

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This is to certify that the project entitled "A STUDY ON CUSTOMER SATISFACTION WITH REFERENCE TO LINERS INDIA LTD VIJAYAWADA" fulfillment is being submitted by SHAIK ABDUL BASHA bearing Regd. No. 19471E0041 in partial of requirement for the award of the degree of Master of Business Administration in Narasaraopeta Engineering College (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2020 to August-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

Project Guide

Mr. I. Sridhar

M.B.A., (Ph.D.)

Associate Professor

Head of the Department

Dr. S. VENKATA RAMANA

M.B.A., M.Phil., Ph.D.

Professor

EXTERNAL EXAMINER



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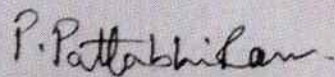
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ISO 9001:2008 Certified Institution) Phone: 08647-239916,  
Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON SALES PROMOTION TECHNIQUES WITH REFERENCE TO HERO MOTO CROP SERVICES PVT.LTD, GUNTUR" is being submitted by P.SUJANA BABU bearing

Regd. No. 19471E0034 in partial fulfillment of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by his under our guidance and supervision from June-2020 August-2020.

The results presented in this report have been verified and are found to be satisfactory. The results embodied in this record have not been submitted to any other University for the award of any other degree.

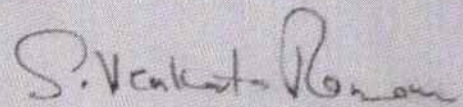


Project Guide

Dr. P.PATTABHI RAM

M.B.A, M.Phil., Ph.D.

Associate Professor



Head of the Department

Dr. S.VENKATA RAMANA

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Website: WWW.nrtengg.com, Email: nrtcc\_mba@yahoo.com

### CERTIFICATE

This is to certify that the project entitled "A STUDY ON INVENTORY MANAGEMENT WITH REFERENCE TO TULASI SEEDS PVT.LTD GUNTUR", is being submitted by PATTAN JANI BASHA bearing Regd. No. 19471E0037 in partial fulfillment of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS), Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2020 to August-2020.

The results presented in this report have been verified and are found to be satisfactory. The results embodied in this record have not been submitted to any other University for the award of any other degree.

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Head of the Department

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*R. Hanumanth Rao*  
External Examiner

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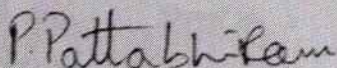
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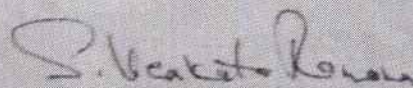
one: 08647-239916, Website: [WWW.necengg.com](http://WWW.necengg.com) Email: [nec@necengg.com](mailto:nec@necengg.com)


## CERTIFICATE

This is to certify that the Project entitled "A STUDY ON RATIO ANALYSIS WITH REFERENCE TO VIJAYAWADA THERMAL POWER STATION, VIJAYAWADA". Is being submitted by P.UMA PRAKASH bearing Regd. No. 19471E0036 in partial fulfillment of the requirement for the award of MBA in NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from June 2020-August 2020.

The results presented in this this report have been verified and are found to be satisfactory. The results embodied in this report have not been submitted to any other University for the award of any other degree.

  
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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON EMPLOYEE WELFARE MEASURES with reference to BHARAT HEAVY ELECTRICS LIMITED, HYDERABAD" fulfillments being submitted by CH.BINDU MADHAVI bearing Regd. No. 19471E0010 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College(Autonomous)**,affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

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EXTERNALEXAMINER  
*Dr. T. Greenishna*

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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON FRAUD CONTROL ACTIVITY IN RETAIL BANKING - CREDIT CARDS with Reference to Mitra Risk Management Services Pvt. Ltd., Hyderabad" is being submitted by O.HAJARATHAYA bearing Regd. No. 19471E0033 in partial fulfilment of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from JUN 2020- AUGUST 2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*P. Pattabhi Ram*

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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON IMPACT OF COVID-19 ON CREDIT WORTHINESS OF RETAIL BANKING CUSTOMERS WITH REFERENCE TO SBI" fulfillment is being submitted by **B.CHAITHANYA KUMAR** bearing Regd. No. **19471E0005** in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to **Jawaharlal Nehru Technological University, Kakinada** is record of bonafide work carried out by him under our guidance and supervision from May-2020 to June-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

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**CERTIFICATE**

This is to certify that the project entitled "STUDY ON WORKING CAPITAL WITH REFERENCE TO THE TIRUMALA DIARY" fulfillment is being submitted by **NARRARAMANJANEYULU** bearing Regd. No. 19471E0031 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2020 to Aug-2020

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

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This is to certify that the project entitled "A STUDY ON WORKING CAPITAL MANAGEMENT with reference to SOVEREIGN AGRI INDUSTRIES, GUNTUR", fulfillment is being submitted by P.MANILU bearing Regd. No. 19471E0038 in partial of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by his under our guidance and supervision from June -2020 to Aug-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*P. Pattabhiram*

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*S. Venkata Ramana*

Head of the Department

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M.B.A., M.Phil., Ph.D.

*R. Srinivasulu*

EXTERNAL EXAMINER

*[Signature]*



*[Signature]*

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**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON INVENTORY MANAGEMENT WITH REFERENCE TO PRAKASHAM MILK PRODUCER COMPANY LIMITED" fulfillment is being submitted by P SUBBA RAO bearing Regd. No. 19471E0035 in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from june-2020 to august-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*P. Pattabhiram*

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*R. L. Srinivas*  
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*Principals*  
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### CERTIFICATE

This is to certify that the project entitled "**ASTUDY ON EMPLOYEE MOTIVATION WITH REFERENCE TO EDLOGIX SOFTWARE SOLUTIONS PVT. LTD, HYDERABAD**", is being submitted by **A.RANJITH SINGH** bearing Regd. No. **19471E0084** in partial fulfillment of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from Jun-2020 to August-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

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External Examiner



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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON CHANGE IN CUSTOMER PERCEPTION ON HEALTH INSURANCE WITH IMPACT OF COVID 19 " fulfillment is being submitted by **BANALA BHANUTEJASWINI** bearing Regd. No. 19471E0004 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June-2020 to August-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

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**Dr. S. VENKATA RAMANA**  
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*M. S. R.*  
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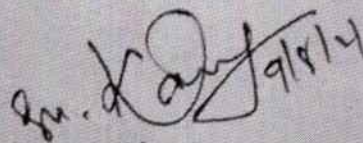
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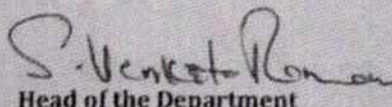
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This is to certify that the project entitled "A STUDY ON EMPLOYEE HEALTH WITH REFERENCE TO JOCIL LTD., DOKIPARRU" is being submitted by KOTA MOUNIKA bearing Regd. No. 19471E0059 in partial fulfillment of requirement for the award of the degree of **Master of Business Administration in Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June-2020 to Aug-2020.

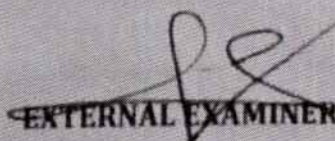
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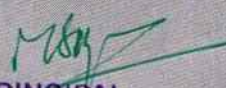
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**EXTERNAL EXAMINER**



  
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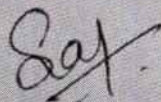
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**DEPARTMENT OF M.B.A., NARASARAOPET - 522601**

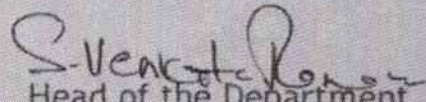



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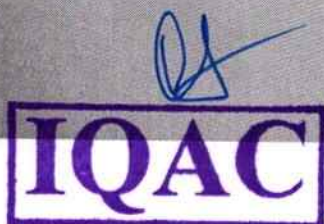
This is to certify that the project entitled "A STUDY ON EMPLOYEE WELFARE with reference to PEARL BEVERAGES LIMITED, EDLAPADU", fulfillment is being submitted by **SHAIK SHOYAB** bearing Regd. No. **19471E0078** in partial of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by his under our guidance and supervision from june-2020 to august-2020.


The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
**Project guide**  
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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON IMPACT OF COVID-19 ON INDIAN FASHION INDUSTRY WITH REFERENCE TO LEVIS" fulfillment is being submitted by **KILARU ANJANEYULU** bearing Regd. No. **19471E0019** in partial fulfillment of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from May-2020 to June-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*Project guide*

**Mr. I. SRIDHAR**

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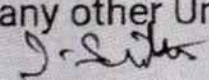
Institution) Phone: 08647-239916,

Website: www.nrtengg.com, Email: nrtec\_mba@yahoo.com

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON INVENTORY MANAGEMENT OF SRI DHANALAKSHMI COTTON AND RICE MILL SPVT LTD GANAPAVARAM" fulfillment is being submitted by KOLLA RAMA MOUNIKA bearing Regd. No. 19471E0020 in partial of requirement for the award of the degree of Master of Business Administration in Narasaraopeta Engineering College (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision.

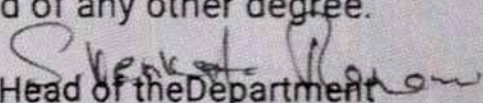
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Projectguide

Mr. I. Sridhar

M.B.A., (Ph.D)

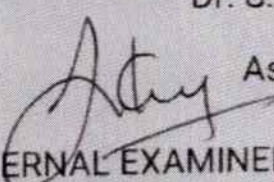
Associate Professor.

  
Head of the Department


Dr. S. VENKATARAMANA

M. B. A., M. Phil., Ph.D.

Associate Professor.

  
EXTERNAL EXAMINER



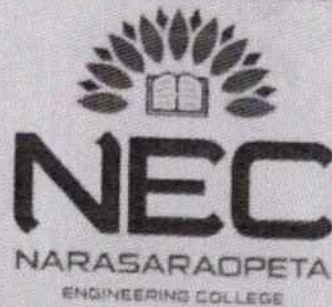
  
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DEPARTMENT OF MANAGEMENT STUDIES



**CERTIFICATE**

This is to certify that the project report entitled "A STUDY ON CASH FLOW STATEMENT with reference to SRI DHANALAKSHMI COTTON & RICE MILLS PVT.LTD, GANAPAVARAM" is a genuine and bonafide work composed by V GOPI KRISHNA (19471E0083) under my guidance and submitted in partial fulfilment of the requirements for the award of the degree of the **MASTER OF BUSINESS ADMINISTRATION** by J N T University, Kakinada, Andhra Pradesh.

*T.L. Sravani Kumari*  
**Project Guide**

**Mrs. T.L.SRAVANI KUMARI,**  
M.B.A., LL.B  
Assistant Professor

*S. Venkata Ramana*  
**Head of the Department**

**Dr. S.VENKATA RAMANA**  
MBA., M.Phil, Ph.D

Professor

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**External Examiner**

*[Signature]*  
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Institution) Phone: 08647-239916,

Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON "FUNDS FLOW STATEMENT WITH SPECIAL REFERENCE TO., SAKKU SPINNING MILLS" CHIN KONDRUPADU" fulfillment is being submitted by E.ANILKUMAR bearing Regd. 19471E0085 in partial of requirement for the award of the degree of M.B.A NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawahar Nehru Technological University Kakinada is record of bona fide work carried out by under our guidance and supervision from June-2020 to Aug-2020

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for award of any other degree.

*T.L. Sravani Kumari*  
Project guide

Mrs. T.L. SRAVANI KUMAR  
M.B.A, LLB  
Assistant Professor

*S. Venkata Ramana*  
Head of the Department

Dr. S. VENKATA RAMANA  
MBA M.Phil., Ph.D.  
Professor

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EXTERNAL EXAMINER



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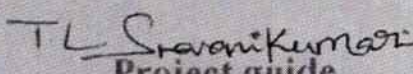
ISO 9001:2008 Certified Institution) Phone: 08647-239916,

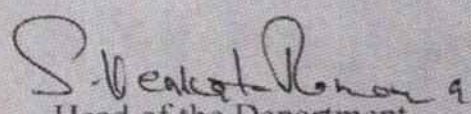
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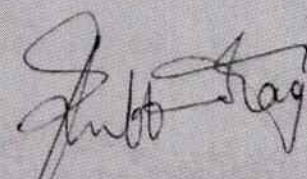
### CERTIFICATE

This is to certify that the project entitled "A STUDY ON JOB SATISFACTION with reference to HERITAGE FOODS, VIJAYAWADA, Fulfillment is being submitted by **K. CHINTU** bearing Regd. No. **19471E0086** in partial of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2020 to Aug-2020.


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Project guide  
**T.L.SRAVANI KUMARI,**  
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Assistant Professor

  
Head of the Department  
**Dr. S. VENKATA RAMANA**  
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Website: www.nrtengg.com, Email: nrtec\_mba@yahoo.com

### CERTIFICATE

This is to certify that the project entitled "AN EVALUATION OF STRESS ON EMPLOYEES With reference to SUSWADEEP AGRO SERVICES PVT.LTD" fulfillment is being submitted by P.LAKSHMI SOWJANYA bearing Regd. No. 19471E0070 in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June 2020 to August 2020

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*Project guide*

**Mr.Y.Suresh**

M.B.A., M.Com(M.Phil)

Assistant Professor

*S.Venkat Ramana*

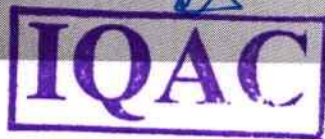
*Head of the Department*

**Dr.S.VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.

Professor

*[Signature]*  
**EXTERNAL EXAMINER**



*[Signature]*  
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Guntur District  
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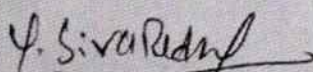


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08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

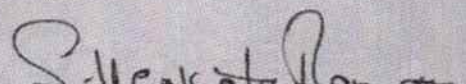
**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON RATIO ANALYSIS IN BHARAT HEAVY ELECTRICAL LIMITED, HYDERABAD" Fulfillment is being submitted by **Gajavalli Harish Kumar** bearing Regd. No. **19471E0013** in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to **Jawaharlal Nehru Technological University, Kakinada** is record of bona fide work carried out by him under our guidance and supervision from **jun-2020** to **august-2020**.

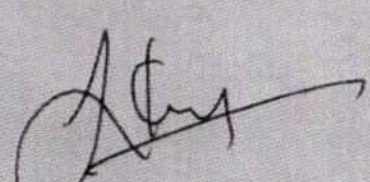
The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
**Project guide**


**Dr. Y Siva Reddy**  
M.B.A., Ph.D.  
Associate Professor.

  
**Head of the Department**

**Dr. S. VENKATARAMANA**  
M. B.A., M.Phil., Ph.D.  
Professor

  
**EXTERNAL EXAMINER**



  
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An ISO 9001:2008 Certified Institution) Phone: 08647-239916,

Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

**CERTIFICATE**

This is to certify that the project entitled "A STUDY JOB SATISFACTION WITH REFERENCE TO R A M K Y INFRASTRUCTURE L T D W I T H REFERENCE TO HYDERABAD. ,ful fillment is being submitted by K.pujitha bearing Regd. No. 19471E0022 in partial of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2021 to MAY-2021,

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*J. Sridhar*

Project guide Mr. I. Sridhar  
M.B.A (Ph.D)  
Associate Professor

*S. Venkata Ramana*

Head of the Department  
Dr. S. VENKATA RAMANA  
M.B.A (Ph.D)  
Associate Professor

*K. Sanyasirao*

EXTERNAL EXAMINER

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*[Signature]*

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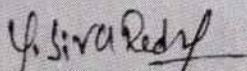
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This is to certify that the project entitled "A STUDY ON TRAINING AND DEVELOPMENT with reference to ITC LIMITED, HYDERABAD" fulfillment is being submitted by G.Nandhini bearing Regd. No. 19471E0015 in partial of requirement for the award of the degree of **Master of Business Administration** in Narasaraopeta Engineering College (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June - 2020 to August 2020.

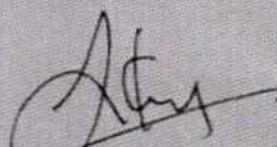
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Project guide

**Dr. Y. SIVA REDDY**  
M.B.A., Ph.D.  
Associate Professor

  
Head of the Department

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
**EXTERNAL EXAMINER**

  
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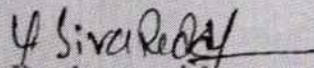
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Website WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

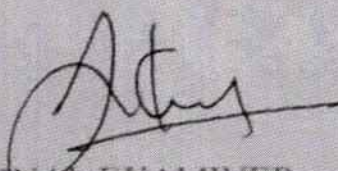
### CERTIFICATE

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The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
Project guide  
**Dr. Y. SIVAREDDY**  
M.B.A, Ph.D.  
Associate Professor

  
Head of the Department  
**Dr. S. VENKATA RAMANA**  
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08647- 239916,

Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

**CERTIFICATE**

This is to certify that the project entitled "A STUDNY ON JOB SATISFACTION WITH REFERENCE TO THE BHARATHI CONSUMER CARE PRODUCTS PVT.LTD NALLACHERUVU, GUNTUR " fulfillment is being submitted by **G.SANDEEP KUMAR** bearing Regd. No. **19471E0014** in partial of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bona fide work carried out by him under our guidance and supervision from JUNE-2020 to AUG -2020

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

**Project guide**

**Dr. Y. SIVAREDDY**  
M.B.A, Ph.D.  
Associate Professor

**Head of the Department**

**Dr. S. VENKATA RAMANA**  
MBA M.Phil., Ph.D.  
Professor

  
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Website: [WWW.necnsi.com](http://WWW.necnsi.com), Email: [nec\\_mba@yahoo.com](mailto:nec_mba@yahoo.com)

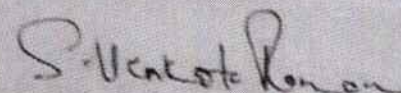
## CERTIFICATE

This is to certify that the project entitled "A STUDY ON EMPLOYEE HEALTH AND SAFETY MEASURES OF SP EDIBLE PRODUCTS PVT.LTD." fulfillment is being submitted by VENKATA RAMI REDDY.B bearing Regd. No. 19471E0048 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2020 to August-20120.

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Project guide

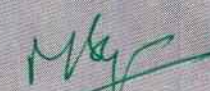
P. Venkateswara Rao  
M.B.A. (Ph.D.)  
Assoc Professor

  
Head of the Department

Dr. S. VENKATA RAMANA  
M.B.A., M.Phil., Ph.D.  
Professor

  
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Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

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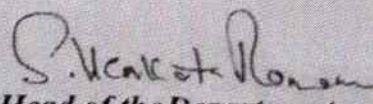
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*Project guide*

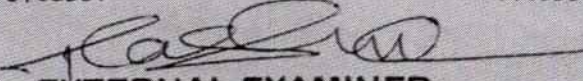
**Mr. P. VENKATESWARA RAO**  
M.B.A., (Ph.D.)

Assistant Professor

  
*Head of the Department*

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.

Professor

  
**EXTERNAL EXAMINER**



  
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Twice Accredited by NBA&NAAC with "A" Grade, An ISO 9001:2008 Certified Institution)

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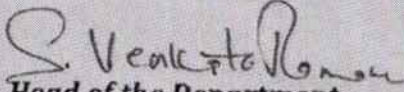
### CERTIFICATE

This is to certify that the project entitled "A STUDY ON INVENTORY MANAGEMENT WITH REFERENCE TO KALPATARUVU SPINNING MILLS PVT LTD, THIMMAPURAM" fulfillment is being submitted by D.ANITHA bearing Regd. No. 19471E0050 in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

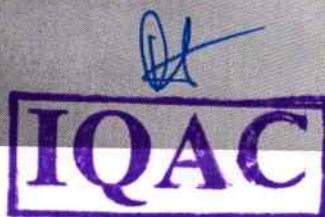
  
Project guide

**Mr. P.VENKATESWARA  
RAO**  
M.B.A.,(PH.D).  
Associate Professor

  
Head of the Department

**Dr. S.VENKATARAMANA**  
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Professor

  
EXTERNAL EXAMINER



  
PRINCIPAL

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**NARASARAOPET - 522 601**

**Guntur (Dist.), A.P.**

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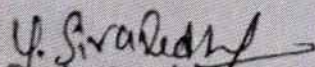
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Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

### CERTIFICATE

This is to certify that the project entitled "A STUDY ON CUSTOMER SATISFACTION WITH REFERENCE TO VEDA SEED SCIENCES PVT.LTD, GUNTUR", is being submitted by **INNAMURI MURALI KRISHNA** bearing Reg No. **19471E0017** in partial fulfillment of requirement for the award of the degree of M.B.A in **NARASARAOPETA ENGINEERING COLLEGE (Autonomous)**, Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from Jun-2020 to Aug-2020.

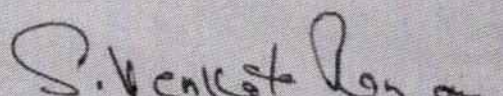
The results presented in this report have been verified and are found to be satisfactory. The results embodied in this record have not been submitted to any other University for the award of any other degree.

  
Project guide

**Dr. Y. SIVA REDDY**

MBA., Ph.D.

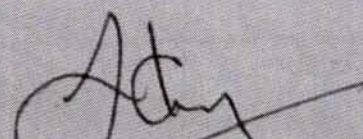
Associate Professor

  
Head of the Department

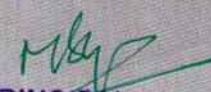
**Dr. S. VENKATA RAMANA**

M.B.A M.Phil., Ph.D.

Professor

  
External Examiner



  
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Phone: 08647-239916, Website:www.nrtengg.com, Email:nrttec\_mba@yahoo.com

**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON TRAINING AND DEVELOPMENT WITH REFERENCE TO RINL (Vizag steel plant)" fulfillment is being submitted by K.SAI SUCHARITHA bearing Regd. No. 19471E0018 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

**Project guide**  
**Mr. I. SRIDHAR**  
M.B.A., Ph.D.  
Assoc. Professor

**Head of the Department**  
**Dr. S. VENKATA RAMANA**  
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Professor

**EXTERNAL EXAMINER**



**PRINCIPAL**  
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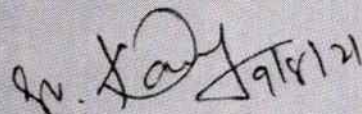
**DEPARTMENT OF M.B.A., NARASARAOPET - 522601**



**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON SALES PROMOTION TECHNIQUES WITH REFERENCE TO HERITAGE FOODS (INDIA) PVT. LIMITED.", is being submitted by **K.SIVA REDDY** bearing Regd. No. **19471E0057** in partial fulfillment of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from May-2020 to July-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

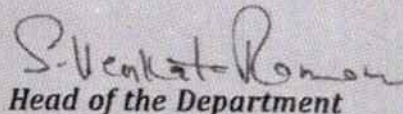


**Project guide**

**Sk. Karembasha**

M.B.A., (Ph.D.),

Associate Professor




**Head of the Department**


**Dr. S. VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.

Professor

  
**EXTERNAL EXAMINER**



  
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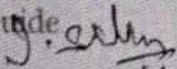
DEPARTMENT OF M.B.A., NARASARAOPET – 522601

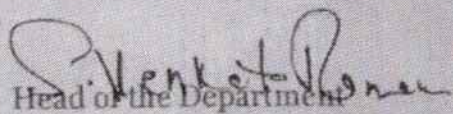


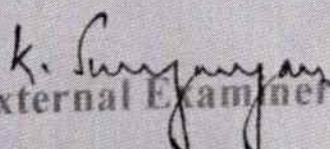
## CERTIFICATE


This is to certify that the Main Project entitled “A STUDY ON CONSUMER BUYING BEHAVIOR TOWARDS ONLINE SHOPING IN MAJOR CITIES IN INDIA” is being submitted by **M.YAMALAIAH** bearing Regd. No. **19471E0024** in partial fulfillment of the requirements for the completion of M.B.A in **NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)**, affiliated to Jawaharlal Nehru Technological University Kakinada.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this report have not been submitted to any other University for the award of any other degree.

Project Guide  
  
**I. Sridhar**  
MBA., [Ph.D.]  
Associate professor

  
Head of the Department  
**Dr. S. Venkata Ramana**  
MBA., M.Phil., Ph.D.

  
External Examiner

  
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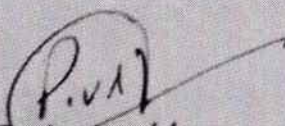
Certified Institution) Phone: 08647-239916,

Website: www.nrtengg.com, Email: nrtec\_mba@yahoo.com

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON BUDGETARY CONTROL ADANI ENTERPRISES LIMITED" fulfillment is being submitted by B. SIVA RAMA KRISHNA bearing Regd. No. 19471E0047 in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopet Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

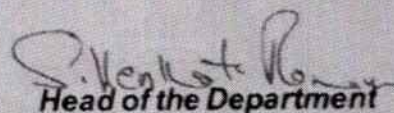


Project guide

Mr. P. VENKATESWARA RAO

M.B.A., (Ph.D.)

Associate Professor




Head of the Department

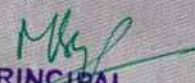
Dr. S. VENKATA RAMANA

M. B.A., M.Phil., Ph.D.

Professor



EXTERNAL EXAMINER



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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON CAPITAL BUDGETING WITH REFERENCE TO TULASI SEEDS (p)LTD GUNTUR" fulfillment is being submitted by **KUMBA SRILAKSHMI** bearing Regd. No. 19471E0023 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*J. Sridhar*

**Project guide**

**I. Sridhar**  
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Associate Professor

*S. Venkata Ramana*

Head of the Department

**Dr. S. VENKATARAMANA**

M.B.A., M.Phil., Ph.D.

Professor

*K. Srinivasan*  
**EXTERNAL EXAMINER**



*M. K. S.*  
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**(AUTONOMOUS)**  
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Kakinada, Code:47 Twice Accredited by NBA & NAAC with "A" Grade, A.N.


ISO 9001:2008 Certified Institution) Phone: 08647-239916,

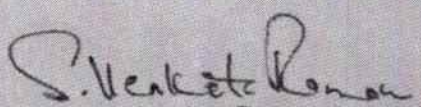
Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

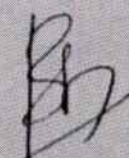
## CERTIFICATE

This is to certify that the project entitled "A STUDY ON SALESPROMOTION TECHNIQUES WITH REFERENCE TO HERITAGE FOODS INDIA LTD, VIJAYAWADA", is being submitted by **SHAIK ABUBAKAR SIDDIK** bearing Regd. No.19471E0073 in partial fulfillment of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him/her under our guidance and supervision from may-2020 to June-2020.

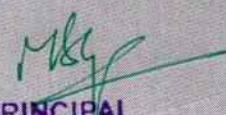
The results presented in this report have been verified and are found to be satisfactory. The results embodied in this record have not been submitted to any other University for the award of any other degree.

  
Project guide  
**P. VENKATESWARARAO**  
MBA(Ph.d)  
Assistant Professor

  
Head of the Department  
**Dr. S. VENKATA RAMANA**  
MBA M.Phil., Ph.D.

  
External Examiner



  
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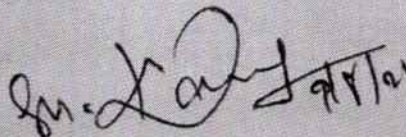
Twice Accredited by NBA & NAAC with "A" Grade, An ISO 9001:2008 Certified Institution)

Phone: 08647-239916, Website: [WWW.nrtengg.com](http://WWW.nrtengg.com), Email: [nrtec\\_mba@yahoo.com](mailto:nrtec_mba@yahoo.com)

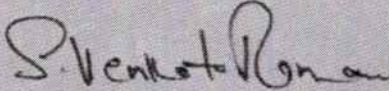
### CERTIFICATE

This is to certify that the project entitled "A STUDY ON EMPLOYEE GRIEVANCE HANDLING with reference to Apex CoVantage India Private Ltd, Hyderabad" fulfillment is being submitted by K. SWATHI bearing Regd. No. 19471E0058 in partial of requirement for the award of the degree of Master of Business Administration in Narasaraopeta Engineering College (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bon a fide work carried out by her under our guidance and supervision from June 2020 to Agu-2020.


The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
Project guide

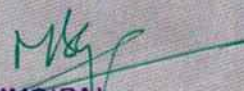
Mr. SK. KAREM BASHA  
M.B.A., (Ph.D.)  
Associate Professor

  
Head of the Department

Dr. S. VENKATA RAMANA  
M.B.A., M.Phil., Ph.D.  
Professor

  
EXTERNAL EXAMINER



  
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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON JOB SATISFACTION WITH REFERENCE TO EFFTRONICS SYSTEMS PVT.LTD,VIJAYAWADA" fulfillment is being submitted by S. ADI LAKSHMI bearing Regd. No. 19471E0079 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College(Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June-2020 to August-2020

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*Project guide*

**Mrs. SYED SALMA**

M.B.A., (Ph.D)

Assistant Professor

*Head of the Department*

**Dr.S.VENKATARAMANA**

M.B.A., M.Phil., Ph.D.

Professor

**EXTERNAL EXAMINER**



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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON WORKING CAPITAL MANAGEMENT WITH REFERENCE TO SOVEREIGN AGRI INDUSTRIES, HYDERABAD" fulfillment is being submitted PUTTA ANJALI bearing Regd. No. 19471E0071 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopet Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June 2020 to August 2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

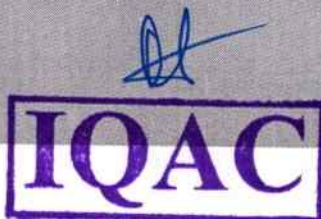
*P. Pattabhiram*  
**Project guide**

**Dr. P. PATTABHIRAM**  
M.B.A., M.Phil., Ph.D.  
Associate Professor

*S. Venkata Ramana*  
**Head of the Department**

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Associate Professor

**EXTERNAL EXAMINER**



*mkj*  
**PRINCIPAL**  
**NARASARAOPETA ENGINEERING COLLEGE**  
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Kakinada, Code: 47 Twice Accredited by NBA & NAAC with "A" Grade, An  
ISO 9001:2008 Certified Institution) Phone: 08647-239916,  
Website: www.nrtengg.com, Email: nrtec\_mba@yahoo.com

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This is to certify that the project entitled "A STUDY ON RETAIL CUSTOMER SATISFACTION" with reference to BIG BAZAAR, HYDERABAD, fulfilment is being submitted by RAVELLA RAJESH bearing Regd. No. 19471E0072 in partial of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2021 to July-2021.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*Y. Siva Reddy*  
Project guide

**Dr. Y. SIVA REDDY**  
M.B.A., Ph.D.  
Associate Professor

*S. Venkata Ramana*  
Head of the Department

**Dr. S. VENKATA RAMANA**  
MBA M.Phil., Ph.D.  
Associate Professor

EXTERNAL EXAMINER

**IQAC**

**PRINCIPAL**  
**NARASARAOPETA ENGINEERING COLLEGE**  
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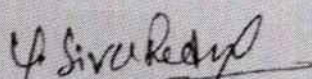
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Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

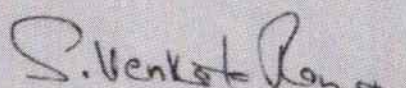
### CERTIFICATE

This is to certify that the project entitled "A STUDY ON HUMAN RESOURCE INFORMATION SYSTEM with reference to Apex CoVantage India Pvt. Ltd, Hyderabad" fulfillment is being submitted by **D.K.HARIKA** bearing Regd. No. 19471E0011 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June-2020 to August-2020.


The results presented in this is have been verified and are found to be satisfactory. The results embodied in this is have not been submitted to any other University for the award of any other degree.

  
Project guide

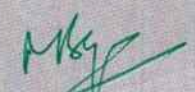
**Dr. Y.SIVA REDDY**  
M.B.A., Ph.D.  
Associate Professor

  
Head of the Department

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
EXTERNAL EXAMINER



  
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& Permanently Affiliated to JNTUK, Kakinada, Code 47Twice

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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON FRAUD CONTROL ACTIVITY IN RETAIL BANKING - HOME LOANS with Reference to Mitra Risk Management Services Pvt. Ltd., Hyderabad" is being submitted by **DASARI NAGA SINDHU** bearing Regd. No. 19471E0012 in partial full fulfillment of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June-2020 to Aug-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*Y. Siva Reddy*  
**Projectguide**

**Dr. Y. SIVAREDDY**

M.B.A., Ph.D.

Associative Professor

*S. Venkate Rama*  
**Head of the Department**

**Dr. S. VENKATARAMANA**

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Professor

*[Signature]*  
**EXTERNAL EXAMINER**



*[Signature]*  
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Accredited by NBA & NAAC with "A" Grade, An ISO 9001:2008 Certified Institution)  
Phone: 08647-239916, Website: www.nrtengg.com, Email: nrtec\_mba@yahoo.com

CERTIFICATE

This is to certify that the project entitled "A STUDY ON CONSUMER BEHAVIOUR WITH REFERENCE TO BIGBAZAR" fulfillment is being submitted by KOPPURAVURI MANIDEEP bearing Regd. No. 19471E0021 in partial of requirement for the award of the degree of Master of Business Administration in Narasaraopeta Engineering College (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2020 to August-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

Project guide

Mr. I. Sridhar

M.B.A., (Ph.D.)

Associate

Professor

Head of the Department

Dr. S. VENKATA RAMANA

M.B.A., M.Phil., Ph.D.

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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON TRAINING AND DEVELOPMENT with reference to DELIGHT CHEMICALS PVT.LTD PIDUGURALLA " fulfillment is being submitted by MARASA ROSHINI DEVI bearing Regd. No. 19471E0025 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College(Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2021 to August-2021.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*Project guide*

**Mr. T. MALLIKHARJUNA RAO**

M.B.A., M.Phil., Ph.D.

Assistant Professor

*Head of the Department*

**Dr. S. VENKATARAMANA**

M.B.A., M.Phil., Ph.D.

Professor

**EXTERNAL EXAMINER**



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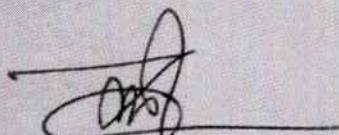
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n) Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

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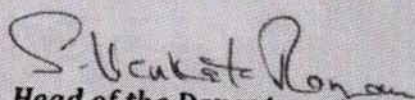
This is to certify that the project entitled "A STUDY ON EMPLOYEE MOTIVATION with reference to JAYALAKSHMI AUTOMOTIVES, PVT.LTD" fulfillment is being submitted by M.V.N.VIJAYALAKSHMI bearing Regd. No. 19471E0026 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision.

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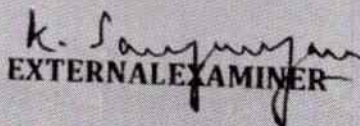
*Project guide*

**T.MALLIKARJUN Rao**  
M.B.A., (Ph.D).  
Assistant Professor

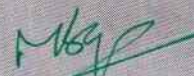


*Head of the Department*

**Dr.S.VENKATA RAMANA**  
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Professor



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Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON STRESS MANAGEMENT WITH REFERENCE TO Dr.REDDY LABORATORIES LTD, HYDERABAD" fulfillment is being submitted by NUTHIKATTU SRIKANTH bearing Regd. No. 19471E0064 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by his under our guidance and supervision from June-2020 to august-2020.

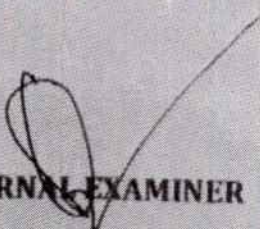
The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
**Project guide**

**Y.SURESH**  
M.B.A., M.COM., (M.PHIL.)  
Assistant Professor

  
**Head of the Department**

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
**EXTERNAL EXAMINER**

  
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**Guntur (Dist.), A.P.**

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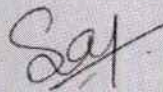
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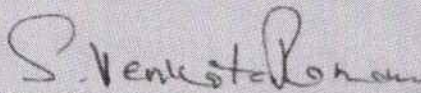
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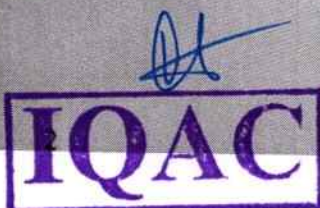
This is to certify that the project entitled "A STUDY ON FINANCIAL ANALYSIS OF PHARMACEUTICAL INDUSTRIES LIMITED" fulfillment is being submitted by **SHAIK MOTAD SHABBEER** bearing Regd. No. **19471E0076** in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision.


The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
**Project guide**  
**Sd. SALMA**  
M.B.A., (Ph.D)  
Asst. Professor

  
**Head of the Department**  
**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
**EXTERNAL EXAMINER**



  
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Code: 477 Twice Accredited by NBA & NAAC with "A" Grade, An ISO 9001:2008 Certified Institution) Ph  
one: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mha@yahoo.com

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON CAPITAL BUDGETING WITH REFERENCE TO ITC PVT.LTD" fulfillment is being submitted by T.HEMA RANI bearing Regd. No. 19471E0080 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June 2020 to August 2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

**Project guide**

**SD.SALMA**

M.B.A., (Ph.D)

Assistant Professor

**Head of the Department**

**Dr.S.VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.

Professor

**EXTERNAL EXAMINER**



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ISO 9001:2008 Certified Institution) Phone: 08647-239916,

Website WWW.nrtengg.com, Email nrtec\_mba@yahoo.com

**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON JOB SATISFACTION WITH REFERENCE TO BIHARATHI CONSUMER CARE PRODUCTS PVT.LTD BEGUMPET, HYDERABAD" is being submitted by T.MADHAN bearing Regd. No. 19471E0081 in partial fulfillment of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada in record of bonafide work carried out by him under our guidance and supervision from June-2020 to August-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*T.L. Sravan Kumar*  
Project Guide

T.L. SRAVANI KUMARI  
MBA, LL.B

*Dr. S. Venkata Ramana*  
External Examiner

*S. Venkata Ramana*

Head of the Department

Dr. S.VENKATA RAMANA

MBA M.Phil., Ph.D.



*[Signature]*  
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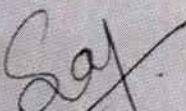
An ISO 9001:2008 Certified Institution) Phone: 08647-239916,

Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

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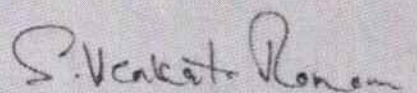
This is to certify that the project entitled "A STUDY ON CASH MANAGEMENT USING RATIO'S AT BHARATHI CONSUMERCARE PRODUCTS PVT.LTD GUNTUR" is being submitted by SHAIK KARIMULLA bearing Regd. No. 19471E0043 in partial fulfillment of requirement for the award of the degree of M.B.A in **NARASARAOPETA ENGINEERING COLLEGE** (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2020 to Aug-2020.

The results presented in this report have been verified and are found to be satisfactory. The results embodied in this record have not been submitted to any other University for the award of any other degree.

  
Project Guide

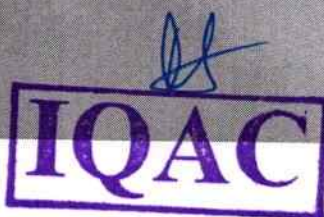
**Mrs. S.D SALMA**

MBA.,(Ph.D)

  
Head of the Department  
**Dr. S.VENKATA RAMANA**

MBA M.Phil., Ph.D.

  
External Examiner



  
**PRINCIPAL**  
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(Accredited by NBA & NAAC with "A" Grade, An ISO 9001:2008 Certified Institution) Phone: 08647-239916,

Website: www.nrtengg.com, Email: nrtec\_mba@yahoo.com

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This is to certify that the project entitled "A STUDY ON PERFORMANCE APPRAISAL SYSTEM WITH REFERENCE TO DELTA PAPER MILLS LIMITED BHIMAVARAM" fulfillment is being submitted by D.SAI LAKSHMI PRASANNA bearing Regd. No. 19471E0051 in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision.

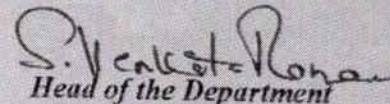
The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
Project guide

Mr.P.VENKATESWAR  
RAO

M.B.A., (Ph.D)

ASSOCIATE Professor

  
Head of the Department

Dr.S.VENKATA RAMANA

M.B.A., M.Phil., Ph.D.  
Professor

  
EXTERNAL EXAMINER



**NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS),**  
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DEPARTMENT OF M.B.A., NARASARAOPET - 522601




**CERTIFICATE**

This is to certify that the project entitled "CUSTOMER BUYING BEHAVIOUR OF INSURANCE THROUGH ONLINE WITH REFERENCE TO SHRIRAM LIFE INSURANCE", is being submitted by **Ms. M MANASA PHANI** bearing Regd. No. 19471E0061 in partial fulfillment of requirement for the award of the degree of M.B.A in **NARASARAOPETA ENGINEERING COLLEGE**, Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by her under our guidance and supervision from JULY-2020 to AUGUST-2020.

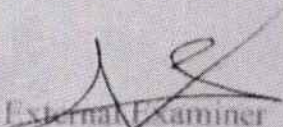
The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
Project Guide

(Y. SURESH)  
MBA, M.Com(M.Phil)

  
Head of the Department

(Dr. S. Venkata Ramana)  
MBA, M.Phil, Ph.D

  
External Examiner

  
PRINCIPAL

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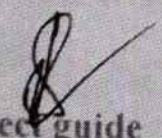
ISO 9001:2008 Certified Institution) Phone: 08647-239916,

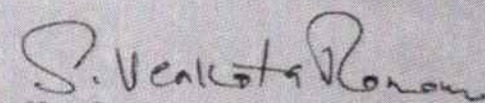
Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

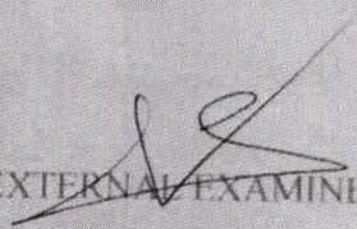
### CERTIFICATE

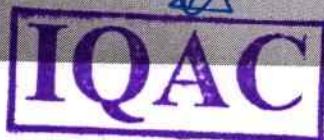
This is to certify that the project entitled "A STUDY ON MARKETING MIX with reference to VIDEOCON ELECTRONICS PVT.LTD, MOGALRAJA PURAM, VIJAYAWADA, fulfillment is being submitted by M.Sambasiva Rao bearing Regd. No. 19471E0060 in partial of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2020 to Aug-2020.


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Project guide  
Y. SURESH,  
M.B.A, M.Com, (M.Phil)

  
Head of the Department  
Dr. S.VENKATA RAMANA  
MBA M.Phil., Ph.D.

  
EXTERNAL EXAMINER



  
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08647-239916, Website: [www.nrtengg.com](http://www.nrtengg.com), Email: [nrtec\\_mba@yahoo.com](mailto:nrtec_mba@yahoo.com)

**CERTIFICATE**

This is to certify that the project entitled "A STUDY ON MUTUAL FUNDS with reference to INDIABULLS FINANCIAL SERVICE LIMITED, HYDERABAD" is being submitted by P.SAROJINI bearing Regd. No.19471E0068 in partial fulfillment of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is a record of bonafide work carried out by her under our guidance and supervision from June 2020 to August 2020

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

**Project guide**

**Mrs. S.D. SALMA**

M.B.A (P.hD)

Assistant professor

**Head of the Department**

**Dr. S. VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.

Professor

**EXTERNAL EXAMINER**

**PRINCIPAL**

**NARASARAOPETA ENGINEERING COLLEGE  
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**NARASARAOPET - 522 601**

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Phone: 08647-239916, Website: www.nrtengg.com, Email: nrtec\_mba@yahoo.com

### CERTIFICATE

This is to certify that the project entitled "A STUDY ON BRAND AWARENESS OF DELIGHT CHEMICALS done at DELIGHT CHEMICALS PRIVATE LIMITED, PIDUGURALLA, GUNTUR DISTRICT" fulfillment is being submitted by P. RAVI KUMAR bearing Regd. No. 19471E0069 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June 2020 to August 2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*TL. Sravanikumari*  
**Project guide**

**TL. SRAVANIKUMARI**

M.B.A., LLB  
Asst Professor

*S. Venkataramana*  
**Head of the Department**  
**Dr. S. VENKATARAMANA**

M.B.A., M.Phil., Ph.D.  
Professor

*[Signature]*  
**EXTERNAL EXAMINER**



*[Signature]*  
**PRINCIPAL**  
**NARASARAOPETA ENGINEERING COLLEGE**  
**(AUTONOMOUS)**  
**NARASARAOPETA - 522601**  
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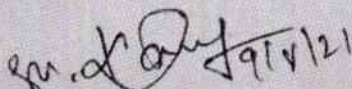
Twice Accredited by NBA & NAAC with "A" Grade, An ISO 9001:2008 Certified Institution)

Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

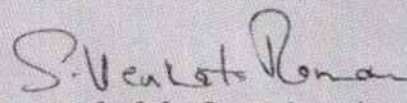
### CERTIFICATE

This is to certify that the project entitled "A STUDY ON RECRUITMENT AND SELECTION WITH REFERENCE TO HERITAGE FOODS LIMITED, VIJAYAWADA" fulfillment is being submitted by JAMMULA VASU bearing Regd. No. 19471E0055 in partial of requirement for the award of the degree of **Master of Business Administration in Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision form june-2020 to August-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
**Project guide**


**Sk. Kareem Basha**  
M.B.A., (Ph.D).  
Associate Professor

  
**Head of the Department**

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
**EXTERNAL EXAMINER**



  
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Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

### CERTIFICATE

This is to certify that the project entitled "A STUDY ON LABOUR WELFARE WITH REFERENCE TO K.C.P CEMENTS LIMITED, MACHERLA" fulfillment is being submitted by K. SIVA VYSHNAVI bearing Regd. No. 19471E0056 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June-2020 to August-2020.

The results presented in this is have been verified and are found to be satisfactory. The results embodied in this is have not been submitted to any other University for the award of any other degree.

*Mr. K. Karem Basha*  
9/8/2021

*Project guide*

**Mr. SK. KAREM BASHA**

M.B.A., (Ph.D.)

Associate Professor

*Dr. S. Venkata Ramana*  
Head of the Department

**Dr. S. VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.

Professor

*[Signature]*  
**EXTERNAL EXAMINER**



*[Signature]*  
**PRINCIPAL**  
**NARASARAOPETA ENGINEERING COLLEGE**  
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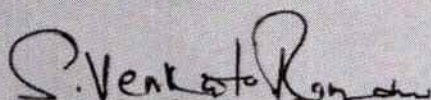
Twice Accredited by NBA & NAAC with "A" Grade, An ISO 9001:2008 Certified Institution)

Phone: 08647-239916, Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

## CERTIFICATE

This is to certify that the project entitled "A STUDY ON DIGITAL BANKING SERVICES IN GUNTUR DISTRICT WITH REFERENCE TO ING VYSYA" fulfillment is being submitted by **AMUDALA TEJASWINI** bearing Regd. No. **19471E0002** in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from May-2020 to June-2020.

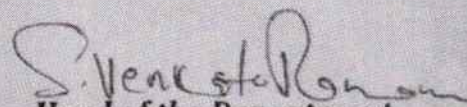
The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
*Project guide*

**Dr. S. VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.

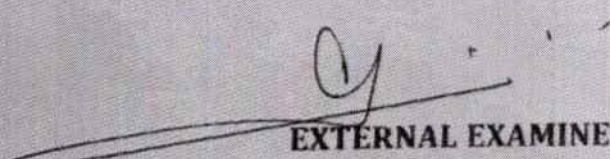
Professor

  
*Head of the Department*

**Dr. S. VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.

Professor

  
**EXTERNAL EXAMINER**

*Dr. S. Venkata Ramana*

  
**PRINCIPAL**

**NARASARAOPETA ENGINEERING COLLEGE  
(AUTONOMOUS)**

**NARASARAOPET - 522 601**

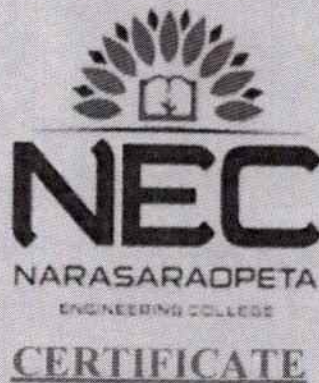
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**DEPARTMENT OF M.B.A., NARASARAOPET - 522601**



This is to certify that the project entitled "A STUDY ON CUSTOMER SATISFACTION WITH REFERENCE TO VEDA SEED SCIENCES PVT.LTD, GUNTUR" is being submitted by GUNDALA ASHOK bearing Regd. No. 19471E0054 in partial fulfillment of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June-2020 to Aug-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

*SK. Karem Basha*  
Project Guide  
**SK.KAREM BASHA**  
MBA. (Ph.D)

*S. Venkata Rama*  
Head of the Department  
**Dr. S.VENKATARAMANA**  
MBA M.Phil., Ph.D.

*[Signature]*  
External Examiner



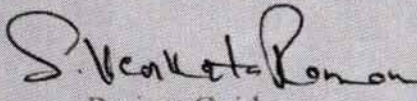
*[Signature]*  
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**NARASARAOPET - 522601**  
Guntur (Dist.)



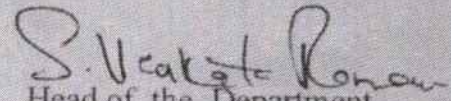
## CERTIFICATE

This is to certify that the Main Project entitled "A STUDY ON IMPACT OF COVID-19 IN ONLINE MARKETING WITH REFERENCE TO FLIPKART PVT, LTD." is being submitted by A.SRINIVASA RAO bearing Regd. No. 19471E0001 in partial of requirements for the award of the degree of Master of Business Administration in NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bondfide work carried out by him under our guidance and supervision from June-2020 to Aug-2020.

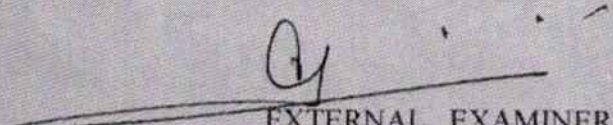
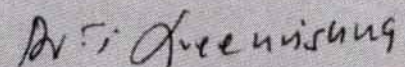
The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

  
Project Guide

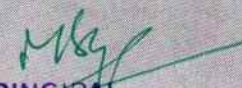
**Dr. S.VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D  
Professor

  
Head of the Department

**Dr. S.VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D  
Professor

  
EXTERNAL EXAMINER  




  
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ISO 9001:2008 Certified Institution) Phone: 08647-239916,  
Website: WWW.nrtengg.com, Email: nrtcc\_mba@yahoo.com

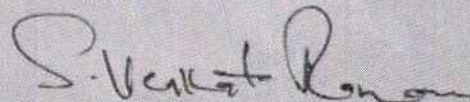
## CERTIFICATE

This is to certify that the project entitled "A STUDY ON IMPACT OF COVID 19 PANDEMIC ON TOURISM INDUSTRY" fulfillment is being submitted by AVUDARI LAKSHMAN bearing Regd. No. 19471E0003 in partial of requirement for the award of the degree of **Master of Business Administration** in Narasaraopeta Engineering College (Autonomous), affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by him under our guidance and supervision from June -2020 to AUG-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

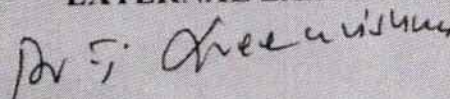
  
**Project guide**

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor


  
**Head of the Department**

**Dr. S. VENKATA RAMANA**  
M.B.A., M.Phil., Ph.D.  
Professor

  
**EXTERNAL EXAMINER**





  
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ISO 9001:2008 Certified Institution) Phone: 08647-239916,  
Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.com

### CERTIFICATE

This is to certify that the project entitled "A STUDY ON WORKING CAPITAL" with reference to JOCIL, DOKIPARRU, fulfilment is being submitted by U.RAMANA REDDY bearing Regd. No. 19471E0082 in partial of requirement for the award of the degree of M.B.A in NARASARAOPETA ENGINEERING COLLEGE (Autonomous), affiliated to Jawaharlal Nehru Technological University Kakinada is record of bona fide work carried out by her under our guidance and supervision from JUNE-2020 to AUGUST-2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

T.L. Sravanikumar  
Project guide

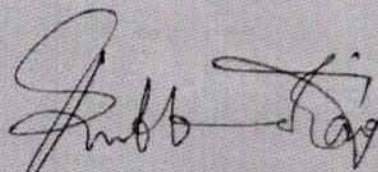
T.L. SRAVANI KUMARI,  
M.B.A LLB

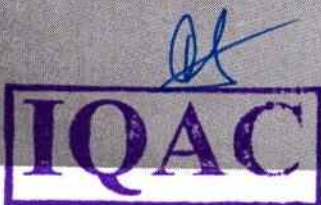
Assistant Professor


S. Venkata Ramana  
Head of the Department

Dr. S. VENKATA RAMANA

MBA M.Phil., Ph.D  
Professor

  
EXTERNAL EXAMINER



  
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ISO 9001:2008 Certified Institution) Phone: 08647-239916,

Website: WWW.nrtengg.com, Email: nrtec\_mba@yahoo.co

### CERTIFICATE

This is to certify that the project entitled "A STUDY ON CASH MANAGEMENT WITH REFERENCE TO AMARAVATHI TEXTILES PVT LTD" MARTUR is being submitted by **SHAIK KARIMULLA** bearing Regd. No. 19471E0075 in partial fulfillment of requirement for the award of the degree of M.B.A in **NARASARAOPETA ENGINEERING COLLEGE (AUTONOMOUS)**, Jawaharlal Nehru Technological University Kakinada is record of bonafide work carried out by him/her under our guidance and supervision from June-2020 to August 2020

The results presented in this report have been verified and are found to be satisfactory. The results embodied in this record have not been submitted to any other University for the award of any other degree.

Project guide  
**S.D. SALMA, M.B.A, (P.h.D)**

Assistant Professor

Head of the Department  
**Dr. S. VENKATA RAMANA**

MBA M.Phil., PH.D.

External Examiner



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### CERTIFICATE

This is to certify that the project entitled "A STUDY ON RECRUITMENT AND SELECTION WITH REFERENCE TO INDIA MART VIJAYAWADA" fulfillment is being submitted by SK. MUNEER SHAMI bearing Regd. No. 19471E0077 in partial of requirement for the award of the degree of **Master of Business Administration** in **Narasaraopeta Engineering College (Autonomous)**, affiliated to Jawaharlal Nehru Technological University, Kakinada is record of bonafide work carried out by her under our guidance and supervision from June 2020 to august 2020.

The results presented in this thesis have been verified and are found to be satisfactory. The results embodied in this thesis have not been submitted to any other University for the award of any other degree.

**Project guide**

**Mrs. Sd. SALMA**

M.B.A., (Ph.D)

Assistant Professor

**Head of the Department**

**Dr. S. VENKATA RAMANA**

M.B.A., M.Phil., Ph.D.

Professor

**EXTERNAL EXAMINER**



**PRINCIPAL**

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This is to certify that **Mallavarapu Nikhil** student of MCA from **NARASARAOPET ENGINEERING COLLEGE** has done project “**Brain Tumor Detection Using Deep Neural Network and Machine Learning Algorithm**” using **Machine Learning Algorithm** in our organization under our guidance and supervision.

For<<Dream India Technologies>>

*G. Nageswara Rao*



Project Guide.



*M. R.*  
Principal  
**NARASARAOPETA ENGINEERING COLLEGE**  
(AUTONOMOUS)  
NARASARAOPET - 522 601.  
Guntur (Dist.), A.P.



AN ISO 9001:2015 CERTIFIED COMPANY



CERTIFICATE

This is to certify that **CH. VENKATESH** student of MCA from **NARASARAOPET ENGINEERING COLLEGE** has done project "A FACEMASK DETECTOR USING MACHINE LEARNING AND IMAGE PROCESSING TECHNIQUES" using Machine Learning Algorithm in our organization under our guidance and supervision.

For<<Dream India Technologies>>

*G. Nageswara Rao*



Project Guide.



*[Signature]*  
Principal  
**NARASARAOPETA ENGINEERING COLLEGE**  
(AUTONOMOUS)  
NARASARAOPET - 522 601.  
Guntur (Dist.), A.P.



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(An ISO Certified Institution & Accredited By NAAC with 'A' Grade)

Narasaraopet-522601



## CERTIFICATE

This is to certify that the project entitled "A COLLABORATIVE AUDITING BLOCKCHAIN FOR TRUSTWORTHY DATA INTEGRITY IN A CLOUD STORAGE SYSTEM" is being submitted by Mr. ESTHALA ABHISHEK (19475F0014) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

**Project Guide**

Dr. S.V. N. Sreenivasu M.Tech, Ph.D  
Professor

**Head of the Department**

Mrs. M. Mamatha M.Tech  
Associate Professor  
Department of MCA



**External Examiner**

**Principal**  
NARASARAOPETA ENGINEERING COLLEGE  
(AUTONOMOUS)  
NARASARAOPET - 522 601.  
Guntur (Dist.), A.P.



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Narasaraopet-522601




## CERTIFICATE

This is to certify that the project entitled "Randomized View Reconciliation in Permission less Distributed Systems" is being submitted by Mr. R. Venu (19475F0012) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

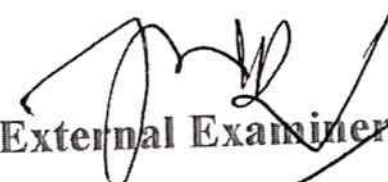
Mrs. M. Mamatha, M.Tech.,

Assoc Professor  
Department of MCA

  
Head of the Department

Mrs. M. Mamatha, M.Tech.,

Assoc Professor  
Department of MCA

  
External Examiner

  
Principal

NARASARAOPETA ENGINEERING COLLEGE  
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Narasaraopet-522601



**CERTIFICATE**


This is to certify that the project entitled "PROVABLY EFFICIENT ALLOCATION FOR EDGE SERVICE ENTITIES USING HERMES" is being submitted by Mr. A. SREEKANTH (19475F0011) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M.Tech  
Assoc.Prof  
Department of MCA

  
Head of the Department

Mrs. M. Mamatha, M.Tech  
Assoc.Prof  
Department of MCA

  
External Examiner

  
Principal



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**CERTIFICATE**

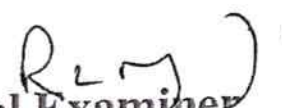
This is to certify that the project entitled "EASY AND SECURE HANDLING OF SENSORS AND ACTUATORS AS CLOUD-BASED SERVICE" is being submitted by Mr. P. RAMESH (19475F0016) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
**Project Guide**

Dr. S.V. N Sreenivasu M. Tech, Ph. D  
Professor

  
**Head of the Department**  
Mrs. M. Mamatha M. Tech  
Associate Professor,  
Department of MCA



  
**External Examiner**  
14/08/21

  
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**CERTIFICATE**

This is to certify that the project entitled "Privacy-Preserving Image Retrieval and Sharing in Social Multimedia Applications" is being submitted by Mr. K. ADI NARAYANA (19475F0015) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
**Project Guide**

Dr. S.V. N Sreenivasu M.Tech, Ph.D  
Professor

  
**Head of the Department**

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Associate professor,  
Department of MCA



  
**External Examiner**  
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**CERTIFICATE**

This is to certify that the project entitled "CLOUD MANUFACTURING ARCHITECTURE BASED ON PUBLIC BLOCKCHAIN TECHNOLOGY" is being submitted by Ms. R. Swarna (19475F0028) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
**Project Guide**

**Dr. S. V. N. SREENIVASU, M.Tech, Ph.D,**  
**Professor**

  
**Head of the Department**

**Mrs. M. Mamatha, M.Tech**  
**Assoc Professor**

  
**External Examiner**



  
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## CERTIFICATE

This is to certify that the project entitled "Emotions and Age Classification Using Convolutional Neural Network" is being submitted by Mr. T.Bala Bhaskar Rao (19475F0040) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November-2020 to April-2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mr. G. Sambasiva Rao, MCA

  
Head of the Department  
Mrs. M. Mamatha, M.Tech

  
External Examiner



  
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## CERTIFICATE

This is to certify that the project entitled "QUICK AND ACCURATE FALSE DATA DETECTION IN MOBILE CROWD SENSING" is being submitted by Mr. R. BHIMA NAIK (19475F0033) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

Project Guide

Mr. G. Sambasiva Rao, MCA

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Mrs. M. Mamatha, MTech

External Examiner





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## CERTIFICATE

This is to certify that the project entitled "Efficient Data Collection Over Multiple Access Wireless Sensors Network" is being submitted by Mr. Ch. Rajamohan Reddy(19475F0013) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

Project Guide

Dr. S. V. N Sreenivasu, M.Tech, Ph.D,

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14/08/21

  
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**CERTIFICATE**

This is to certify that the project entitled "HIERARCHIAL ATTENTION NETWORK FOR VISUALLY-AWARE FOOD RECOMMENDATION" is being submitted by Mrs. G. SANDHYA (19475F0048) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

**Project Guide**

**Dr. S. V. N Sreenivasu, M.Tech, Ph.D,  
Professor**

**Head of the Department**

**Mrs. M. Mamatha, M.Tech.,  
Associate Professor**

**External Examiner**

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CERTIFICATE

This is to certify that the project entitled "AN ADAPTIVE AUTHENTICATED DATA STRUCTURE WITH PRIVACY-PRESERVING FOR BIG DATA STREAM IN CLOUD" is being submitted by Mr. Y. Yedukondalu (19475F0050) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

Project Guide

Dr. S. V. N. SREENIVASU, M.Tech, Ph.D,  
Professor

Head of the Department

Mrs. M. Mamatha, M.Tech  
Assoc. Professor

  
External Examiner  
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**CERTIFICATE**

This is to certify that the project entitled “**ROBUST LOSS INFERENCE IN THE PRESENCE OF NOISY MEASUREMENTS AND HIDDEN FAULT DIAGNOSIS**” is being submitted by Ms. J. Madhavi (19475F0053) as a partial fulfillment of requirements for the award of “**Master of Computer Applications**” degree in the **Department of MCA** from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mr. G. Sambasiva Rao, MCA

  
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Mrs. M. Mamatha, M.Tech.



  
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## CERTIFICATE

This is to certify that the project entitled "A Novel Category Group Index Mechanism for Efficient Ranked Search of Encrypted Cloud Data" is being submitted by Mr. G. Akhilendra Chowdary (19475F0054) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M.Tech.,  
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Mrs. M. Mamatha, M.Tech.,  
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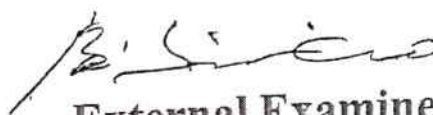
This is to certify that the project entitled "A FACEMASK DETECTOR USING MACHINE LEARNING AND IMAGE PROCESSING TECHNIQUES." is being submitted by Mr. CH. VENKATESH (19475F0056) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
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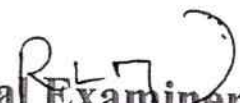
This is to certify that the project entitled **Optimizing Primary User Privacy in Spectrum Sharing Systems** is being submitted by **Mr. SHAIK BHADHAR SHAREEF (19475F0020)** as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the **Department of MCA** from J.N.T.U.K, KAKINADA during November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mr. G. SAMBASIVA RAO, MCA

  
Head of the Department

Mrs. M. MAMATHA, M. Tech

  
External Examiner  
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**CERTIFICATE**

This is to certify that the project entitled "PRIVACY-PRESERVING SIMILARITY COMPUTATION IN CLOUD-BASED MOBILE SOCIAL NETWORKS" is being submitted by Mr. A. Anil (19475F0019) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

**Project Guide**

**Dr. S. V. N. SREENIVASU, M.Tech, Ph.D,**  
Professor

**Head of the Department**

**Mrs. M. Mamatha, M.Tech**  
Assoc. Professor

**External Examiner**  
14/08/21



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**CERTIFICATE**


This is to certify that the project entitled "Brain Tumor Detection Using Deep Neural Network and Machine Learning Algorithm" is being submitted by Mr. M. Nikhil (19475F0018) in partial fulfilment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mr. G. Sambasiva Rao, MCA

  
Head of the Department

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CERTIFICATE

This is to certify that the project entitled "STUDENT ALUMNI MANAGEMENT SYSTEM" is being submitted by Mr. R. RAMU (19475F0017) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

Project Guide

Dr. S.V. N SREENIVAS M. Tech, Ph.D  
Professor

Head of the Department

Mrs. M. Mamatha M.Tech  
Associate Professor

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This is to certify that the project entitled "TRAFFIC SIGN RECOGNITION BY COMBINING GLOBAL AND LOCAL FEATURES BASED ON SEMI-SUPERVISED CLASSIFICATION" is being submitted by Mr. M. Naveen (19475F0043) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M.Tech.  
Assoc.Prof  
Department of MCA

  
Head of the Department

Mrs. M. Mamatha, M.Tech  
Assoc.Prof  
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External Examiner



  
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## CERTIFICATE

This is to certify that the project entitled "Pricing Bandwidth Allocation and Service Competition in Heterogeneous Wireless Networks" is being submitted by Mrs. K. Harika (19475F0046) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

G. Sambasiva Rao, M.C.A

  
Head of the Department  
M. Mamatha, M.Tech.,

  
External Examiner



  
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**CERTIFICATE**

This is to certify that the project entitled "MULTINATIONAL LICENSE PLATE RECOGNITION USING GENERALIZED CHARACTER SEQUENCE DETECTION" is being submitted by Mr. S. Sagar Reddy (19475F0045) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M.Tech.  
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Head of the Department

Mrs. M. Mamatha, M.Tech  
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This is to certify that the project entitled "ANALYZING ASR PRETRAINING FOR LOW-RESOURCE SPEECH-TO-TEXT TRANSLATION" is being submitted by Mr. B. Uday Sekhar Reddy (19475F0041) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

**Project Guide**

**Dr. S. V. N Sreenivasu, M.Tech, Ph.D**

**Professor,**

**Head of the Department**

**Mrs. M. Mamatha, M.Tech.,**

**Associate Professor**



**External Examiner**

**Principal**  
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**CERTIFICATE**

This is to certify that the project entitled **"SOCIAL-AWARE PRIVACY-PRESERVING MECHANISM FOR CORRELATED DATA"** is being submitted by **Ms. B.N.S.S.S. Tejaswi (19475F0024)** as a partial fulfillment of requirements for the award of **"Master of Computer Applications"** degree in the **Department of MCA** from **J.N.T.U.K, KAKINADA** during the year **November 2020 to April 2021** under our guidance and supervision and worth of requirements of the university.



**Project Guide**

**Mr. G. Sambasiva Rao, MCA**



**Head of the Department**

**Mrs. M. Mamatha, M.Tech**



**External Examiner**



v



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**CERTIFICATE**

This is to certify that the project entitled "AUTOMATIC HTML CODE GENERATION FROM MOCK-UP IMAGES USING MACHINE LEARNING TECHNIQUES" is being submitted by Mrs. SK. RUKSANA (18471F0002) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M. Tech.,

Assoc.Professor,

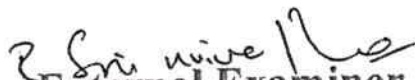
Department Of MCA

  
Head of the Department

Mrs. M. Mamatha, M.Tech.,

Assoc.Professor

Department Of MCA

  
External Examiner

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CERTIFICATE

This is to certify that the project entitled "BLOCKCHAIN-BASED HIERARCHICAL TRUST NETWORKING FOR JOINT CLOUD" is being submitted by Ms. K. SAI SRAVANTHI (18471F0001) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to July 2021 under our guidance and supervision and worth of requirements of the university.

Project Guide

Dr. S. V. Naga Sreenivasu, M.Tech, Ph.D,

Head of the Department

Mrs. M. Mamatha Assoc.Prof M.Tech

External Examiner





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**CERTIFICATE**

This is to certify that the project entitled "A Novel Feature Matching Ranked Search Mechanism Over Encrypted Cloud Data" is being submitted by Mr. M. PHANINDRA KUMAR (19475F0002) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2019 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
**Project Guide**

Mrs. M. Mamatha M. Tech  
Associate Professor.  
Department of MCA

  
**Head of the Department**

Mrs. M. Mamatha M. Tech  
Associate Professor.  
Department of MCA

  
**External Examiner**



  
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This is to certify that the project entitled "SHUFFLE SCHEDULING FOR MAPREDUCE JOBS BASED ON PERIODIC NETWORK STATUS" is being submitted by Mr. R. Mahesh Babu (19475F0022) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

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Mrs. M. Mamatha, M.Tech

  
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KAKINADA)

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Grade)Narasaraopet-522601



## CERTIFICATE

This is to certify that the project entitled "A Decryptable Attribute Based Keyword Search Scheme on E-Health Cloud In Internet of Things Platforms" is being submitted by Mr. J. AMITH BABU (19475F0044) in partial fulfillment of requirements for the award "Master of Computer Applications" degree in the Department of MCA from J.N.T.U. KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M.Tech.,

Associate Professor

Department of MCA

  
Head of the Department

Mrs. M. Mamatha, M.Tech.,

Associate Professor

Department of MCA

  
External Examiner



  
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**CERTIFICATE**

This is to certify that the project entitled "**BLOCKCHAIN EMPOWERED ARBITRABLE DATA AUDITING SCHEME FOR NETWORK STORAGE AS A SERVICE**" is being submitted by Ms. P. Srividya (19475F0023) in partial fulfillment of requirements for the award of "**Master of Computer Applications**" degree in the **Department of MCA** from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
**Project Guide**

**Mrs. M. Mamatha M.Tech.**  
Associate.Professor  
Department of MCA

  
**Head of the Department**

**Mrs. M. Mamatha Assoc.Prof M.Tech**  
Associate.Professor  
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**External Examiner**



  
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**CERTIFICATE**

This is to certify that the project entitled "Spectrum Sharing in mm Wave Cellular Networks Using Clustering Algorithms" is being submitted by Mrs. D. Narendra (16471F0055) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
**Project Guide**

**Mr.G. Sambasiva Rao, MCA**

  
**Head of the Department**

**Mrs. M. Mamatha, M.Tech.**

  
**External Examiner**



  
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## CERTIFICATE

This is to certify that the project entitled "Resolvable Designs For Speeding Up Distributed Computing" is being submitted by Mrs. U. Manjusha (19475F0042) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mr.G. Sambasiva Rao, MCA

  
Head of the Department

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CERTIFICATE

This is to certify that the project entitled "Pricing Competition and Content for Internet Service Providers" is being submitted by Mrs. K. Madeena (19475F0051) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mr. G. Sambasiva Rao, MCA,

  
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**CERTIFICATE**

This is to certify that the project entitled "A CLOUD BASED FRAMEWORK FOR MACHINE LEARNING WORKLOADS AND APPLICATIONS " is being submitted by Mr. B. Mehar Gopi (19475F0049) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

**Project Guide**

**Dr S V N SREENIVASU, M.Tech, Ph.D,**

**Professor**

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**Mrs. M. Mahatma M.Tech**

**Assoc.Prof**

**External Examiner**



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**CERTIFICATE**

This is to certify that the project entitled "OPTIMAL MULTI-USER COMPUTATION OFFLOADING STRATEGY FOR WIRELESS POWERED SENSOR NETWORKS" is being submitted by Mr. N. Pavan Kumar (19475F0047) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

**Project Guide**

**Dr. S. V. N. SREENIVASU, M.Tech, Ph.D,**

**Professor**

**Head of the Department**

**Mrs. M. Mamatha, M.Tech**

**Assoc. Professor**

**External Examiner**

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## CERTIFICATE

This is to certify that the project entitled "A CONTEXT AWARE SERVICE EVALUTION APPROACH OVER BIGDATA FOR CLOUD APPLICATIONS" is being submitted by Ms. G. Saisri (19475F0003) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.


  
Project Guide

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Associate Professor  
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Mrs. M. Mamatha, M.Tech  
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External Examiner  
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**CERTIFICATE**

This is to certify that the project entitled "NET VISION ON-DEMAND VIDEO PROCESSING IN WIRELESS NETWORKS" is being submitted by Ms. K. Mary Lakshmi (19475F0038) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
**Project Guide**

Mr. G. Sambasiva Rao, MCA

  
**Head of the Department**

Mrs. M. Mamatha, HOD, M.Tech



  
**External Examiner**

14/08/21

  
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## CERTIFICATE

This is to certify that the project entitled "PROOFS OF PHYSICAL RELIABILITY FOR CLOUD STORAGE SYSTEM" is being submitted by Ms. JIRIPURAPU RAMYA (19475F0025) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

Project Guide

Dr. S.V. N Sreenivasu M.Tech, Ph.D  
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## CERTIFICATE

This is to certify that the project entitled "SECURING RESOURCES IN DECENTRALIZED CLOUD STORAGE" is being submitted by Ms. V. NAGA LAKSHMI (19475F0026) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2019 to April 2021 under our guidance and supervision and worth of requirements of the university.

**Project Guide**

Dr. S.V. N Sreenivasu M.Tech, Ph.D  
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**Head of the Department**

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**External Examiner**



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## CERTIFICATE

This is to certify that the project entitled "Load Imbalance and Caching Performance of Sharded Systems" is being submitted by Mr. M. Pavan Kalyan (19475F0030) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November-2020 to April-2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

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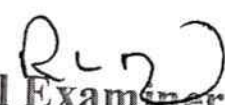
**CERTIFICATE**

This is to certify that the project entitled "RESILIENT RANGE-BASED D-DIMENSIONAL LOCALIZATION FOR MOBILE SENSOR NETWORKS" is being submitted by Mr. BATTULA RAMESH (19475F0021) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2019 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mr. G. Sambasiva Rao, MCA,

  
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**CERTIFICATE**

This is to certify that the project entitled "EFFICIENT COMPUTING RESOURCE SHARING FOR MOBILE EDGE-CLOUD COMPUTING NETWORK" is being submitted by Ms. P. Mallika (19475F0037) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mr. G. Sambasiva Rao, MCA

  
Head of the Department

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## CERTIFICATE

This is to certify that the project entitled "A PROFIT MAXIMIZATION SCHEME IN CLOUD COMPUTING WITH DEADLINE CONSTRAINTS" is being submitted by Ms. D. Navya (19475F0039) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K., KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M. Tech

Associate. Proffessor  
Department of MCA

  
Head of the Department

Mrs. M. Mamatha, M.Tech

Associate.Proffessor  
Department of MCA



  
External Examiner

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CERTIFICATE

This is to certify that the project entitled "A BLOCKCHAIN-BASED MODEL FOR CLOUD SERVICE QUALITY MONITORING" is being submitted by Ms. SK. Jakira (19475F0029) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M.Tech,  
Assoc.Prof  
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Mrs. M. Mamatha, M.Tech,  
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14/08/21

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## CERTIFICATE

This is to certify that the project entitled "PERFORMANCE GUARANTEES OF DISTRIBUTED ALGORITHMS FOR QOS IN WIRELESS AD HOC NETWORKS" is being submitted by Mr. P. J. V. N. Sudhakar (19475F0004) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

Project Guide

S. V. N Sreenivasu, M.Tech, Ph.D,  
Professor

  
Head of the Department

Mrs. M. Mamatha, M.Tech.,  
Associate Professor

  
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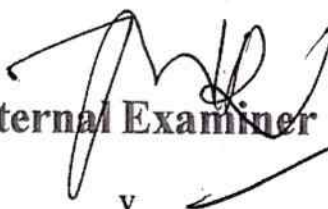
This is to certify that the project entitled "ON INTERFERENCE AWARE POWER ADJUSTMENT AND SCHEDULING IN FEMTOCELL NETWORKS" is being submitted by Mr. P. MAHESH BABU (19475F0006) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
**Project Guide**

Mrs. M. Mamatha, M.Tech.  
Assoc.Prof  
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**Head of the Department**

Mrs. M. Mamatha, M.Tech.  
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Narasaraopet-522601



## CERTIFICATE

This is to certify that the project entitled "EDGE FEDERATION TOWARDS AN INTEGRATED SERVICE PROVISIONING MODEL" is being submitted by Mrs. Y.NAGAMANI (18471F0004) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mr. G. SAMBASIVA RAO, MCA.

  
Head of the Department  
Mrs. M. Mamatha, M.Tech.,

  
External Examiner



  
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**CERTIFICATE**

This is to certify that the project entitled "AN ASSOCIATIVE OPTIMIZING METHOD ON RELIABILITY AND COST IN CLOUDS" is being submitted by Mr. SK D. Haneef (18471F0003) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M.Tech.  
Assoc.Prof

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Head of the Department

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Assoc.Prof

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12/8/21  
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**CERTIFICATE**

This is to certify that the project entitled "Dynamic traffic management for SD-WAN Inter Cloud communication" is being submitted by Mr. A.ANIL (19475F0035) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
**Project Guide**

Mrs. M. Mamatha, M. Tech  
Associate professor,  
Department of MCA

  
**Head of the Department**

Mrs. M. Mamatha, M. Tech  
Associate Professor,  
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**External Examiner**



  
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**CERTIFICATE**

This is to certify that the project entitled "**BLOCK CHAIN-BASED INCENTIVES FOR SECURE AND COLLABORATIVE DATA SHARING IN MULTIPLE CLOUD**" is being submitted by **Mr. R.VENU BABU (19475F0032)** as a partial fulfilment of requirements for the award of "**Master of Computer Applications**" degree in the **Department of MCA** from J.N.T.U.K, KAKINADA during November 2019 to April 2021 under our guidance and supervision and worth of requirements of the university.

**Project Guide**

Dr.S.V.N. Sreenivasu, M.Tech, ph.D,  
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**Head of the Department**

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Associate professor  
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**CERTIFICATE**

This is to certify that the project titled "CURRENCY RECOGNITION SYSTEM USING IMAGE PROCESSING" is being submitted by Mrs. G. Sai Durga (19475F0031) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the University.

  
Project Guide

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Head of the Department

Mrs. M. Mamatha, M. Tech

Assoc. Professor,

Department Of MCA

  
External Examiner



  
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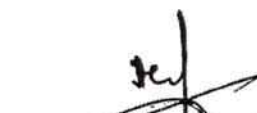
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CERTIFICATE

This is to certify that the project entitled "RISK-AWARE DATA OFFLOADING IN MULTI-SERVER MULTI-ACCESS EDGE COMPUTING ENVIRONMENT" is being submitted by Mr. KOTA. JAGADEESH (19475F0009) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2019 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide  
Mr. G. SAMBASIVARAO, MCA

  
Head of the Department  
Mrs. M. MAMATHA, M.TECH

  
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## CERTIFICATE

This is to certify that the project entitled "ONLINE IDENTIFICATION OF GROUPS OF FLOWS SHARING A NETWORK BOTTLENECK" is being submitted by Mr. S. Thirupathirao (19475F0007) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
Project Guide

Mrs. M. Mamatha, M.Tech.  
Assoc.Prof  
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**CERTIFICATE**

This is to certify that the project entitled "RETHINKING FAST AND FRIENDLY TRANSPORT IN DATA CENTER NETWORKS" is being submitted by Ms. Syed Fathima (19475F0005) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
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## CERTIFICATE

This is to certify that the project entitled "Video Behavior Profiling for Anomaly Detection" is being submitted by Mr. P. Naveen kumar (19475F0001) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
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**CERTIFICATE**


This is to certify that the project entitled "Adaptive Consistency Propagation Method for Graph Clustering" is being submitted by Mr. SK. NAGGOR BABU (19475F0008) as a partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during November 2019 to April 2021 under our guidance and supervision and worth of requirements of the university.

  
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**CERTIFICATE**

This is to certify that the project entitled "A BLOCKCHAIN BASED ACCESS CONTROL FRAMEWORK FOR CYBER-PHYSICAL-SOCIAL SYSTEM BIG DATA" is being submitted by Ms. G. Gouthami (19475F0010) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

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**CERTIFICATE**

This is to certify that the project entitled "TWO-FACTOR MUTUAL AUTHENTICATION OFFLOADING FOR MOBILE CLOUD COMPUTING" is being submitted by Ms. A. Sravanthi (19475F0034) in partial fulfillment of requirements for the award of "Master of Computer Applications" degree in the Department of MCA from J.N.T.U.K, KAKINADA during the year November 2020 to April 2021 under our guidance and supervision and worth of requirements of the university.

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